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# Cloud Accounting and the Qualitative Characteristics of Financial Reporting Quality of Deposit Money Banks in Nigeria

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## **Abstract**

This study examined the effect of cloud accounting in enhancing the qualitative characteristics of financial report of deposit money banks in Nigeria. Survey research design was employed and data were gathered through the administration of questionnaires to the targeted respondents which comprises of the staff in the operations offices of the banks. The thirteen deposit money banks listed in the Nigerian Exchange Group form our population of the study from which the study sampled those with presence in Yenagoa, Bayelsa state to administer our questionnaire. Seventy-eight copies of questionnaire were administered to the heads of operations and to the unit heads in the operations departments broken down to six copies of questionnaire for each bank. However, only seventy-three copies of the questionnaire were retrieved from the respondents which were used for conducting the analysis. Ordinary least square and analysis of variance were used to test the hypotheses. The result showed that software as a service (SaaS) and infrastructure as a service (IaaS) positively enhances the qualitative characteristics of financial report of deposit money banks in Nigeria. The study therefore recommended that financial institutions, especially deposit money banks should explore the benefits of cloud accounting; accounting regulations should be created to reconcile the different components of software as a service to the cost structure of banks, and also corporate strategies should be implemented to lower the cost of cloud accounting.

**Keywords:** Cloud Accounting, IaaS, SaaS, Qualitative Characteristics, Financial Report.

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## **1. Introduction**

The aim of financial reporting is to provide information about the financial transactions that transpired within the reporting period. This information serves as a major useful tool in making and taking decisions by the users of the financial report. This means that by all aspects, the information provided should have quality by being true and objectively reflect the true financial position of the reporting organization. In other words, financial reporting quality is the extent to which financial reports of a company communicate the underlying transactions and the performance of the firm during the reporting period. It must be relevant, have faithful representation, material, complete, neutral, concise and timely. For financial reports to be concise and timely, it means that the conventional traditional means of gathering, organizing, summarizing and reporting the financial report cannot be conducted and confined to a desktop computer or office server, given the development of real time transactions in today's world. In addition to this, the quest to keep the record of increasing large array of information of company transactions as well as retrieve same easily where and when needed, led to the development of technologies on how to match the ever-changing style of business, known as cloud accounting. Cloud accounting is online accounting that functions like a computer program on users'

computers but provides services over the internet and permits access from remote servers (Mishra & Mohanty, 2017).

Cloud accounting is a model of network computing where a program or application runs on a connected server or servers which is usually hosted, rather than on a local computing device such as a personal computer. Akai, Ibok and Akininyi (2023) noted that the hosted application can be accessed by any internet enabled device such as personal computer, tablet or a smart phone. Through cloud computing, basic accounting tasks, like managing and balancing the books, using software that resides in the cloud in a service model such as Software as a service (SaaS), Internet as a service (IaaS), Platform as a service (PaaS) and Network as a service (Naas) is made possible (Al-Okaily et al., 2022). *For the purpose of this study, we will focus on Software as a service (SaaS) and internet as a service (IaaS).* However, for the purpose of this study, only Software as a service and Internet as a service will be studied. This is so because the researchers deemed it important that the geographical location where this study will be conducted is not populated enough like many others to warrant the inclusion of the other proxies Software as a service (SaaS) is a software distribution model in which a cloud provider hosts application and makes them available to end users over the internet. In this model, an independent software vendor (ISV) may contract a third-party cloud provider to host the application. IaaS is used by companies that want to outsource their data center and computer resources to a cloud provider. IaaS providers host infrastructure components such as servers, storage, networking hardware and virtualization resources. This cloud type is focused on providing a complete platform, for interface, applications, and database development testing which enables banks to streamline development, and lower the internet costs and the need for hardware and software provision.

Agents and clients can communicate and complete tasks within the framework that cloud accounting offers, with the help of these computer-based programs. The real time processing of the accounting function which to a great extent is precise, timely and curb errors to the barest minimum can help to improve the quality of financial reporting in the banking sector. This study is poised towards examining the effect of cloud accounting in enhancing the qualitative characteristics of financial report of deposit money banks in Nigeria.

