

The Impact of Fraud Management Activities on Organization Survival in Nigeria

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Abstract: - This study examined the impact of fraud management activities on organizational survival in Nigeria. The study used the primary source of data collection through the use of a well structured questionnaire which was administered to 270 respondents. The Wilcoxon test for related samples was used to analyze the data obtained in the study. The findings of this study revealed that the major measures of fraud management in Nigeria are deterrence measures, prevention measures, detection measures, mitigation measures, analysis measures, investigation measures and prosecution measures. It was found that the measures of fraud management have significant impact on fraud management in Nigeria with a Wilcoxon test value of 55.00 and a p-value of 0.00 which is less than $\alpha=0.05$. The study identified deterrence measures, prevention measures, detection measures, mitigation measures, analysis measures, investigation measures and prosecution measures as the major fraud management activities in Nigeria. The findings showed that there is need for effective implementation of fraud management activities in organizations in Nigeria since a Wilcoxon test value of 66.00 and a p-value of 0.08 which is greater than $\alpha=0.05$. This result implies that effective implementation of fraud management activities in the organizations does not significantly impact on fraud management in the organizations. Further findings showed that the response of the study indicated a very high degree of internal reliability with a Cronbach's Alpha value of 92.5%.

Keywords: Detection Measures, Fraud management, Mitigation Measures, Organization

I. INTRODUCTION

Fraud can be referred to as any act of deception, carried out for the purpose of undeserved or unlawful advantage. It is a civil or criminal wrong that may result in loss of money, documents, and properties. It can be in the form of assuming a fake identity (or assuming someone else's details like social security numbers/national identification number), forgery, falsification of documents or perversion of truth and counterfeiting.

Fraud management can refer to the real-time screening of transaction activity across users, accounts, processes and channels, to identify and prevent internal and external fraud in an organization. Fraud management tools are employed to evaluate the variation between related users, related accounts, channels and other entities, to identify unusual behavior that could be a sign of criminal activity, and fraud. In 2016, the *World Bank's Ease of Doing Business Report* ranked Nigeria 169th position out of 189 countries in the ease of doing business. This implies that Nigeria is faced with so many challenges when it comes to doing business. 80% of new

business organizations and startups in Nigeria falls within the first three years of commencing operation. This is caused by a variety of challenges these organizations has to face.

Among the challenges that are faced by business organizations are access to capital or credit, electricity and power supply, government regulations, market development, corruption, bribery and fraud. Abdulahi (2007) opined that most management of organizations in Nigeria have failed to internalize the norm of not using funds for purpose other than their intended use. The indiscretions are not only symptomatic of large financial abuses, but have serious negative effect of encouraging malpractices and maladjustments in business operations. Hence the need to adopt a fraud management practice to proffer solution to different fraudulent activities and ensure the survival of the organization.

Fraudulent activities in organizations have been identified to be one of the major killer of business organizations in Nigeria. Fraud losses continue to impact on most organization and the costs of fraud are transferred to society in the form of opportunity costs, increased customer inconvenience, outrageous high prices for goods and services, and criminal activities funded by the fraudulent gains. The business environment in Nigeria is deeply characterized by fraudulent activities and its related corrupt practices. Fraudulent activities is responsible for instability in the economy resulting to a high mortality rate of business organizations and the consequent losses of revenues. Hence, the need for a Fraud Management Lifecycle practices/employed by business organizations. The management system if managed effectively and with well-balanced components, is expected to significantly help organization to prevent and reduce the losses associated with fraud and ensure organization survival. This study therefore seeks to access what impact that fraud management Lifecycle has on organizations in order to ensure their survival.

II. LITERATURE REVIEW

According to Agwor (2017), fraud is any form of deception practiced to cheat another to his own detriment or to the disadvantage of any other, or to cause another loss, while the perpetrator has a clear knowledge of his deliberate falsehood, deception or advantage over the innocent and unsuspecting victim.

