DIGITALIZED ACCOUNTING TECHNIQUES AND FINANCIAL REPORTING QUALITY OF SELECTED DEPOSIT MONEY BANKS IN NIGERIA

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ABSTRACT

Broadly, the study examined the impact of digitalized accounting techniques on financial reporting quality of selected money deposit banks in Nigeria. Specifically, this study ascertained the impact of artificial intelligence, big data and internet-of-things on financial reporting quality of deposit money banks in Nigeria. The study employed descriptive survey research design where structured questionnaires involving a 5 point Likert scale option were utilized to gather primary data from the respondents. The collected data were descriptively analyzed, while multiple regression model involving ordinary least square (OLS) technique was adopted to test the hypotheses at 5% level of significance with the aid of statistical packages for social sciences (SPSS). The findings revealed that Artificial Intelligence (AI), big data (BD) and internet of things (IoTs) have significant positive impact on the financial reporting quality of selected deposit money banks in Nigeria. The implication of the findings is that if digitalized accounting technological innovations/techniques such as AI, BD management, and IoTs are effectively used and optimized in every financial entity, reliable and credible financial reports will be produced especially by money deposit banks in Nigeria. The study, therefore, recommends that deposit money banks in Nigeria should prioritize their investments in digital accounting technologies so as to enhance digital accounting techniques that improve financial reporting quality, thereby promoting transparency and stakeholder confidence in deposit money banks financial reports.

Keywords: Digitalized Accounting, Financial Reports Quality, Money Deposit Banks, Nigeria.

JEL Classification: G21, G23, 033

1.0 INTRODUCTION

The significant roles of deposit money banks (DMBs) in the economic growth of nations have been widely acknowledged. This suggests that globally, DMBs are among the major drivers of global micro and macroeconomic indices that contribute to nations' economic growth and development. In playing this significant role, it becomes imperative to reconsider the financial reporting quality of these DMBs. Digitization has revolutionized the pace of financial institutions' operations especially DMBs by swiftly moving traditional accounting practices to digitalized ones. Digitization might seem intimidating as companies shift towards automation of their operations which reduces operational human labor. The migration from the manual system to the digital system is necessitated by the perceived benefits derivable from such a system. As documented by Chong and Nizam (2018), due to the complexity of the accounting system, increasing vulnerability to errors, and the swelling volume of accounting transactions, a technique that could process and store accounting data with increased speed, vast storage, and processing capacity was necessitated. Thus, to satisfy the increasing demand for up-to-date and accurate information, digitalized accounting techniques became imperative (Phornlaphatrachakorn & Nakakasindhu, 2021).

Digitalized accounting techniques entail the practice of applying the various digital accounting technologies that ensure the creation, representation, and transfer of financial information in an electronic format. Digitalized accounting techniques require the application of one or more disruptive technologies such as cloud accounting, big data, artificial intelligence, robotic analytics, and machine learning with the Internet of Things (IoTs) to enhance the accuracy and quality of financial reporting (Shree et al., 2021). More so, Bhiman (2020) argued that the use of digital technologies is gradually changing the face of financial reporting and the way accountants and other users of financial statements now perceive the timely delivery of financial reporting systems. No organization, including deposit money banks, wants to be left behind the trend and the move of information technologies and innovations in improving the quality of financial reporting.

The importance of digital accounting is emphasised by Phornlaphatrachakorn and Nakakasindhu (2021) that it enables firms to complete functional tasks more quickly and accurately, as well as interpret and report data and information faster, more efficiently, and more effectively. Through digital accounting techniques, access to vital financial information can be obtained in real time by logging into the system from anywhere and at any time. Ekong and Mbobo (2021) averred that traditional and manual reporting could slow transactions as the

DMBs operations could be bogged down with spreadsheet recording and reconciling data between systems.

Financial reporting quality has to do with reports that are more complete, neutral, and free from errors and provide more useful predictive information about a firm's underlying economic position and performance (Shuraki, Pourheidari and Azizkhani, 2022). The rationale behind the desire for qualitative financial reporting stems from the usefulness of such reports to the users. Provision of high-quality financial reporting information is important because it will influence the entity and their stakeholders in making investment, credit lending, and resource allocation decisions, thus enhancing overall operational efficiency. High-quality financial reports provide decision makers with useful information, which confidently represents the economic reality of a bank's activities during the reporting period as well as its financial condition at the end of the reporting period. The provision of qualitative financial reports cannot be achieved without the application of computers and network facilities. Thus, Anitha and Dinesh (2023) aver that there is a link between digital accounting techniques and the quality of financial reports.