## **2. Conceptual Clarification**

### **2.1 Cloud Accounting**

Cloud accounting is an online accounting application that can be accessed from any location in the world with an internet connection. Financial statements have long been recognized as an official and widely used source of information for both internal and external parties to the organization. Financial statements offer a framework for analyzing the financial performance and position of any particular company, according to the International Accounting Standards Board (IASB) (Ndinanakenkpo et al., 2023). Cloud accounting system offers features like general ledger management, accounts receivable and payable, financial reporting, and budgeting accessible via web browsers or mobile apps, provides scalability, enabling organizations to adjust resources according to needs, reducing infrastructure costs (Karanikola et al., 2023). Cloud accounting software users have access to an adequate quantity of data during the data collection process in storage centers (Mihoob et al., 2013). According to Akpan et al. (2023), cloud accounting refers to server-based accounting software that works similarly to a computer program on a computer system and delivers services via the internet to distant servers located anywhere in the globe. Cloud accounting system is an online tool for managing business accounts. The software functions similarly to other accounting software that is installed on users' computers and is available as a service (SaaS) that users can request. It is hosted on servers and is accessed by users via the internet. Accessing accounting data and information through the internet is necessary for cloud accounting. These files and information

are frequently supplied by a third party, stored on remote servers, and accessed by end users via the internet. Cloud accounting is the term for the internet-based access to accounting data and information. Cloud accounting enables firms to streamline accounting and financial processes through cloud computing infrastructure (Weathers et al., 2024).

## **2.2 Software as a Service (SaaS)**

A cloud computing model known as Software as a Service (SaaS) allows software applications to be delivered online via subscription. Users can access applications and their features through a web browser rather than installing and maintaining software locally. Software as a service (SaaS) is a software distribution model in which a cloud provider hosts application and makes them available to end users over the internet (Akpan *et al.*, 2023). This model's accessibility, affordability, and scalability have all contributed to its rising popularity. SaaS offers scalability because it allows users to quickly scale up or down in response to their needs without requiring large infrastructure investments. Because it allows them to modify their software usage in response to changing workloads, this scalability is especially helpful for businesses. Shared infrastructure, automatic updates, and service provider-managed maintenance are what make SaaS economical, according to Armbrust *et al.* (2010). Consumers gain from predictable subscription-based pricing and do not have to pay the one-time costs linked with traditional software installations. The accessibility of SaaS is one of its main benefits. Any device with an internet connection and a web browser can be used to access SaaS applications. This adaptability makes it easier to collaborate remotely, work from anywhere, and provide consistent platform user experiences. There are often worries regarding the security of data kept on cloud servers. To safeguard customer data, respectable SaaS companies, however, make significant investments in security measures. To protect data integrity and confidentiality, these precautions include encryption, authentication procedures, and frequent security updates.

## **2.3 Infrastructure as a Service (IaaS)**

A cloud computing concept called Infrastructure as a Service (IaaS) offers virtualized computer resources online. IaaS is the most primary set of services provided by the cloud computing system, as it is the first layer of the whole system in which the service provider provides the basic computing infrastructure for software, network equipment. and server based on which clients can develop the platform and execute the applications by themselves (Orji & Obutor, 2024). SaaS is the last and topmost layer of the cloud system. SaaS enables a client to have access to the preinstalled applications in the infrastructure of the server of the vendor. It is a pay-per-use system where the client need not have to maintain or install the software but can use it and pay for its usage. With the Infrastructure as a Service (IaaS) model, users can pay for the processing power, storage, and networking components that are virtualized on an as-needed basis. Due to this, companies can grow their IT infrastructure without having to make sizable capital expenditures (Mell & Grance, 2011). IaaS gives customers on-demand access to computer resources, enabling them to add and remove storage and virtual machines as needed. Businesses can react swiftly to fluctuating demands and workloads, thanks to this flexibility. Infrastructure-as-a-service (IaaS) providers offer a variety of infrastructure components as services, such as networks, storage, and virtual machines, users have a great degree of customization and flexibility because they can control the operating systems, applications, and some networking components, hence seeing it as a self-serving system (Sohhan, 2019). One of IaaS's main features is scalability, which enables customers to adjust their infrastructure's size in response to demand. Because it allows them to pay for only the resources they use, this scalability is especially advantageous for companies with variable workloads.