Gavy *et al.*, (2011) noted that fraud encompasses deceit, misrepresentation of the truth, concealment of material facts

to gain some unfair advantage over another. Fraud is said to occur when a person or group of persons with full knowledge of material facts misrepresents such facts with the intention to gain something of value e.g. money and properties

Nwairoegbu-Agbam *et al.* (2016) opined that the success of an organization is a fundamental objective and comprises of one of the primary reasons for organizations effective and efficient control of its assets and financial resources. Failure to do so could result to waste, fraud, mismanagement and in some cases bankruptcy of the organization. Gary *et al.*, (2011) described fraud management strategy as a type of business organizational measures on fraud that involves administrative, punishment, incentive alignment, social and legal sanctions, vigilance, and corrective measures.

According to Ozigbo and Orife (2011), process control is a system of control involving finance or otherwise, introduced by the management or an organization to direct business activities to flow in a better, orderly and efficient manner. It ensures that management policies are strictly adhered to and ensure the safety of assets and accuracy of business records.

According to Hidayet (2013) lack of organizational survival result to failure characterized by negative indicators such as loss of legitimacy, loss of market share and loss of assets and properties and eventually liquidate.

Nwairoegbu-Agbam *et al.* (2016) investigated the relationship between fraud management strategies and organizational success in Nigeria. They employed the Spearman's rank order correlation coefficient analysis to test the hypothesis in the study. The findings of the study showed significant associations between the dimensions of the predictor variable (fraud management strategies) and the measures of the criterion variable (organizational success). The result implies that effect fraud management strategies is the major factor for organizations to be more strategically positioned to manage their resources efficiently and thereby enhance their employees' perception about the affairs and well-being of the organization, which would further facilitate employee retention and employee satisfaction. In addition, Nwairoegbu-Agbam *et al.* (2016) from the findings of their study stressed the need for consistent process and audit control in enhancing the performance and thus, success of the organization.

III. RESEARCH DESIGN AND METHODOLOGY

The study employed the quasi-experimental design which is an empirical interventional study was used to estimate the causal impact of the intervention on target population without random assignment. The study also adopts a cross-sectional survey method in order to investigate the study variables; fraud management and organization survival.

3.1 Population of study

A total of 150 registered small and medium scale business organizations in Anambra State was the total population used

for the study. The organizations have different field of business ranging from manufacturing/production, distribution/warehousing, mining/construction, business process outsourcing/rendering services, and transportation. They were all sited both in rural and urban areas of the state. But due to difficulty in accessing some of the organizations as a result of poor terrain, the researcher had reduced the population using the Judgmental or Purposive sampling technique. Therefore, the total population of organizations considered was 102. The researcher had to used the Judgmental sampling technique by including organizations that can be accessed without difficulty into the study population.

3.2 Sampling procedure and sample size determination

The Cochran's sample size formula was used to determine the sample size. The Cochran formula allows you to calculate an ideal sample size given a desired level of precision, desired confidence level, and the estimate proportion of the attributes present in the population (Cochran 1977). The aim of the calculation is to determine an adequate sample size which can estimate results for the whole population with a good precision. The formula is given below:

$$n_0 = \frac{Z^2 pq}{e^2} \quad (1)$$

where,

n_0 is the sample size,

Z is the selected critical value of desired confidence level,

p is the estimated proportion of an attribute that is present in the population, $q = 1 - p$, and

e is the desired level of precision.

For the purpose of this study the

$$n_0 = 269$$

$$z = 1.64 \text{ (Assuming } \alpha = 0.05)$$

$$p = 0.5$$

$$q = 0.5 \text{ and}$$

$$e = 0.05$$

Therefore the sample size for this study was 269. Hence, 270 questionnaire were administered to 270 staff of the 102 selected organizations and 250 were correctly responded and returned.

