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Artificial Intelligence & Internal Audit Quality of Commercial Banks in Nigeria

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ABSTRACT

Internal auditors have crucial roles in appropriately and effectively managing risk within organizations. Several enquiries are made as to whether artificial intelligence (AI) can assist them to them meet this goal. The study investigated the application of artificial intelligence in Nigerian commercial banks in a bid to facilitate audit quality. This study adopted the survey research design, prompting expert opinion on the subject matter. The study adopted the purposive sampling methods. The study enrolled 121 employees from selected banks. Employing the sample t-test to test the hypotheses formulated. The findings from the study show that at 95% confidence level p-value<0.05, the application of artificial intelligence has aided internal audit in commercial banks. Bringing to light valuable benefits which include real time detection, wider audit coverage, improved accuracy, and efficiency. Furthermore, the findings reveal that there are significant challenges impeding the application of AI by commercial banks. The study recommended improved AI awareness, training, and driving automation to improve quality of audit in commercial banks.

KEYWORDS: Artificial intelligence, Audit quality, Commercial banks, Internal audit.

1. INTRODUCTION

In a world of vast technological advancement, where changes and development evolve every day, Industries and various sectors have largely realized the need for data analytics and artificial intelligence as important tool for decision-making in their day-to-day operations.

Several sectors, ranging from the health to retail, agriculture, media and entertainment industries, and several others have come to the realization that data analytics and AI are effective in transforming and improving their business models.

The financial sector is not an exception as the Accounting field and audit practice in general is experiencing a fundamental transition as a result of data analytics (DA) and artificial intelligence application (AI) (Kokina & Davenport 2017). Technological transformation is fast erupting and changing the world in general. Artificial intelligence (AI) serves as a managerial tool for auditors. It enables them to work better and faster with the aid of technology. Gathering data with machine learning tools or robots provides the auditor with real time data which they can examine in a more timely manner and identified potential risks can be resolved immediately, AI as it relates to audit, brings to light an effective solution which assists auditors to stay ahead of the curve by positioning the required data directly in front of them.AI facilitates the audit process by automating repetitive and labor-intensive task that would have been manually carried out by the auditors (Rapoport, 2016 and Agnew, 2016) Patterns and trends are identified from large data sets and processed through the use of data analytics tools to provide insights for risk assessments and pinpoint anomalies as well as red flags that demands a closer look and requires further investigation. It also subsists as a proactive approach to detect and predict irregularities before they occur and develops into actual incidents (Neesgood & Kennedy, 2021)

Imagine an auditor having to dig through tons and tons of vouchers, tickets, journals or even looking through several books of account in search of anomalies and any trace of fraudulent activities. Sometimes they have to travel to different geographical locations, cities town or even departments.

However, evidence of corrupt practices from around the world abounds as individuals vested with financial responsibilities misappropriate funds and are unable to give convincible account of enormous resources committed to their care.

The impact of fraudulent practices has had series of negative effect on the economy and the country's public image. Economically, financial fraudulent practices have robbed the

country of its development. It has given room for ineffective structures, poor and weak institutions and ultimately it has impoverished the masses. In terms of the nation's reputation, Corruption Perception Index (2021) has ranked Nigeria 154 out of 180 countries in corruption and corrupt practices. The import of this situation is that in spite of the increased effort to curb fraudulent activities, several digital frauds are emerging, fraudsters are way ahead, eating into the fiber of the financial services and developing intelligent solutions that fraud experts have not been able to crack. There is therefore a need to leverage on technology through the use of artificial intelligence and data analytics tools to facilitate audit and investigation in commercial banks.

The primary aim of this study is to consider the efficacy of Artificial Intelligence on audit quality. Specifically, the study will focus on the following objectives:

1. To delve into the importance of audit and investigations in Nigerian Commercial Banks
2. To measure the extent of the usage of artificial intelligence in Nigerian Commercial Banks
3. To elucidate the factors limiting the use of artificial intelligence in Nigerian Commercial Banks

The central question of this study is whether artificial intelligence has been able to improve the quality of internal audit in the commercial banks in Nigeria. Further questions that will be asked are:

1. How has the use of AI facilitated the internal audit quality in Nigerian Commercial banks?
2. To what extent have Nigerian Commercial banks adopted the use of AI?
3. What factors have impeded the application of AI in the Nigerian Commercial banks?

The study formulates the following null and alternative hypotheses that are tested.