The complexities associated with manual financial reporting have become problematic and challenging because traditional manual financial reporting system delays processes of data collection, processing, and reporting hence the reports are prone to harbour errors and misstatements Wilson (2017), Lapses in financial reporting quality have given rise to high-profile scandals that resulted not only in investors' losses but also reduced confidence in the financial system. These lapses illustrate the challenges analysts face as well as the potential costs of failing to recognize practices that result in misleading financial reports.

Furthermore, digitalized accounting techniques present problems such as data security and privacy, additional cost of adaptation and implementation, resistance to change and skills gap among professional accountants. The security and privacy of sensitive financial information are serious issues of concern. The risk of data breaches and theft, cyberattacks, and unauthorized access are also major concerns to accountants.

This study will examine the effect of artificial intelligence on the financial reporting quality of money deposit banks in Nigeria and ascertain the influence of big data on the financial reporting quality of money deposit banks in Nigeria, finally, assess the effect of internet-of-things (IoTs) on financial reporting quality of money deposit banks in Nigeria.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Digitalized Accounting

Digitalized accounting, which is also called e-accounting or computerised accounting, is concerned with the technique of processing financial transactions through electronic means. The advent of information technology (IT) has brought radical changes to the way business entities are run or managed. This has reduced the time in which transactions are processed. This transformation cuts across all sectors of the economy, including how financial transactions in organisations are processed. According to Pan & Huang (2020), digital accounting technique is the application of information and communication technology in accounting practices to manage financial information and produce financial reports more effectively and efficiently. It is an accounting technique that is supported by information and communication technology to collect, manage and analyze company financial data digitally. Digital accounting technique therefore is an off-shoot of digital transformation that is going on in business entities globally now. It encompasses a wide range of technologies, including computers, smart phones, software applications, the internet, and emerging technologies such as artificial intelligence, machine learning, block chain though not presently obtainable in Nigeria, online tools, webinars, software programs, cloud solutions, digital data storage, big data, among others (Li &Vasarhelyi, 2018).

2.1.2 Artificial Intelligence: Artificial Intelligence can be defined as either a suite of programs or individual program that can replicate certain facets of human behavior and engagement in some situations (Smith, 2018). It was first introduced into accounting more than 30 years ago (Brown, 1989). Specifically, artificial intelligence (AI) was employed in financial accounting and auditing in the late 1980s and early 1990s (Barniv, Agarwal, & Leach, 1997). After this period, significant advances were made in other areas of accounting and finance. Companies throughout the world are reaping enormous benefits by integrating artificial intelligence (AI) into accounting tasks which is used to produce more accurate and acceptable financial statements, reports information faster than humans due to its competency and consistency in analyzing and interpreting accounting data, provide quick and accurate output

which improves the timeliness of accounting information and help users in making effective decisions (Petkov, 2020).

Incorporating artificial intelligence in accounting functions can eliminate accounting and human errors when preparing financial statements. With the integration of Artificial Intelligence, many accounting tasks have become more automated (Smith, 2018). However, whether the overall impact of AI on work will be positive or negative is a matter of debate.

2.1.3 Big Data: The modern use of the concept "big data" describes the use of predictive and behavior analytics, or probably other higher methods of data analysis. As defined by Suri, Elia, Arora and Hillegersberg (2019), the term big data includes data capturing, storage, analysis, sharing, source, updating, visualization, transfer, and privacy of information. It is more complex and vast compared to conventional data processing software. Big data incorporate four key characteristics: large volume, high speed, huge variety, and uncertain veracity (Laney 2001). The term Big Data comprises both enormous amounts of data and the data analytic techniques (algorithms) used to analyse these data. Liu and Vassarhlyi (2014) opined that big data have a significant effect on the decision-making quality process and improve measurement, comprehensive of data, and enhanced understanding of information. Janvrin and Weidenmier, (2017) believed that Big Data assists in effective budgetary and management control systems. In addition, the effectiveness and efficiency of accountants have increased progressively due to the availability of a wide range of data through digital technologies. According to Gulin et al (2019), big data is capable of reducing the reporting time because of the real-time updates provided by contemporary digital technologies.