IaaS reduces costs by removing the requirement for businesses to purchase and maintain physical hardware. Because users can access and manage their virtualized infrastructure via a web interface, traditional on-premise solutions come with higher operational and maintenance

costs. An important factor in the IaaS model is security. In order to safeguard data, providers put in place security measures like access controls, encryption, and frequent security update. Furthermore, IaaS providers frequently abide by industry rules, assisting companies in fulfilling their legal and regulatory obligations.

## **2.4 Financial Reporting Quality**

The quality of financial reporting is determined by the accounting rules, processes, and procedures that are applied when handling financial transactions and when preparing and presenting data to users and other stakeholders (Ogundajo *et al.*, 2022). It involves holding a company accountable for its assets, giving managers the framework for evaluating stewardship responsibilities and financial choices. The accuracy with which financial reporting delivers valuable information about an entity's performance is the conceptual framework definition of financial reporting quality (Shuraki *et al.*, 2021). Similar to this assertion is the one put forward by Verdi (2006), describing financial reporting quality as the precision with which financial reporting provides useful information about a firm's performance and its expected cash flows for investor decisions. According to the Conceptual Framework, comparability, verifiability, timeliness, and understandability are among the enhancing qualitative characteristics of financial reporting (Wen, 2020).

## **2.5 Enhancing Qualitative Characteristics**

**Comparability:** Users can recognize and comprehend similarities and differences between items thanks to comparability. This necessitates that data that is comparable across time with similar data about other entities is more valuable. The value adequacy of earnings and equity book value is more comparable among non-U.S. firms following the application of International Accounting Standards (IAS) than local accounting standards (Ndinanakenkpo *et al.*, 2023). According to Yurisandi and Puspitasari (2015), comparability of financial reports increased after IFRS adoption. This in contrast to the study of Beuselinck and Manigart. (2007) that asserts that the earnings comparability is not affected by mandatory IFRS adoption. Consistency and comparability are linked but distinct concepts. Applying the same techniques to the same items, either within a single period or across multiple periods, is referred to as consistency. Achieving comparability is facilitated by consistency (ICAN, 2021).

**Verifiability:** The assurance that financial data accurately depicts the economic resources it purports to represent is aided by verifiability. This suggests that all identifiable items in the financial statements, including assets, liabilities, and other items, should be able to be independently verified at any point in time. The statement implies that multiple knowledgeable and impartial observers may come to a consensus regarding the accuracy of a given depiction (IASB, 2010). For measured financial information to be verifiable, it does not have to be a single point estimate. One can verify a range of potential quantities and the associated possibility (ICAN, 2021).

**Timeliness:** This entails regularly providing decision-makers with financial data that has the power to affect their choices (ICAN, 2021). When users have early access to financial information and its content particularly when it's needed for decision-making quality is attained. The usefulness of information decreases with age. Although not significantly, the timeliness of financial information decreased following the adoption of IFRS (Yurisandi & Puspitasari, 2015). As a result, it is said that there are now more IFRS mandatory disclosures, which may require businesses to take longer to prepare and present their financial reports.

**Understandability:** The financial statement must be prepared, categorized, and presented in a way that is easy for financial report users to understand in order for it to be deemed understandable. Avi (2023) opines that it is unanimously accepted that the postulate of understandability represents a principle with equal dignity to fairness and truthfulness. Information can be made more comprehensible by being clearly and unambiguously

characterized, categorized, and presented (Ogundajo *et al.*, 2022). Users who diligently examine and evaluate the data, and who possess a reasonable understanding of accounting, business, and economics activities are the intended recipients of financial reports (ICAN, 2021).