3.3 Method of data collection

The primary source of data collection was used for the study which was obtained from the respondents through the

administration of well-structured questionnaire. The questionnaire used dichotomous questions with YES and NO responses and was structured to cover three sections; Section A – Demography, Section B – Measures of Fraud Management and Section C - Effective imolementation of Fraud Management Activities. The questionnaire was administered to all business organizations that was included in the selected sample. The researcher had contacted each organization of which he was referred to the highest ranking personnel that is in charge of fraud management in each of the organization. With proper scrutiny and explanation of the subject matter, the questionnaire was filled by the personnel and submitted back to the researcher.

3.4 Method of Data Analysis

The statistical tool used to analyze the data for the study is the Wilcoxon test.

3.4.1 The Wilcoxon Test (for two related samples)

The Wilcoxon test is intermediate between the sign test and the correlated sample t-test in the amount of information which is extracted from the data of interest (Okoli *et al.*, 2015). The sign of the deference is used in the computation of the Wilcoxon test. However, there is in fact only small difference in the power efficiencies of Wilcoxon and correlated samples t-tests in situations where either could be used. The Wilcoxon test is based on a statistic T, derived from the sum of the ranks for the differences in the data pairs in the less frequent direction.

The distribution of T approximates a normal distribution as n (the number of subjects) gets larger with:

$$\mu = \frac{n(n+1)}{4} \tag{2}$$

and

$$\sigma = \sqrt{\frac{n(n+1)(2n+1)}{24}} \tag{3}$$

Hence, when n is 25 or larger, the test significance of T is calculated using the z score and comparing it to the standard normal distribution tables, where

$$z = \frac{T - \frac{n(n+1)}{4}}{\sqrt{\frac{n(n+1)(2n+1)}{24}}} \tag{4}$$

We must be cautious in the use of T when we are dealing with data that includes more than a few tied ranks as it is unlikely

to be appropriate to use. In this case we should examine the measure of the dependent variable and see if we can make it more sensitive, to produce more distinction between the difference scores and hence fewer tied ranks.

3.5 Data Presentation

Table 1: Summary of response on Measures to fraud management

Measures Of Fraud Management	Response	
	YES	NO
Deterrence measures	150	100
Prevention measures	160	90
Detection measures	150	100
Mitigation measures	200	50
Analysis measures	200	50
Fraud policy	166	84
Investigation measures	181	69
Prosecution measures	160	90
Are all these measures practice by your organization?	178	79
If yes, do you think employing all measures if more effective in tackling fraud than employing just a few measures?	189	61

Table 2: Summary of response on Effective implementation of Fraud Management Activities

Questions	Response	
	YES	NO
Do you have appropriate focus on fraud cause?	160	90
Do you have appropriate fraud management informants reporting?	129	121
Do you have standard policy to ensure a consistent and controllable set of fraud preventive tactics?	140	110
Does your company have an aggressive set of prosecution stage activities?	160	90
Is there coordination of fraud management in your company?	90	160
Has fraud management coordination been helpful in the management of fraudulent activities in your organization?	80	170
Has the balancing of fraud management lifecycle derived success in managing organizational fraud?	160	90
Do you think that the activities in the fraud management lifecycle need to be balanced for effective fraud management?	180	70
Do the environmental factors from the business and regulatory environment and from society as a whole impact the application of fraud management lifecycle.	200	50

IV. DATA ANALYSIS AND RESULT

4.1 Wilcoxon Analysis on examining the measures of Fraud management

The Wilcoxon test was used to examine the measures of fraud management in the organizations under study using data presented in table 1.

Table 3: Rank Analysis on Measures to Fraud Management

	Option	N	Mean Rank	Sum of Ranks
Response	Yes	10	15.50	155.00
	No	10	5.50	55.00
	Total	20		

The result of table 3 showed that majority of the respondents agreed to the measures of fraud management discussed in this study since response "Yes" recorded the highest mean rank of 15.50 while response "No" recorded a mean rank of 5.50.