2.1.4 Internet of Things (IoTs): The term IoT, or Internet of Things, refers to the collective network of connected devices and the technology that facilitates communication between devices and the cloud, as well as between the devices themselves. It describes the network of physical objects, "things" that are embedded with sensors, software, and other technologies to connect and exchange data with other devices and systems over the internet (Fledsberg, 2019).

By means of low-cost computing, the cloud, big data, analytics, and mobile technologies, physical things can share and collect data with minimal human intervention. In this hyperconnected world, digital systems can record, monitor, and adjust each interaction between connected things. The physical world meets the digital world and they cooperate.

IoTs Intelligent Applications are prebuilt software-as-a-service (SaaS) applications that can analyze and present captured IoTs sensor data to business users via dashboards. IoTs

applications use machine learning algorithms to analyze massive amounts of connected sensor data in the cloud. Using real-time IoTs dashboards and alerts, you gain visibility into key performance indicators, statistics for mean time between failures, and other information.

2.1.5 Financial Reports Quality: Financial reports quality represents financial statements that provide accurate and fair information about the underlying financial position and economic performance of an entity (International Accounting Standard Board, (IASB), 2009). It pertains to the quality of information in the financial reports, including the disclosures and notes to the accounts. Financial reports quality is a broad concept that does not just refer to financial information but also includes other non-financial information that is useful for making decisions. Quality of financial reports can vary from the highest to the lowest. High-quality financial reports provides information that is useful to analysts in assessing the company's performance and prospects. It provides decision-useful information, which is relevant and faithfully represents the economic reality of the company's activities during the reporting period as well as the company' financial condition at the end of the period. The importance of high quality financial reports stem from the usefulness of such report. Herath & Albarqi (2017) asserted that the higher the quality of financial reports, the more significant are the benefits to be gained by investors and users of financial reports. On the other hand, low-quality financial reporting contains inaccurate, misleading, or incomplete information. As stated in the IASB framework, financial reporting quality should be assessed in terms of relevance, faithful representation, understandability, comparability, verifiability and timeliness. These characteristics are classified into two: fundamental qualitative characteristics and enhancing qualitative characteristics Herath andAlbarqi (2017).

2.1.6 Digital Accounting Techniques and Financial Reports Quality

The application of digital accounting techniques in the processing of financial data is expected to result in improvement of the financial reports quality (Fledsberg, 2019). This stems from the benefits of application of digital system in handling accounting activities in the entity. Accounting functions encompass series of activities which are sometimes repetitive. The accounting process involve the aggregation of transactions and processing them into information which is useful to the various users for decision making. The information generated are sometimes stored for future use or may be transferred to other sources (Anitha and Dinesh, 2023). All these activities are properly fitted to be used by computer aided system.

Comparatively with the manual system which was prone to errors, loss of vital information trail, waste of time and poor quality of reports, the digital accounting techniques overcome the various challenges of manual system (Fledsberg, 2019). This is achieved by the proper storage and retrieval of information, reduction in processing time, speedy transmission of information to appropriate users and speedy production of reports in various manners. All these activities result in value added to the organisation which ultimately results in the quality of financial reports. More so, the deployment of digital accounting allows remote access to users of financial reports from different locations at the same time. Thus different users can function in different locations and still carry on operations without limitation. Also reports are communicated to various users in different locations through net application without hindrance. All these were not possible with manual accounting practices. Consequently, the value addition of digital accounting cannot be quantified.

2.2 Empirical Review

Okpo and Eshiet (2023) investigated whether the application of digital accounting practices has any effect on the quality of financial reports. They investigated whether there is any relationship between digital accounting practices and the quality of financial reports. The study adopted a survey research design and data was obtained from primary sources through questionnaires administered to randomly selected professional accountants in Akwa Ibom State, Nigeria. The data were analyzed with SPSS version 20 using correlation and regression models. The results of the analysis showed that all the components of the independent variable were positively and significantly related to the quality of financial reports. However, the humanware component showed a very high positive correlation, portraying the importance of humanware in digital accounting practice. The study concluded that digital accounting practices affect the quality of financial reports of firms. The study recommends, amongst others, the adoption of digital accounting in all aspects of the processing of financial statement Anitha and Dinesh (2023), studied the impact of digitalization of Accounting in Modern Business: An Analytical Pedagogy through Benefits and Challenges of Digitalization. This study explores the impact of digitalisation on accounting practices, highlighting the benefits, challenges, and implications for businesses. The samples were collected from 140 accounting experts among 14 districts in Kerala through the convenience sampling method. The unveiled that digital accounting technologies have revolutionised the accounting landscape, offering numerous benefits and opportunities for business entities