## **2.6 Theoretical Framework**

### **2.6.1 Diffusion of Innovation Theory**

The diffusion of innovation theory serves as the study's foundation (Rogers, 1962). In 1962, Everett M. Rogers created the Diffusion of Innovations theory, which sheds light on how novel concepts, inventions, or technological advancements proliferate and become embraced by people or groups. According to his theory of generational innovation, ideas and inventions are beneficial for economic development (Azih, 2018). The world is dynamic and not static, according to Bui *et al.* (2020). New ideas, inventions, and innovations to current product designs and service delivery methods are created with each generation, but the goal is not to use these innovations for profitable or productive purposes. The Diffusion of Innovations theory, according to Rogers (1962), looks at how new ideas spread throughout a population. This theory delineates the phases that individuals or groups go through when adopting an innovation, as well as the variables that impact this process. Based on their openness to new ideas, Rogers divided adopters into five groups: innovators, early adopters, early majority, late majority, and laggards.

People learn the essential facts about the innovation and become aware of it. In order to assess the innovation's benefits and drawbacks, prospective adopters look for additional information. Depending on their evaluation, people choose whether or not to accept the innovation. When an innovation is adopted, real-world applications follow. When evaluating the results and advantages of the innovation, users make decisions to either adopt it or not. The perceived qualities of the innovation (similarity, trialability, complexity, observability, and relative advantage), communication channels, social system features, and the level of innovation all have an impact on the rate of diffusion.

This theory has been widely used to understand and forecast the acceptance and diffusion of innovations in a variety of fields, such as public health campaigns, organizational change, and technology adoption. It continues to be a fundamental framework for researching the dynamics of innovation adoption and has made a substantial contribution to our knowledge of the diffusion of ideas within groups and societies.

## **2.7 Empirical Review**

Daniel (2024) studied the effect of cloud accounting on financial performance of listed deposit money bank in Nigeria using the *ex-post facto research design*. The study's population is the 19 deposit money banks in Nigeria, while a sample of 15 was drawn using the judgmental sampling technique. Secondary data were obtained from the annual reports of the sampled banks, while analysis was carried out using correlation analysis and the result indicated that there exists a high relationship between cost accounting and computerized accounting system which are the independent variable proxies and return on assets which is the dependent variable. Recommendation from the study is that both the Central Bank and other regulatory bodies formulate policies that will enhance the use of computerize accounting. Among others. Oyewobi and Adeyemi (2024) examined cloud-based accounting information system and financial reporting quality of listed of information and communication technology (ICT) firms in Nigeria. Population of the study were the eight (8) and the variables are discretionary accruals as proxy for financial reporting quality and cloud expenditure growth and cloud security investment are proxies for cloud-based accounting. Data were drawn from the published annual reports of the ICT firms in the study over the period 2013-2022, and analysis was conducted using panel ordinary least square. Result from the analysis indicates a negative

correlation between discretionary accruals and cloud expenditure growth, whereas a positive correlation exists between discretionary accruals and cloud security investment. The study recommended that ICT firms should prioritize investments in robust cloud security measures so as to improve their financial reporting quality.

According to Akpan *et al.* (2023), the quality of financial information provided by a subset of Nigerian firms was investigated in relation to cloud-accounting. The study had a population that is heterogeneous, spanning a variety of professional fields including accountants, auditors, and information technology specialists in Lagos state. The study used cross-sectional survey research design with a population of 400 responders. The use of questionnaire was employed to obtain the required data for analysis. The dependent variable was substituted with data storage, data efficiency, and data mining. Regression analysis with Ordinary Least Square (OLS) and descriptive statistics were used to examine the data. The analysis's conclusion demonstrated that cloud accounting has a favorable and substantial impact on data mining, data storage, and data efficiency. The findings also showed that cloud accounting plays a significant role in the financial information that businesses provide to investors and other stakeholders. Recommendation from the study revealed that investing in automated accounting networks and training employees will enhance more effective and efficient financial reporting.