Table 4: Test Statistic on Measures to Fraud Management

	Response
Wilcoxon W	55.000
Z	-3.788
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 ^a
a. Not corrected for ties.	
b. Grouping Variable: Option	

The result of table 4 found a Wilcoxon W test measure of 55.00 and a p-value of 0.00. The null hypothesis was rejected since the p-value is less than critical value of 0.05. This result implies that measures of fraud management have significant impact on fraud management in Nigeria.

4.2 Wilcoxon Analysis on effective implementation of Fraud Management activities

The Wilcoxon test was used to examine the effective implementation of fraud management activities in the organizations under study using data presented in table 2.

Table 5: Rank Analysis on Effective implementation of Fraud Management Activities

	Option	N	Mean Rank	Sum of Ranks
Response	Yes	9	11.67	105.00
	No	9	7.33	66.00
	Total	18		

The result of table 5 showed that majority of the respondents agreed to the effective implementation of fraud management activities in their organization since response "Yes" recorded the highest mean rank of 11.67 while response "No" recorded a mean rank of 7.33.

Table 6: Test Statistic on Effective implementation of Fraud Management Activities

	Response
Wilcoxon W	66.000
Z	-1.740
Asymp. Sig. (2-tailed)	.082
Exact Sig. [2*(1-tailed Sig.)]	.094 ^a
a. Not corrected for ties.	
b. Grouping Variable: Option	

The result of table 6 found a Wilcoxon W test measure of 66.00 and a p-value of 0.82. The null hypothesis was accepted since the p-value is greater than critical value of 0.05. This result implies that implementation of fraud management activities in the organizations does not significantly impact on fraud management.

Table 7: Reliability Test Statistics of the Responses

Cronbach's Alpha	N of Items
.952	19

The result of the reliability statistics presented in table 7 found a Chronbach's Alpha value of 0.952. This result indicates that the internal consistency of the responses of the research instrument (Questionnaire) is 95.2% consistent, indicating a very high degree of internal reliability

V. CONCLUSION

This study examined the impact of fraud management on organizational survival in Nigeria. In Nigeria, fraudulent activities is responsible for instability in the economy and this has resulted loss of revenues in the business environment and in some cases extinction of some organizations. The findings of this study revealed that the major measures of fraud management in Nigeria are deterrence measures, prevention measures, detection measures, mitigation measures, analysis measures, investigation measures and prosecution measures. It was found that the measures of fraud management have significant impact on fraud management in Nigeria.

Also, findings showed that there is need for effective coordination of fraud management activities in organizations in Nigeria. However, it was found that effective implementation of fraud management activities in the organizations does not significantly impact on fraud management in the organizations. This result is attributed to poor implementation of fraud management activities in the organizations. Since, it was found that there is poor implementation of fraud management activities in most organizations in Nigeria, hence, the need for awareness and understanding of these fraud management activities in organizations in Nigeria. This is very important because it will help in reduction of fraud incidences and enhance

organizational survival since fraud prevention as one of the stages of fraud management is never the core business focus. Fraud management supports the larger business objectives while business exists to provide goods and services. Further findings showed that the response of the study indicated a very high degree of internal reliability.

