

Information Technology and Public Sector Fraud in Nigeria

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Abstract: Information technology has transformed significantly financial transactions across the globe. This coupled with globalization has made it easy to transfer money to any account in different parts of the world. The study focused on Information Technology and Fraud in the public sector in Nigeria. The study adopted survey design research method for the purpose of achieving its objective. A sample size of 420 respondents was purposively selected from both the private and public sectors in Nigeria. The study made use of primary data collected through the use of questionnaire. A Cronbach alpha of 0.834 was obtained for the validity and reliability of the questionnaire used to collect the primary data. The data were analyzed using descriptive and inferential statistical methods.

The results obtained showed that Information technology had a significant effect on Fraud in the public sector in Nigeria. PUBFRAUD ($F_{1,304} = 105.720$). The P-value associated with the F-value as shown in the significant column is 0.000, this is less than 0.05 indicating that there was a significant relationship between the Information technology and Public Sector Fraud in Nigeria. $Adj R^2 = 0.256$. The Coefficient of the independent variable $\beta = 0.574$, shows that information technology had a positive and significant effect on Public Sector Fraud. PUBFRAUD ($t_{(10.282)} = 000, p < 0.05$). The study, therefore concluded that, there exists a significant relationship between fraud in the public sector in Nigeria and information technology

Keywords: Fraud, Information Technology, Public Sector,

I. INTRODUCTION

Information Technology contributes significantly to the effectiveness and greater integration of world financial markets.

Information technology includes any communication devices such as cellular phones and computer hardware connected to the internet which are used to make Electronic Fund Transfers (EFF). EFT refers to the electronic transfer of money from one bank account to another. This could be done within a bank or across a number of financial institutions in the world without the involvement of bank staff. Advanced information technology has made it possible to transfer money from one country to another by a mere click of a computer mouse button. As a result of this, money obtained in an illicitly manner from the government account can be transferred to any account across the globe. The most prominent of EFT is the wire transfer and transfer using Automatic Teller Machine.

Over the years, government annual expenditures have been on the increase but without a corresponding improvement in the welfare of Nigerians (Chikwado, 2021). This has been

attributed to a number of fraudulent diversion of public funds amounting to several billions of naira by the political office holders (Olufemi, Akinwumi and Ugonna, 2021). Greater part of these funds was transferred to foreign bank accounts (Kingston, 2020). This is the basis of this study.

Objective of the study

Ascertain the effect of information technology on Public Sector Fraud in Nigeria.

Research Questions

What is the effect of information technology on Public Sector Fraud in Nigeria?

Hypothesis

Information technology has no significant effect on Public Sector Fraud in Nigeria.

Method of data analysis: The study adopted survey design research method for the purpose of achieving its objective. A sample size of 420 respondents was purposively selected based on their knowledge of information technology and fraud. The 305 questionnaire properly completed and returned were analyzed using descriptive and inferential statistical methods.

II. LITERATURE REVIEW

Theoretical Framework

Fraud Triangle Theory

This theory was developed by Cressey (1953). According to him, three factors lead to the commitment of any type of fraud by fraudsters. These three factors which are; pressures or incentives, opportunities and rationalization or justification are applicable to public sector fraud (World Bank, 2017), this is the basis of its adoption for this study. The pressures which could be financial or non-financial include the desire to buy luxury cars and apartments, political campaign, donating to various organizations, vote buying. Opportunities refer to the existence of what to steal without hindrance or the circumstances that allow fraud to occur such as; the authoritative position and weak internal control. Rationalization or Justification especially when the fraudster believes others are also doing it in the Public Sector. In Fraud Diamond Theory, Wolfe and Hermanson (2004) added capability to the three elements of the Fraud Triangle. The

fraudster's capability covers knowledge of processes and controls to actually commit the fraud.

III. EMPIRICAL REVIEW

Public Sector Fraud

Fraud is defined by the US Federal Bureau of Investigation in 1984 as the fraudulent conversion and acquisition of money or property by deception.