Hypothesis One

$H_0$1: The application of Artificial Intelligence has not significantly benefited Nigerian Commercial Banks

$H_1$1: The application of Artificial Intelligence has significantly benefited Nigerian Commercial Banks

Hypothesis Two

$H_0$2: There is no significant application of AI in Commercial Banks.

$H_1$2: There is a significant application of AI in Commercial Banks

Hypothesis Three

$H_0$3: There are no significant challenges impeding the application of Artificial Intelligence by Commercial Banks

$H_1$3: There are significant challenges impeding the application of Artificial Intelligence by Commercial Banks.

2. LITERATURE REVIEW

Conceptual Review

John McCarthy coined the term Artificial Intelligence at the academic conference he held in 1956 where he described it as the science of making intelligent machines.

Artificial Intelligence (AI) Involves the imitation of human intelligence by machines, in such a way that a computer demonstrates human behaviours and characteristics ,learning constantly to improve its performance (Mach,2021).AI programs utilize data gathered from different interactions to improve processes and systems through improved efficiency.) Artificial intelligence (AI) simulates the intelligence of machines. Being built to act independently and make important choices and decisions to bring about efficient learning, reasoning, problem-solving and decision making. (Von Krogh, 2018).

The application of artificial intelligence to audit can bring about considerable benefits which includes:

Real Time Detection: The application of artificial intelligence can bring about real time detection or anomalies that requires escalation to the appropriate channels for immediate attention and remediation,

Wider coverage: AI gives room for processing large volumes of data locally and even in different subsidiaries and branches which could not have been feasible by human audit.

Increased Efficiency: The use of robotic process automation (RPA) and optical character recognition (OCR) can drastically reduce manual work to a barest minimum, thereby reducing potential human errors and time spent on each task since it does not depend on human resource. TAR (Technology assisted review) on the other hand, concentrates on the most relevant documents in a short space of time and focuses the investigator's review on the key documents only, thereby eliminating a significant number of the false positives.(Fedyk, et al ,2022).

Improved Accuracy: AI can automate the process of sifting through data, making it easier to identify patterns, and flagging any anomalies for further review. AI can also be used to predict or detect fraud, which can help detect discrepancies in a financial statement or report. Additionally, AI can be used to automate the process of generating audit reports, which can help to reduce the time it takes to generate them. Finally, AI can be used to simulate different scenarios and provide insights into potential issues that may arise during the audit. All of these benefits can result in improved accuracy in audits.

Cost Reduction: AI can provide significant cost reductions in the audit process. By automating processes, AI can help to reduce the time and costs associated with manual data entry and analysis. AI can also help to automate internal controls and improve the accuracy of audit reports. Additionally, AI can help to identify trends and anomalies in data, allowing auditors to focus on areas of risk and quickly detect potential fraud. (Fedyk, et al ,2022)

Protection of Sensitive Information: AI-based systems can be trained to detect and protect sensitive data, such as

customer and financial information. AI can also be used to detect patterns of suspicious activity, such as anomalous transactions or unusual user behavior. By doing so, it can help organizations protect themselves from potential fraud or data breaches. Additionally, AI can be used to detect and block malicious attacks, such as malware or ransomware, which can help prevent data theft. By using AI to protect sensitive information, organizations can ensure that their data is secure and that their customers' information is kept safe.

Consistently and Defendable: According to Yee and Norden, 2019, The automation of processes will reduce human error, improve accuracy and dependability as well as enable a more reliable basis for performance and decision making.

Challenges

Even with its associated benefits and prospects , The application of AI in audit is not without its challenges. These include:

Competence and Readiness

The perennial question of readiness arises as with other aspects of technology advancement. Audit staff may not be competent to understand the exact nature of the data and output to draw appropriate conclusions. Therefore, those who do not fully understand the process may find it daunting and shy away from deploying AI in investigations and compliance programs.

Time-consuming: Deployment of AI in investigations can increase efficiency, but it is essential that the design of the AI process is done appropriately and is fine-tuned to produce accurate results. To ensure laws and regulations are not breached, technical data experts and experts in data privacy must collaborate from the beginning of the process, even though this may be time-consuming.

Data Integrity and Security

Specialists are often required to extract client data; however, the completeness and integrity of this data may not be guaranteed. This is particularly true if a client utilizes multiple data systems, restricts the accessible data, or manipulates the data available for extraction. The firm may also lack the appropriate tools or understanding necessary to ensure all data is collected. Additionally, because AI requires access to large datasets for processing the security and privacy of data may be threatened.