Ahmed (2023) conducted research to ascertain how cloud computing affects the caliber of accounting data and how it aligns with international financial reporting standards in Jordan, the study used a sample of cloud computing-using corporations that were chosen at random. The dependent variable was proxied by the development of international financial report standards and the caliber of accounting data. Also, interviews were conducted with managers and accountants, file inspection, and theoretical explanation. upon conclusion of the study, it was revealed that cloud computing has a favorable and substantial impact on the accuracy and reliability of accounting data.

Ndinanakenkpo *et al.* (2023) utilized empirical analysis to examine the effects of cloud accounting on the financial report quality of a subset of Nigerian deposit money banks (DMBs). The study identified 450 respondents from 10 deposit money banks (DMBs) in Akwa Ibom State which make up the population. Taro Yamane formula was employed to ascertain the sample size of 212 people. A Likert 5-point, well-structured questionnaire was used to collect primary data for the research. The study used Infrastructure as a Service (IaaS) and Software as a Service (SaaS) as proxies for the independent variable, while financial reporting's qualitative features served as a stand-in for the dependent variable. The ordinary least square (OLS) regression model was used for the analysis, and the results showed that infrastructure as a service has a positive and significant impact on financial reporting quality, while software as a service has a positive but insignificant effect. The study therefore concluded that cloud accounting significantly affects the quality of deposit money banks' financial reporting in Nigeria, and recommended that in order to accelerate innovation, improve business performance, cut costs, and raise the caliber of financial reporting, financial institutions especially banks are to embrace cloud accounting.

Owolabi *et al.* (2023) examined how cloud accounting affected the quality of financial reporting provided by Nigerian deposit money banks (DMBs). Fourteen (14) listed deposit money banks (DMBs) in Nigeria were identified as the population, and purposive sampling technique was employed to obtain a sample of 10 banks over a period of 10 years. Ten IT staff members from each of the chosen sample banks were given questionnaires, which was the main source of the data. Whereas community and private clouds proxied the independent variable, relevance and faithful representation proxied the dependent variable. The study used multiple regression analysis for analyzing the obtained data, and the results from findings indicated that the relevance and faithful representation of deposit money banks in Nigeria are positively and significantly impacted by private cloud accounting. Also from the study, there is demonstrable

evidence that the community cloud significantly and favorably affects the faithful and relevant representation of deposit money banks in Nigeria, and thus recommends that cloud accounting can be readily adopted if relevant requirements for online servers are provided by the government and other stakeholders.

The impact of a digitalized accounting system on the quality of financial reporting by Nigerian manufacturing firms was studied by Ogundajo *et al.* in 2022. With a population of 4,200 senior employees of listed manufacturing companies in Nigeria that were purposefully selected, a survey research design approach was used. An electronically administered, well-structured questionnaires were administered for the collection data. While accounting software served as a stand-in for the independent variable, the dependent variable was represented by the essential and improved qualitative aspects of financial reporting. The study used multiple regression analysis for the analyzing of the data extracted from the questionnaire. Results from the analyses demonstrated that accounting software significantly and favorably improved the qualitative aspects of financial reporting while also improving its fundamental qualities. Recommendation from the study is that manufacturing company's management should keep using accounting software to raise the caliber and reliability of financial statements.

Okere (2022) conducted research on how cloud accounting affected Nigerian listed manufacturing companies' performance. The research employed a combination of primary and secondary data. While secondary data were gathered using an ex post facto research approach, primary data were obtained through surveys. The study employed a random sample of ten manufacturing companies in the state of Ogun, and the independent variable was proxied by the following measures: server maintenance costs, accounting process simplification, standardization, and documentation, while the dependent variable was measured in terms of both financial and non-financial performance. After testing the hypothesis using ordinary least square (OLS) and descriptive statistics, the result indicated that listed manufacturing companies in Nigeria saw a positive and significant impact on their performance from cloud accounting and its associated costs. The study therefore recommended that developing accounting regulations that match the structure of accounting practices be adopted in the manufacturing sector and implementing strategies to lower the cost of implementing cloud accounting.