According to Chen (2022), fraud is an intentionally deceptive action designed to provide the perpetrator with an unlawful gain or to deny a right to a victim. Public sector frauds include; Theft and Embezzlement, Forgeries, Unofficial Borrowing, Manipulation of Vouchers, Fake Payments and Computer Frauds (World Bank 2017). It takes the form of false invoicing, manipulations in the procurement process or procuring low quality items, receiving kickbacks for referring contract work to related parties (World Bank 2017). Others are Theft and skimming such as, removing and selling inventory, cash, consumables, or information, fraudulent acceptance of goods and services, and receiving compensation without reporting transactions), Fraudulent expenditure claims (e.g. using false receipts to claim travel and accommodation allowances); Payroll fraud (e.g. adding fake employees to the payroll or claiming overtime for hours not worked (World Bank 2017).

A lot of money is lost annually by the government to these fraudulent practices. According to the World Bank Report (1999) on public procurement assessment survey conducted, 60 kobo out of every N1.00 spent by the government in Nigeria is lost to corrupt practices and that an average of \$10 billion US dollars was being lost annually due to fraudulent practices in the award and execution of contracts (World Bank, 1999). Between 1999 and 2022, there has been exponential growth in the level of fraudulent diversion of government money to private individual's accounts.

Abdullahi and Mansor,(2015). Said the level of public sector accounting fraud has reached the extent that 65% of the Nigerian. revenue is lost through fraudulent practices to only 20% of the Nigerian population, while the remaining 35% of the revenue goes to 80% of Nigerians.

According to Kasum (2009), perpetration of financial irregularities in Nigeria is becoming the specialty of both public and private sectors and that individuals in the country commit fraud and corrupt practices according to the capacity of their offices. Onuora, Akpoveta and Agbomah (2018) attributed increase in Public Sector Fraud in Nigeria, to the fact that in most cases perpetrators get away with the fraudulent act and that only in a few instances are these fraudulent acts uncovered on time, investigated, prosecuted and adequate punishment given. Because a lot of people involved in the fraudulent acts are left free, no deterrence for future fraudulent acts.

High profile fraud in the Public Sector in Nigeria include; N80billion fraud by the Accountant General of the

Federation in 2022, N195billion Pension Scam, N32.8billion Police Pension scam, and the N255 million armored car scandal involving former minister (Olufemi, Akinwumi and Ugonna, 2022). A number of governors and political office holders were also prosecuted for fraudulent diversion of public funds. A governor from South South Political region was prosecuted for the sum of 1.8 million GBP found on him in London in addition to the 10 million GBP real estate which he owned in U.K (Olufemi, Akinwumi and Ugonna, 2022)

Wire Transfers (WT), which is the transfer of funds by electronic means between banks without the involvement of bank staff have been identified as the main channel through which Electronic Fund Transfer fraud is committed. This is because WT allows for huge sum of money to be transferred at a time. (U.S, Bureau Of Justice Statistics,1986). The wire transfer system facilitates the transfer of money from one party, called the originator or sender, to another party, called the beneficiary or

receiver. The party could be an individual who wants to transfer a large sum of money from his accounts to another bank's account (U.S Bureau of Justice Statistics ,1986).

Descriptive Statistics: Analysis of respondents' perception on Information Technology and fraud in the public sector in Nigeria

In this section, the focus is on the analysis of information obtained from the perception of the respondents on the role of information technology in siphoning money gotten in an illicit manner from the government accounts to pump prime economies of other nations of the world. From 210 respondents representing 68.6% of all the respondents strongly agreed that Information Technology has transformed tremendously financial transactions across the globe. Those who agreed were 74 or 24.2% while 14 or 4.6% slightly agreed.

The analysis revealed further that only 2 or 0.7% of the respondents slightly disagreed, 4 or 1.3% disagreed while 2 or 0.7% strongly disagreed. The mean figure obtained from this question was 5.6 indicating that information technology plays a very prominent role in global financial transactions. On whether personal accounts can be operated in any bank across the globe, 136 respondents or 44.4% of all the respondents strongly agreed, 118 or 38.6% agreed while 34 or 11.1% slightly agreed.

The respondents who slightly disagreed were 4 or 1.3%, another 4 or 1.3% disagreed while 10 or 3.3% strongly disagreed. In their response to question asked to obtain information from the respondents on whether all funds transferred to foreign personal accounts pass through the Banking sector, 126 respondents representing 41.2% of all the respondents strongly agreed that all funds transfer pass through the banking sector, 112 or 36.6% agreed and 32 or 10.5% slightly agreed. The respondents who slightly disagreed were 8 or 2.6% of the respondents; another 8 or

2.6% disagreed while the remaining 20 or 6.5% strongly disagreed.