Theoretical Review

This area considers theories that have looked at the relationships artificial intelligence and auditing as well as other sectors

The Policeman Theory

According to the policeman theory, the auditor is responsible for searching, discovering and preventing any fraudulent activity. However, the primary responsibility of fraud prevention and detection rests with the management and the governance of an organisation; it is also important that more emphasis is placed on prevention of fraud. Despite this, there has been more pressure on auditors to detect fraud after recent reporting scandals such as the Enron case. As such, it can be argued that in modern societies, the users of statements require an auditor to be responsible for fraud detection, as they use audit reports to analyse and make decisions. Moreover, the auditor also has a duty of care to the end users of audit reports and should consider risks of material misstatements due to fraud when calculating audit risk, in order to provide reasonable assurance and an independent, true and fair view of the financial statements.

Theory of Mind

Theory of Mind, as defined by Goldman, is the cognitive capacity to attribute mental states to self and others, referred to by other names such as "commonsense, naive or folk psychology," "mindreading," and "mentalizing." This ability allows people to form beliefs or judgments about the mental states of others, which are not directly observable. Knowing that people have thoughts, feelings and emotions that affect their behavior, future AI systems must be able to understand that both people and AI objects have these mental states and adjust their behavior accordingly in order to coexist with us. Ultimately, theory of mind is the innate ability of humans to understand the thoughts and feelings of other conscious beings and interact with them accordingly.

Theoretical Framework

This study anchor on the theory of mind which explains that machines with AI can recognize the thoughts, feelings, and expectations of others and adjust their behavior accordingly. Artificial intelligence solutions can simplify the auditors' processes and guide their decisions effectively by reviewing transactions as they occur and flagging those that violate pre-set rules. It leverages algorithms to identify and understand patterns and anomalies within data sets, thereby allowing auditors to detect areas of risk and carry out tasks more efficiently and effectively.

Empirical Review

Several scholars both national and international reputation have carried out similar studies on Artificial Intelligence and audit related issues. The researcher reviewed some of these studies.

The use of Artificial Intelligence (AI) has had a significant impact on Auditing and Accounting performances, broadening the possibilities of the accounting process. Awareness of the various accounting applications and software available can lead to improved operations such as auditing and accounting decision making. Moreover, Managerial accounting decision-making can be enhanced with the use of AI-based technologies such as soft computing and artificial neural networks.

(McGuig & Ghio, 2019; Mehdi et al.,2017).

AI is very crucial in the performance of audit procedures and significantly facilitates proper decision making through the

use of data analytics to provide more relevant and reliable financial information. AI makes use of an expert system, applying machine intelligence rather than human intelligence. (Askary et al., 2018)

Various major accounting firms have taken into consideration to integrate Artificial Intelligence into their auditing and accounting processes, as it has facilitated considerable changes in the sector by reducing misstatements and material errors in the accounting information, as well as enhancing the audits by delivering large scale automated audits in an efficient and effective manner (Yingying et al.,2020).

AI, a simulation of human intelligence processes by computers, has played an important role in facilitating the improvement of financial information available to accountants for making efficient and sound decisions (Bin-Ghanem & Ariff, 2016). A defining feature of AI systems is that they learn from each operating cycle , thereby becoming more "intelligent" through correcting errors and improving upon them (Mach, 2021).

AI has caused significant improvements to the audit process through audit operations automation, as well as enhancing the decision-making process in various business sectors, making a major contribution to accounting. (Khamis-Ali, 2022)

It is widely believed that the younger generation of accountants need to understand and be prepared to work alongside artificial intelligence, as Greenman (2017) investigated the impact of artificial intelligence on the accounting profession. Prospective tasks of bookkeeping or process-driven assignments are more likely to be replaced with an automated technology than the higher value specialties that involve professional judgment.

Zehong and Zheng (2018) investigated the use of artificial intelligence to avoid several accounting frauds and to generate positive impact on accounting information quality. The study concluded that in order to improve the effectiveness of artificial intelligence in accounting, the personnel should become comprehensive and qualified in seven aspects. This article analyzed the effect of artificial intelligence on accounting..