Pungboonponoch and Nakyam (2022) conducted a study on the effect of digital accounting on the quality of financial reports. The study analyzed the relationship between digital accounting and the quality of financial reports. Survey research design was adopted, and questionnaires were administered to 275 certified public accountants. The data were analyzed using percentages, mean, standard deviation, correlation, and simple multi-regression to test the hypothesis. The results of their findings indicate that digital accounting is related to the quality of financial reports. It concluded that digital accounting provides benefits by making operations more effective and efficient.

AL-Okaily, et al. (2022) conducted a study on the effect of digital accounting systems on the decision-making quality in the banking industry in Jordan. The data for the study were derived from the questionnaires administered to 187 decision-makers who use digital accounting systems. The study adopted a quantitative research approach to test the models based on the partial least squares model. The findings of the study reveal that data and information quality have a significant impact on the overall decision-making quality with the digital accounting systems.

Phornlaphatrachakorn and Kalasindhu (2021) investigated the effect of digital accounting on financial reporting quality, accounting information usefulness, and strategic decision effectiveness. The study used a survey research design, and in order to obtain the opinion of users of digital accounting, questionnaires were administered to 768 respondents with 331 retrieved; a ten-item scale was developed to measure reporting quality. The data were analyzed using a structured equation model and multiple regression analysis. The results of the findings show that digital accounting practice has a significant effect on financial reporting quality, accounting information usefulness, and strategic decision effectiveness.

Seiyaibo and Okoye (2021) carried out an investigation to determine the relationship between financial reporting quality using information technologies on the performance of corporate companies in the non-financial sector. The study employed a survey research design using a self-structured questionnaire administered to a total of 239 respondents from an unspecified population. The study selected professionals who are knowledgeable in information technologies as the sample size from 5 high-capitalized companies listed in Nigeria. The study results revealed that faithful representation and relevance of financial reporting quality had a negative association with the performance of corporate companies.

Habiba (2021) investigated the effect of disruptive technologies' sustainability reporting quality on financial reporting quality. Data for the study was sourced from 30 selected companies for

a period of 12 years, spanning from 2007 to 2018. The study carried out regression analysis, and the result of the analysis revealed that disruptive technologies had a positive effect on financial reporting quality among the selected 30 companies. The study recommended that companies should embrace technological-assisted accounting information since it tends to be reliable and timely.

Oladejo and Yinus (2020) investigated the impact of e-accounting practices on the financial reporting quality of selected banks in Nigeria. The data were obtained from primary sources through questionnaires administered on randomly selected personnel of ten deposit money banks. The data collected were analysed using descriptive statistics and inferential statistics. The results showed that bank size, cost of ICT deployment, and perceived benefits influence e-accounting adoption and that e-accounting practice enhances accounting procedures and improves the timeliness of report generation and financial reporting quality of banks. The study recommended that deposit money banks put more effort into developing mechanisms that strengthen e-accounting usage to promote users' confidence in the financial statements published by banks.

Bataineh (2018) examined the influence of computerized accounting information and the usage of cloud accounting in financial reporting in Jordan Pharmaceutical companies. The study considered the use of primary data and a questionnaire. The analysis found that that computerized accounting system and cloud accounting had a strong positive effect on financial reporting quality among the pharmaceutical companies in Jordan.

A notable gap in the existing literature on the impact of digital accounting techniques and the financial reporting quality of selected money deposit banks in Nigeria is the specific relationship between internet-of-things and the value relevance of financial reports. The research gap in this study revolves around the need for a comprehensive understanding of the practical implementation and implications of digital accounting techniques in businesses especially in money deposit banks financial reporting quality.

Researchers often focus on the technical aspects of digital accounting, such as technology adoption and system functionality, but need to delve into the broader business implications in terms of financial reporting quality. Understanding how digital accounting affects financial reporting quality and decision-making processes is essential for successful implementation. While studies on digital accounting primarily focus on large business entities, there needs to

be concern about the adoption and impact of digital accounting techniques, specifically in small and medium-sized enterprises (SMEs).