Data obtained from the questionnaire revealed further that 80 or 26.1% of the respondents strongly agreed that the Central Bank of Nigeria has a complete control over funds transferred to foreign accounts by public office holders. The respondents who agreed were 106 or 34.6% of all the respondents, 40 or 13.1% slightly agreed, 32 or 10.5% slightly disagreed, 28 or 9.2% disagreed and 20 or 6.5% strongly disagreed. The mean figure for this research question was 4.4 indicating that even though the CBN has control over funds transferred to foreign accounts; the control was not very strong. On the use of business firms by public officers to siphon money to foreign accounts, 54 respondents or 17.7% of all the respondents strongly agreed that this is promptly detected by the CBN, 68 or 22.2%

Simple Regression Model and Results

$$PUBFRAUD = f(INFTEC) \text{ which is stated as } Y = \alpha + \beta X + \epsilon$$

$$Y = PUBSECTOR FRAUD$$

$$X = INFORMATION TECHNOLOGY$$

agreed while 86 or 28.1% slightly agreed. The slightly disagreed respondents were 54 or 17%, 24 or 7.8% disagreed and 20 or 6.5% strongly disagreed. The mean is 4.1, the inference to draw from this is that the CBN control over the use of business to siphon money from the economy is weak.

Finally, 170 or 55.6% of the respondents strongly agreed that public funds transferred to foreign accounts by public office holders retard economic growth in Nigeria. The respondents who agreed to this question were 106 or 34.6%,

18 or 5.9% slightly agreed. The respondents who slightly disagreed were 4 or 1.3%, another 4 or 1.3% disagreed while the remaining 4 or 1.3% strongly disagreed. The mean figure for this question was 5.4, a strong indication that public funds fraudulently transferred from the economy using electronic devices retards economic growth in Nigeria.

Reliability Statistics Summary

Corruption Variables	Cronbach's Alpha
Information Technology	0.834

Source: Researcher's Field survey

IV. INFORMATION TECHNOLOGY

Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the estimate	Durbin-Watson
1	0.508	0.258	0.256	0.79665	1.723

Source: Researcher's field survey

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.184	0.314		6.954	0.000
INFTEC	0.574	0.056	0.508	10.282	0.000

Source: Researcher's field survey

ANOVA Table

Model	Sum of squares	Df	Mean Squares	F	Sig.
1	67.094	1	67.094		
Regression	192.932	304	.635	105.720	.000
Residual	260.026	305			
Total					

Source: Researcher's field survey

V. DISCUSSION OF FINDINGS

The tables contain the results of the Regression analysis carried out on the relationship between Information Technology and Public Sector Fraud in Nigeria. R is the correlation between Public Sector Fraud in Nigeria and Information Technology, its value is 0.508. This result shows that the two variables are positively correlated, that is they move in the same direction. At 0.508, the relationship is relatively high. R² which measures the strength of the relationship between Public Sector Fraud in Nigeria and Information Technology, is 0.258 that is a 25.8% Public Sector Fraud in Nigeria is explained by the role of Information Technology in siphoning money out of the Nigerian economy. In the ANOVA table, F-value which is the Mean Square Regression (67.094) divided by the Mean Square Residual (0.635) is 105.720. The P-value associated with the F-value as shown in the significant column is 0.000, this is less than 0.05 indicating fitness of the model to the hypothesis. and that there is a significant relationship between Information Technology and the Public Sector Fraud in Nigeria.

In the coefficient table, the value of constant is 2.184 representing the value of Public Sector Fraud in Nigeria without information technology. The Coefficient of the independent variable INFTEC that is β is 0.574. This shows that a 57.4% increase in the use of Information Technology results in increase in Public Sector Fraud in Nigeria by 100% unit. The t values in the Coefficient table is 6.954 for constant with 0.000 as the significant level and 10.282 for the independent variable with 0.000 as the significant level. This is less than 0.05 showing that the independent variable is a good predictor of the dependent variable.

The model for this corruption variable can be re-stated as follows;

$$Y = 2.184 + 0.574x + 0.06$$

VI. CONCLUSION

Information Technology contributes to the integration of world financial markets and transfer of money obtained illicitly from one country to another. It can therefore be concluded from these results that Information Technology increases the level of Public Sector Fraud in Nigeria.

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