Luo et al. (2018) examined the artificial intelligence in the accounting industry as the research object, analyzed the impact of artificial intelligence on the development of accounting and puts forward and suggestions for its problems.The study posits that the accounting industry should make full use of artificial intelligence to reform and innovate. For enterprises, mastering new information technology is the key to seizing opportunities and upgrading in the new era. It is unquestionable that intelligent finance and accounting is the future development trend. To promote the application of artificial intelligence in the accounting field, it is essential for governments, enterprises, universities, individuals, and other parties to collaborate, and how to effectively solve the problems arising in the process of application is the key.

Chukwudi et al. (2018) investigated the effect of artificial intelligence on the performance of accounting operations in accounting firms in Nigeria. the study confirmed that Expert system has significant effect on the performance of accounting function of accounting firms in Nigeria.

Research Gaps

Previous researchers have written extensively on artificial intelligence and audit as well as the decision making process in accounting .However, the research papers by Tarmidi et al (2018) and Moudud (2014) focused solely on positive aspects of AI in the accounting and auditing procedures. It ignored the threats that the applications of AI may pose to the internal audit procedures and the organization at large.

Furthermore, the study by Hansen, McDonald et al (1992) did not shed light on the challenges that would be encountered if the predictions of the financial statements went wrong, this major area requires critical research to be done such that this does not negatively impact the businesses and companies.

While some of them had included the banking sector in their scope, none of these above-mentioned studies have revealed the extent of artificial intelligence application in deposit Money banks in Nigeria More so, none of these studies are of immediate recent findings (1-3 years), which implies that their findings may need to be re-evaluated for recent changes. Lastly, none of these studies enrolled more than 10 deposit money banks in their studies. This is a scope gap and none of these studies explained the extent of AI application in commercial banks. These gaps are what this present study seeks to fill.

3. METHODOLOGY

Research Design

This study adopted the survey research design. This design is a procedure in quantitative research in which investigators administer questionnaires to a sample describing the attitudes, opinions, behaviours or characteristics of the population. The study adopted the primary source of data collection. This implies that data was collected during the survey of the sampled commercial banks using questionnaires.

Population of Study and Sampling Technique

The population of this study is comprised of all Nigerian commercial banks. A study population is a group of elements or individuals, who share similar characteristics. These similar features can include location, gender, age, sex or specific interest. The emphasis on study population is that it constitutes individuals or elements that are homogeneous in description. According to the information from the central bank of Nigeria (CBN) website, there are 22 commercial banks in Nigeria as at August 8, 2022 when the site was viewed. Using the purposive sampling technique (which allows the researcher to gather responses, which leads to better insights and more precise and valuable research results

from the target respondents) the study obtained valid information from the relevant staff of 15 banks, working within related departments namely: Internal control, Internal audit Data Analytics and Information Technology. These formed the sample frame to whom questionnaires were administered

The 15 banks were accessed and surveyed. A total of 150 copies of the questionnaire were distributed, 132 were retrieved while 121 were considered valid (free of errors) for the study.

4. DATA PRESENTATION, ANALYSIS AND DISCUSSION

Presented below is an analysis of the data collected from the survey. The data used for this chapter was analyzed using the statistical package for social science (SPSS v.23).

Table 1: Questionnaire Distributions in Commercial Banks

S/n	Commercial banks	N0. distributed	N0. received	Valid
1.	*Access bank Plc*	10	10	10
2.	*Ecobank Nigeria Plc*	10	8	7
3.	*Fidelity bank Plc*	10	8	8
4.	*First Bank Nig. Plc*	10	10	10
5.	*FCMB Plc*	10	10	8
6.	*Guaranty Trust bank Plc*	10	10	10
7.	*Keystone Bank plc*	10	8	7
8.	*Polaris bank Plc*	10	7	7
9.	*Stanbic IBTC*	10	10	10
10.	*Sterling bank Plc*	10	6	6
11.	*Union Bank of Nigeria Plc*	10	9	7
12.	*United Bank for Africa Plc*	10	8	8
13.	*Unity Bank Plc*	10	8	8
14.	*Wema Bank Plc*	10	10	8
15.	*Zenith Bank Plc*	10	10	7
	Total	**150**	**132**	**121**

Source: Authors ' compilation (2022)

Table 2: Analysis of Departments of Respondents

Department in the Bank					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Internal Audit	14	11.6	11.6	11.6
	Data Analytics	95	78.5	78.5	90.1
	Information Tech	3	2.5	2.5	92.6
	Internal Control	9	7.4	7.4	100.0
	Total	121	100.0	100.0	

Source: Authors ' compilation (2022)

Test of Hypotheses

The binomial logistics regression analysis test statistics was applied in testing the null hypotheses. Binomial logistics regression predicts the probability that an observation falls into one of two categories of a dichotomous dependent variables based on a set of categorical or continuous independent variables. Therefore, the Likert scale responses were coded into two categories. Strongly agreed and agreed were coded as yes (2) while strongly disagreed, disagreed and

uncertain were coded as no (1). This enabled the study to place the responses into two fit categories.