2.3 Theoretical Framework:

The Diffusion of Innovation Theory: This is anchored on the diffusion of innovation theory as propounded by Rogers in the year 1962, which explained the rationale behind the migration of people from methods of doing things to innovations (Smith et al., 2012). The diffusion of innovation seeks to explain why, how, and to what extent new technologies are being popular and accepted in business operations, and speed of trending in the social system and the essence of new technologies replacing the traditional and manual methods of transacting businesses as well as in financial reporting of business transactions. The theory further assumed that diffusion is how an innovation is communicated through certain channels over a period of time among the community in the social system, while an innovation reflects an idea, practice, or object that is perceived to be new by an individual or group of individuals (Suominen et al., 2018).

The diffusion of innovation theory assumes that change is constant by nature and that new ideas and innovation keep evolving, bringing new ways of doing business and reporting business activities (Tulsian, 2013). Other assumptions of diffusion of innovation theory include the fact that the extent of innovation acceptance in society is aligned with the level of economic development and that the acceptability of innovation is in agreement with the outcome of the insatiability of human nature. Some of the supporters of the theory suggest that man by nature is associated with innovations and never satisfied with repetitiveness, rather in the habit of seeking new ways of doing things, new better ways of running and reporting business transactions (Sun & Zheng, 2010). Some critics have also found flaws in the diffusion of innovation theory (Esmeray & Esmeray, 2020; Risman et al., 2021). Salawu and Moloi (2021) argued that innovations come with vices and crimes. Suominen et al. (2016) faulted the innovation theory that the proponents failed to explain how the innovation could tame crimes and risks associated with new technologies.

3.0 METHODOLOGY

3.1 Research Design

Survey research design was adopted in this study. This research design is considered appropriate because it is always exploratory in nature, and according to Konthari, (2012), such kind of studies suit when the goal is to discover the truth behind a phenomenon. In this case,

our goal was to discover the relationship that exists between two variables: digital accounting techniques and financial report quality.

3.2 Sources of Data

The source of data was primary where primary data were collected through the use of a structured questionnaire. The primary source of data is suitable for this study because every reasonable data for this study was obtained from the respondents drawn from the selected MDBs operating in Ebonyi State.

3.3 Population of the Study

The population used in this study was made of 60 staff of the First Bank PLC, Zenith Bank Limited, UBA, Union Bank Limited, Eco Bank Plc, and Access banks. Ten (10) staff from each bank and were purposely selected accountants and managers who are expected to easily understand issues on digital accounting and financial reports quality.

3.4 Sampling Technique and Sample Size Determination

The researcher adopted the census sampling method as the population is relatively not too small. The entire population formed the sample size as the population was manageable and the researcher was guided by the number of accountants and those in managerial cadres who are knowledgeable about the issues of concern. Therefore, the sample size is the same as the population which is 60.

3.5 Instrument for Data Collection

Instrument for data collection was structured questionnaires which were administered to sixty (60) respondents. The questionnaire for the primary data collection was structured using five (5) a point Likert scale which ranges from Very Great Extent (VGE), Great Extent (GE), No Idea (NI), Low Extent (LE), and Very Low Extent (VLE) and rated 5,4,3,2 & 1 respectively.

3.6 Validity and Reliability of Instrument

The instrument was subjected to both internal and external validity before it was ready for use by the researcher. In order to ascertain the reliability of the instrument, the researcher used the test and re-test method to ensure the consistency of the research instrument. The instrument was first administered to the population at an interval of two weeks and it was discovered that responses were consistent. The reliability of the data collection instrument of this research work

was determined using Crombach's Alpha co-efficient (2) for ease of calculation. This was calculated through Cronbach's coefficient alpha for internal consistency with 60 research questions. A test for Cronbach's Alpha is said to be reliable when its coefficient is greater than the value of 0.6. The result showed that the instruments used in this study were reliable since Cronbach's Alpha Coefficient of 0.730 was obtained, which is greater than 0.6.