REFERENCES

- [1]. Abdulahi, N. A. (2007). Fraud and corruption Detection Deference and investigation strategies in the public sector. *Journal of Association of National Accountant of Nigeria*, 4(3): 7-12.
- [2]. Agwor, T. C. (2017). Fraud Prevention And Business Performance In Quoted Manufacturing Companies in Nigeria. *European Journal of Accounting Auditing and Finance Research*, 15(9): 71-80.
- [3]. Cochran, W.G. (1977). *Sampling Techniques*. 3rd Edition, John Wiley & Sons, New York.
- [4]. Gary, P, Poh-Sun, E, Themin, S & Evelyn, G (2011). Fraud: A review and research agenda. *Accounting business and public interest*, 138-178
- [5]. Hidayet, T. (2013). Organizational failure. *Journal of Sage Publications*, 696-701.
- [6]. Nwairoegbu-Agbam, C. M., Nwuche, C. A. and Anyanwu, A. C. (2016). Fraud Management Strategies and Organizational Success: A Study of Manufacturing Firms in Nigeria. *International Journal of Novel Research in Marketing Management and Economics*, 3(2): 126-138
- [7]. Okoli, C. N., Aronu, C. O., Nwosu, C. A., Osuji, G. A. , Ugwu, N. D., and Ekezie, C. K. (2015). *Modern Statistical Methods and Applications for Sciences and Engineering with Practical Manual*, Divine Press Awka, Nigeria
- [8]. Ozigbo, S.A and Orife, C.O. (2011). Internal control and fraud prevention in Nigerian business organizations: A survey of some selected companies in Warri metropolis. *International Journal of Economic Development and Investment*, 2(3): 74-77.
- [9]. World Bank's Ease of Doing Business Report, 2016, retrieved from - <http://www.worldbank.org/en/events/2015/11/11/doing-business-2016-report>

Appendix I

Sample of Questionnaire on the Impact of Fraud Management on Organization Survival in Nigeria.

Note: Information gotten from this questionnaire are strictly confidential and for research purposes only.

Section A: Demography

Please provide answers to the questions below by ticking the checking the appropriate box.

1. How old is the business organization? 0-5yrs 6-10yrs
10yrs and above
2. What is the number of employees in the organization? 0-10 11-20 21-30
31-40 41 and above
3. What is the nature of business? Manufacture/production Distribution
Business Process Outsource/Services Mining/Construction transportation
4. Where is the organization located? urban rural
5. Please indicate how many past occurrence of fraudulent activities has been recorded in the business? 0-3times 4-6times 7-9times 10 times and above

Section B: Measures to fraud management

Please tick **YES** or **NO** if any of the listed measures to fraud management is practiced by your organization.

Measures Of Fraud Management	Response	
	YES	NO
Deterrence measures		
Prevention measures		
Detection measures		
Mitigation measures		
Analysis measures		
Fraud policy		

Investigation measures		
Prosecution measures		
Are all these measures practice by your organization?		
If yes, do you think employing all measures if more effective in tackling fraud than employing just a few measures?		

Section C: Effective coordination of fraud Management activities

Please tick **YES** or **NO** the questions below.

Questions	Response	
	YES	NO
Do you have appropriate focus on fraud cause?		
Do you have appropriate fraud management informants reporting?		
Do you have standard policy to ensure a consistent and controllable set of fraud preventive tactics?		
Does your company have an aggressive set of prosecution stage activities?		
Is there coordination of fraud management in your company?		
Has fraud management coordination been helpful in the management of fraudulent activities in your organization?		
Has the balancing of fraud management lifecycle derived success in managing organizational fraud?		
Do you think that the activities in the fraud management lifecycle need to be balanced for effective fraud management?		
Do the environmental factors from the business and regulatory environment and from society as a whole impact the application of fraud management lifecycle.		

Appendix II

Demographic Response of Questionnaire on the Impact of Fraud Management on Organization Survival in Nigeria

Section A: Demography

Please provide answers to the questions below by ticking the checking the appropriate box.

1. How old is the business organization? 0-5yrs 98 6-10yrs 98

10yrs and above 54

2. What is the number of employees in the organization? 0-10 30 11-20 54

21-30 42 31-40 91 41 and above 33

3. What is the nature of business? Manufacture/production 24 Distribution 38

Business Process Outsource/Services 20 Mining/Construction 76 transportation 92

4. Where is the organization located? Urban 220 Rural 30

Please indicate how many past occurrence of fraudulent activities has been

recorded in the business? 0-3times 221 4-6times 29 7-9times 0 10 times

and above 0