Hypothesis One

$H_0$1: The application of Artificial Intelligence has not significantly benefited commercial banks

$H_1$1: The application of Artificial Intelligence has significantly benefited commercial banks

Case Processing Summary			
Unweighted Cases		N	Percent
Selected Cases	Included in Analysis	121	100.0
	Missing Cases	0	.0
	Total	121	100.0
Unselected Cases		0	.0
Total		121	100.0
a. If weight is in effect, see classification table for the total number of cases.			

Dependent Variable Encoding	
Original Value	Internal Value
No	0
Yes	1

Classification Table				
		Predicted		
		Fraud in organization		
	Observed	No	Yes	Percentage Correct
Step 0	Fraud in organization			
	0		17	0.0
	0		104	100
	Overall Percentage			86.0
a. Constant is included in the model.				
b. The cut value is .500				

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1.811	.262	47.931	1	.000	6.118

Variables not in the Equation					
			Score	Df	Sig.
Step 0	Variables	B1X1	.725	1	.395
	Overall Statistics		.725	1	.395

Omnibus Tests of Model Coefficients				
		Chi-square	Df	Sig.
Step 1	Step	.700	1	.403
	Block	.700	1	.403
	Model	.700	1	.403

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	97.518[a]	.006	.010
a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.			

Classification Table					
			Predicted		
			Fraud in organization		Percentage
	Observed		No	Yes	Correct
Step 1	Fraud in organization	No	0	17	.0
		Yes	0	104	100.0
	Overall Percentage				86.0
a. The cut value is .500					

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	B1X1	.454	.537	.716	1	.397	1.575
	Constant	1.066	.900	1.401	1	.237	2.902
a. Variable(s) entered on step 1: B1X1.							

Source: SPSS output (2022)

The result shows that the overall percentage (86%) was correctly predicted as given the model. In this part of the output, this is the null model 86.0 = 104/121. the p-value at step 0 is less than 0.05 at 1 df, this implies that the null hypothesis equals 0. therefore, the null hypothesis could be rejected on this basis. However, this is of not much interest to the study. The scores show that our predictors are statistically significant which puts the data in position to predict the right outcome. The omnibus shows that the study specified the full model in the logistics regression command. The p-value (.397) > 0.05 at 1 degree of freedom, therefore, at this point, it is statistically valid to accept the null hypothesis that the application of artificial intelligence has not significantly benefited the commercial banks.

The model's pseudo R2 explained between 0.6% to 10.0% of the variation in AI benefits and correctly classified 86.0% of the cases. The predictor is more likely to be significant 1.575 times than not.

Hypothesis Two

$H_0$2: There is no significant application of Artificial Intelligence in commercial banks

$H_1$2: There is a significant application of Artificial Intelligence in commercial banks

Dependent Variable Encoding	
Original Value	Internal Value
No	0
Yes	1

Classification Table[a,b]					
			Predicted		
			Fraud in organization		Percentage
	Observed		No	Yes	Correct
Step 0	Fraud in organization	No	0	17	.0
		Yes	0	104	100.0
	Overall Percentage				86.0
a. Constant is included in the model.					
b. The cut value is .500					

Variables in the Equation							
		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 0	Constant	1.811	.262	47.931	1	.000	6.118

Variables not in the Equation					
			Score	Df	Sig.
Step 0	Variables	B2X2	.447	1	.504
	Overall Statistics		.447	1	.504

Omnibus Tests of Model Coefficients				
		Chi-square	Df	Sig.
Step 1	Step	.445	1	.505
	Block	.445	1	.505
	Model	.445	1	.505

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	97.774[a]	.004	.007

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Source: SPSS output (2022)

Classification Table[a]					
			Predicted		
			Fraud in organization		Percentage Correct
	Observed		No	Yes	
Step 1	Fraud in organization	No	0	17	.0
		Yes	0	104	100.0
	Overall Percentage				86.0

a. The cut value is .500

Source: SPSS output (2022)

Variables in the Equation							
		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1[a]	B2X2	.350	.524	.444	1	.505	1.418
	Constant	1.282	.821	2.439	1	.118	3.603

a. Variable(s) entered on step 1: B2X2.