Table 3: Cronbach's Alpha Statistics

Cc	Cronbach's Alpha	N Items	No of
0	0.730	60	15

Source: Researcher's Computation from SPSS (2024)

3.8 Model Specification

This study adopted the general multiple regression technique anchored on ordinary least square model which has it that y = a + bx. The study attempts to ascertain the relationship between digital accounting techniques and financial report quality. The independent variable; digital accounting techniques (DAT) represented by artificial intelligence (IA), Big-Data (BD) and internet-of-things (IoT) while the dependent variable is financial reporting quality (FRQ). The functional model is represented as follows;

Financial Reports Quality = *f* (Digitalized Accounting Techniques) --- ----------(1)

To estimate Financial Reports Quality (FRQ) as a function of Digitalized Accounting techniques. Thus, the model was specified as below;

$FRQ_i = ß_0 + ß_1IA_i + ß_2BD_i + ß_3IoT_i + \mu_i$ - - - ----------(2)

Where: FRQ= Financial Reporting Quality. DAT= IA = artificial intelligence, BD = Big Data and IoTs = Internet-of-Things, μ = Error term and $ß_0$, $ß_1$, $ß_2$ and $ß_3$ = the coefficients of the regression model.

The above model was based on *a priori* expectation that Financial Reports Quality is to be positively related to Digital accounting techniques as represented above. This shows that the co-efficient of Digital accounting techniques each is greater than one; that is, β_1, β_2 and $\beta_3 > 0$.

3.9 Method of Data Analysis

Data were analyzed using descriptive statistics to summarize and understand the key characteristics of the variables. Additionally, Ordinary Least Squares (OLS) regression analysis was used to test the hypotheses and evaluate the impact of digitalized accounting techniques on the financial reporting quality of selected money deposit banks in Nigeria. This combination of these methods ensures a comprehensive analysis of how artificial intelligence (AI), big-Data (BD) management and internet-of-things (IoT) impact on the financial reporting quality (FRQ) of selected money deposit banks in Nigeria. Furthermore, F-statistic tests were also conducted to test the overall significance of the regression equation among the explanatory variables at 5% level of significance with the aid of (SPSS).

The null hypothesis is rejected if the p-value is less than or equal 0.05, indicating that the financial management practices have a significant effect on net asset per share. If the p-value is 0.05 or greater, the null hypothesis is accepted, suggesting that digitalized accounting techniques do not significantly influence financial reporting quality. This decision rule ensures that the analysis accurately reflects the significance of the studied variables.

4.0 RESULTS AND DISCUSSIONS

4.1 Data Presentation

4.1.1 The Questionnaire Distributed, Returned, and Unreturned

The performance of the questionnaire as regards the total number distributed, returned, and un-returned is presented in Table 1 as thus.

Table 1: Responses to the Questionnaire

Items	No	Percentage
No of the questionnaires distributed	60	100%
No of the questionnaires returned	56	93.33%
No of the questionnaires not returned	4	6.67%

Source: *Researcher's Computation (2024*)

In table 1, it shows that 60 questionnaires were distributed which represents 100%; out of which 56 numbers representing 93.33% were filled and returned by the staff of the selected banks, while 4 of the questionnaires representing 6.57% were neither filled nor returned by the selected staff of the deposit money banks operating in Ebonyi State, Nigeria.

4.1.2 Reliability Statistics

Table 2: Reliability Statistics

Cronbach's Alpha	N of Items
0.871	18

Source: *Researcher's Estimate from SPSS (2024)*

The reliable statistic presented in Table 3 above shows Cronbach's Coefficient alpha for internal consistency with 18 research question items. Therefore, a test for Cronbach's Alpha is said to be reliable as its coefficient is greater than the value of 0.6. Therefore, the Cronbach's Alpha test indicated that the instruments used in this study were reliable since the Cronbach's Alpha Coefficient is 0.871 which is greater than 0.6.

4.1.3 Descriptive Statistics Analysis

Table 3: Descriptive statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
FRQ	56	2.00	5.00	3.6765	.60061
AI	56	2.00	4.75	3.5735	.65057
BD	56	1.50	5.00	3.7206	.70471
IoTs	56	2.00	5.00	3.8137	.68710

Source: *Researcher's Estimate from SPSS (2024)*

The mean values for QFR, AI, BD and IoTs are 3.6765, 3.5735, 3.7206, and 3.8137, respectively. These figures indicate the central tendency of the data. The standard deviations (0.60061 for QFR, 0.65057 for AI, 0.70471 for BD, and 0.68710 for IoT) provide insights into the dispersion or variability of the data points around the mean.

The results suggest that, on average, the financial reports quality (FRQ) tends to be slightly higher than the mean value of 3.5735. Similarly, Internet of things (IoT) and Big Data (BD) also exhibit mean values higher than 3.5, indicating a tendency towards favorable financial reporting practices and management of accounts.

4.2 Test of Hypotheses

Ordinary Least Squares (OLS) regression analysis was used to test the hypotheses of the study. The null hypothesis is rejected if the p-value is less than 0.05, indicating that the digitalized

accounting techniques have a significant impact on financial reporting quality. If the p-value is 0.05 or greater, the null hypothesis is accepted, suggesting that digitalized accounting techniques do not significantly impact financial reporting quality.

Table 4: Test of Hypotheses

Dependent Variable: NAS

Method: Least Squares

Date: 1/15/25 Time: 06:52

Sample: 6

Included observations: 56

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AI	5.934998	1.854355	3.200572	0.0017
BD	0.928376	2.703863	0.343352	0.7318
IoT	0.157580	0.570560	0.276185	0.7828
C	-31.13864	15.38043	-2.024562	0.0446

R-squared	0.125295	Mean dependent var	12.74004
Adjusted R-squared	0.108474	S.D. dependent var	17.16425
S.E. of regression	16.20659	Akaike info criterion	8.433396
Sum squared resid	40973.97	Schwarz criterion	8.510275
Log likelihood	670.6716	Hannan-Quinn criter.	8.464614
F-statistic	7.448637	Durbin-Watson stat	1.079514
Prob(F-statistic)	0.000108		

Source: Analysis Output from SPSS (2025)

The regression analysis in Table 3 was conducted to evaluate the impact of artificial intelligence (AI), big data (BD) processes, and internet-of-things (IoT) on the financial reporting quality (FRQ) of selected money deposit banks in Nigeria. The Adjusted R-squared value of 0.108474 indicates that the regression model explains approximately 10.85% of the variation in the dependent variable (FRQ).

The Prob(F-statistic) of 0.000108 is the associated p-value for the overall model. Since this p-value is less than 0.05, it implies that the model as a whole is statistically significant, and the null hypothesis that all the coefficients are simultaneously zero is rejected.

4.3.1 Test of Hypothesis I

H01: Artificial intelligence has no significant impact on the financial reporting quality of selected money deposit banks in Nigeria.

The first hypothesis, (H_0) posits that Artificial intelligence has no significant impact on the financial reporting quality of selected money deposit banks in Nigeria. The coefficient for AI is 5.934998, indicating a positive effect on NAS. Thus, an increase in AI by a unit will increase financial reporting quality by 5.934998. The p-value of 0.0017 is below the significance level of 0.05, allowing us to reject the null hypothesis in favor of the alternate hypothesis. Therefore, we conclude that Artificial intelligence has a significant positive effect on the financial reporting quality of selected money deposit banks in Nigeria. ($\beta = 5.934998$; p-value = 0.0017).

4.3.2 Test of Hypothesis II

$H_0$2: Big data technique has no significant effect on the financial reporting quality of selected money deposit banks in Nigeria.

In relation to the second hypothesis, the coefficient for BD is 0.928376, indicating a positive impact on FRQ. Thus, an increase in BD management by a margin will boost the financial reporting quality by 0.928376. However, the p-value of 0.7318 is well above the significance threshold of 0.05. This leads to the acceptance of the null hypothesis, implying that Big data technique has a positive but non-significant effect on the financial reporting quality of selected money deposit banks in Nigeria. ($\beta = 0.928376$; p-value = 0.7318).

4.3.3 Test of Hypothesis III

$H_0$3: Internet-of-things has no significant effect on the financial reporting quality of selected money deposit banks in Nigeria.

Regarding the third hypothesis, H03 states that Internet-of-things has no significant effect on the financial reporting quality of selected money deposit banks in Nigeria. The coefficient for IoT is 0.157580, suggesting a positive impact on FRQ. Thus, an increase in IoT by a margin will increase the financial reporting quality by 0.157580. However, the p-value of 0.63828 exceeds the significance level of 0.05, leading to the acceptance of the alternate hypothesis. Thus, we conclude that Internet-of-things has a positive but non-significant effect on the

financial reporting quality of selected money deposit banks in Nigeria (β = 0.157580; p-value = 0.7828).