Source: SPSS output (2022)

The overall percentage (86%) was correctly predicted as given the model. In this part of the output, this is the null model 86.0 = 104/121. The omnibus also shows that we specified the full model in the logistics regression command. The p-value (.505) > 0.05 at 1 degree of freedom, therefore, at this point, we accept the null hypothesis that there is no significant application of Artificial Intelligence in Deposit Money Banks

Hypothesis Three

$H_0$3: There are no significant challenges impeding the application of Artificial Intelligence by commercial banks

H_a3: There are significant challenges impeding the application of Artificial Intelligence by commercial banks

Dependent Variable Encoding	
Original Value	Internal Value
No	0
Yes	1

Classification Table[a,b]					
			Predicted		
			Fraud in organization		
	Observed		No	Yes	Percentage Correct
Step 0	Fraud in organization	No	0	17	.0
		Yes	0	104	100.0
	Overall Percentage				86.0
a. Constant is included in the model.					
b. The cut value is .500					

Variables in the Equation							
		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 0	Constant	1.811	.262	47.931	1	.000	6.118

Variables not in the Equation					
			Score	Df	Sig.
Step 0	Variables	B3X3	5.178	1	.023
	Overall Statistics		5.178	1	.023

Omnibus Tests of Model Coefficients				
		Chi-square	Df	Sig.
Step 1	Step	5.673	1	.017
	Block	5.673	1	.017
	Model	5.673	1	.017

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	92.546[a]	.046	.082
a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.			

Classification Table[a]					
			Predicted		
			Fraud in organization		Percentage Correct
	Observed		No	Yes	
Step 1	Fraud in organization	No	0	17	.0
		Yes	0	104	100.0
	Overall Percentage				86.0
a. The cut value is .500					

Variables in the Equation							
		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1[a]	B3X3	-1.425	.666	4.580	1	.032	.241
	Constant	4.218	1.227	11.826	1	.001	67.907
a. Variable(s) entered on step 1: B3X3.							

Source: SPSS output (2022)

The overall percentage (86%) was correctly predicted as given the model. In this part of the output, the null model is also 86.0 = 104/121. The omnibus shows that we specified the full model in the logistics regression command. The p-value (.032) < 0.05 at 1 degree of freedom, therefore, at this point, we reject the null hypothesis that there are no significant challenges impeding the application of Artificial Intelligence by Deposit Money Banks

Summary of Findings

A total of 121 personnel of different deposit money banks were enrolled in the survey. The study employed the binomial logistic regression analysis to test the hypotheses formulated. The findings from the study shows that at 1 degree of freedom p-value>0.05, the application of artificial intelligence has benefited the banks but this is still at a low level. This can be due to ineffective application as predicted by the second hypothesis. In reality, while AI has benefited DMBs, there are still high-profile fraud carried out often in the country via several banks. As much as lot of fraud cases go unreported, the few captured by the media speaks volume. Also that there was no significant (.505 > 0.05) application of Artificial Intelligence in deposit Money banks, this is because some of the banks do not have a dedicated department for AI or Data Analytics and there are significant challenges (.032< 0.05) impeding the application of AI accounting by Deposit Money Banks.

5. CONCLUSION

Even though Artificial Intelligence provides promising outlook for the future, most researchers and organizations have to adopt the necessary skills and knowledge to integrate AI into their processes. With AI and data analytics, there is a chance to redress some of the internal audit challenges and for auditors to have the ability to test more transactions and balances. This may increase the chances of detecting certain types of fraud or the ability to identify inefficiencies and opportunities for a clients' business. The information from this study will help in understanding how artificial intelligence affects audit quality in Nigerian Deposit Money Banks

Policy Recommendations

Based on the findings of the study, The underlisted measures are recommended:

i. Deposit Money Banks should focus on training auditors to keep pace with technological advances in AI applications in collecting audit guides, representing knowledge, and controlling the search for such evidence within databases.

ii. There should be improved Awareness in Artificial Intelligence technologies by internal audit to foster better audit quality

iii. Banks should pay more attention to giving auditors many opportunities to develop and practice the application of artificial intelligence methods because of their importance in improving the collection of audit evidence.

iv. Banks should prioritize data privacy security while ensuring that the quality of internal audit process is not jeopardized.

v. There should be continuous update of IT software and automation of business processes as well as Audit and reporting techniques

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