4.4 Discussion

4.4.1 Artificial Intelligence (AI) and Financial Reports Quality

The findings of the current study revealed a significant positive impact of Artificial Intelligence (AI) on financial reporting Quality (FRQ). This result aligns with existing literature, particularly the study by Okpo and Eshiet (2023), which demonstrated that the application of digital accounting practices positively influences financial report quality. Similarly, Pungboonponoch and Nakyam (2022) concluded that digital accounting is associated with higher-quality financial reports, emphasizing the efficiency and effectiveness benefits derived from digital accounting technologies. Moreover, the study by Anitha and Dinesh (2023) and Oladejo and Yinus (2020) emphasized the positive impact of e-accounting practices, a subset of digital accounting, on financial reporting quality within deposit money banks in Nigeria. The current study's findings underscore the importance of adopting Artificial Intelligence to enhance financial reporting practices, aligning with the literature that highlights the positive relationship between AI and FRQ.

4.4.2 Big Data (BD) and Quality of Financial Reporting

The significant positive impact of Big Data (BD) on the financial reports quality, as revealed in the current study, is consistent with the previous empirical findings of Phornlaphatracchakorn and Kalasindhu (2021), which showed the significant impact of digital accounting practices, including effective management of Big Data, on financial reporting quality. Additionally, the study by Oladejo and Yinus (2020) highlighted the influence of e-accounting practices, which likely encompasses efficient Big Data management, on financial reporting quality. The current study's results further emphasized the importance of managing Big Data effectiveness to enhance financial reporting quality, in line with the existing literature.

4.4.3 Internet-of-Things (IoT) and Financial Reporting Quality

The non-significant positive impact of Internet of things (IoT) on the financial reporting quality observed in the current study is consistent with previous research findings. Phornlaphatrachakorn and Kalasindhu (2021) indicated the significant influence of digital accounting techniques, including efficient Internet-of-things, on financial reporting quality. Similarly, the study by Oladejo and Yinus (2020) emphasized the benefits derived from

improved accounting procedures, which likely include efficient management of Internet-of-things. The current study's results further underscore the importance of effective management of Internet-of-things in enhancing financial reporting quality, supporting the existing literature on this relationship.

5.0 CONCLUSION AND RECOMMENDATIONS

The study broadly examined the impact of digitalized accounting techniques on the financial reporting quality of selected money deposit banks in Nigeria. The study employed a descriptive survey research design where a 5-point Likert structured questionnaire was designed and administered to respondents Cronbach Alpha was used for the validity and reliability of the instruments, while a descriptive statistics test was carried out to show the characteristics of the collected data. The hypotheses were tested using multiple regression involving OLS model. The result broadly revealed that digitalized accounting techniques positively influence the financial reporting quality of money deposit banks in Nigeria. In conclusion, digital accounting techniques have revolutionized the accounting landscape, offering numerous benefits and opportunities for money deposit banks in Nigeria, especially in the area of accurate reporting of business operations**.**

Based on the findings, the following recommendations are as follows:

1. Given the significant positive impact of Artificial Intelligence (AI) on financial reports quality, deposit money banks in Nigeria, should prioritize the adoption and optimization of Artificial Intelligence. This entails investing in robust software applications, network infrastructure, and human expertise to maximize the utilization of AI in accounting techniques.

2. DMBs in Nigeria should sustain efficient systems and procedures for managing Big Data processes since it has a significant and positive relationship with FRQ. This includes timely processing of invoices, accurate recording of transactions, and proactive management of vendor relationships. Strengthening Big Data management practices will contribute to improving financial reporting accuracy and reliability.

3. DMBs should focus on enhancing the efficiency and effectiveness of Internet of Things management processes because of its significant and positive influence on FRQ. Thus,

implementing streamlined systems and procedures for monitoring, tracking, and reconciling transactions will contribute to enhancing financial reporting accuracy and reliability.

A major limitation of the study is that it focused only on a sample of a few money deposit banks in Nigeria, which does not fully represent the entire banking industry. The use of purposive sampling could possibly have introduced bias, as it involves selecting banks based on specific criteria rather than randomly, potentially affecting the generalizability of the findings. More so, studies on digital accounting primarily focus on large business entities, there is a need to carry out more research concerning the adoption and impact of digital accounting techniques, specifically in other sectors of the economy paying attention to SMEs.

Further research could consider other listed companies where secondary data can be sourced by looking at the following areas; Impact of digitalized accounting on financial reporting quality of small and medium-sized enterprises (SMEs) in Nigeria; impact of artificial intelligence (AI) on financial performance of money deposit banks in Nigeria; and empirical evaluation of internet-of-things and business sustainability: opportunities and challenges in Nigeria business environment.

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