Awotomilusi *et al.* (2022) examined the adoption of cloud computing on the efficacy of accounting practices in deposit money banks in Nigeria. The population of the study consisted of all deposit money banks in Lagos, out of purposive sampling technique was adopted to obtain a sample size of 19 banks of which questionnaire was administered to various units of each of the banks. Ordinary least square regression was used for the analysis, and the result revealed that cloud computing significantly and positively related to the efficacy of accounting practices in Nigeria, and with the recommendation that adoption of cloud computing will increase the efficacy of accounting system of deposit money banks in Nigeria.

Owolabi and Izang (2020) assessed how cloud accounting affected the caliber of financial reports provided by Nigerian SMEs. All SMEs in Lagos State, Nigeria, made up the study's population. Journals, articles, and gazettes that have been published were the secondary sources of the data. The data was investigated by looking over a variety of data from study-related domains, and every study variable was scrutinized. The findings show that the quality of financial reporting produced by SMEs in Nigeria is positively and significantly impacted by cloud accounting. In order to improve financial performance and address data security concerns, the study also suggests that SMEs incorporate cloud accounting techniques into their financial reporting.

### **3. Methodology**

We examined the effect of cloud accounting in enhancing the qualitative characteristics of financial report of deposit money banks in Nigeria. Survey research design was employed and

data were gathered through the administration of questionnaire to the targeted respondents which comprises of the staff in the operations offices of the banks. This includes the heads of operations and the unit heads in the operations units such as the fund transfer unit heads, the foreign operations unit heads, the customers service unit heads, the cash management unit heads and also the automated Teller Machine (ATM) officers. The thirteen deposit money banks listed in the Nigeria Exchange Group form our population of the study from which we sampled those with presence in Yenagoa, Bayelsa state to administer our questionnaire. Seventy-eight questionnaires were administered to the heads of operations and to the unit heads in the operations departments, broken down to six questionnaires for each bank. However, we able to retrieve seventy-three questionnaires from which we conducted our analysis.

### 3.1 Model Specification

$$FRQ_{it} = \alpha_0 + \beta_1 SaaS + \beta_2 IaaS + \text{uit}$$

$$FQC_{it} = \alpha_0 + \beta_1 SaaS + \beta_2 IaaS + \text{uit} \dots\dots\dots (i)$$

$$EQC_{it} = \alpha_0 + \beta_1 SaaS + \beta_2 IaaS + \text{uit} \dots\dots\dots (ii)$$

Where;

FRQ = Financial Reporting Quality

EQC = Enhancing Qualitative Characteristics

SaaS = Software as a Service

IaaS = Infrastructure as a Service

## 4. Data Presentation, Analysis and Discussion of Findings

### 4.1 Data Presentation

This study examined the effect of cloud accounting on the financial reporting quality of deposit money banks in Nigeria. Questionnaire were distributed to the respondents in order to get their opinion. The response rate is shown in Table 4.1 below

**Table 1: Administration and Retrieval of Questionnaire**

|                 | Frequency | Percentage |
|-----------------|-----------|------------|
| <b>Filled</b>   | 73        | 93.6       |
| <b>Rejected</b> | 5         | 6.4        |
| <b>Total</b>    | 78        | 100        |

Source: Field work (2024)

The study had a response rate of 93.6%. Out of the 78 questionnaires administered to the heads of operations and to the unit heads in the operations departments of the selected deposit money banks in Bayelsa State, 73 were fully filled. Therefore, this analysis is based on 73 responses.

### 4.2 Demographic Characteristics of the Respondents

For the purpose of identifying some facts and data concerning the study sample, a number of personal variables were chosen. The variables included: gender, age and educational level, marital status and work experience. Frequencies and percentages of the demographic characteristics of the sample were analyzed, and results are presented in Table 4.2 below

**Table 2: Respondents Biodata**

| Variables     | Categories         | Frequency | Percentage |
|---------------|--------------------|-----------|------------|
| <b>Gender</b> | Male               | 42        | 57.5       |
|               | Female             | 31        | 42.5       |
|               | Total              | 73        | 100        |
| <b>Age</b>    | 20-25 year         | 12        | 16.4       |
|               | 26– 30 years       | 33        | 45.2       |
|               | 31 – 40 years      | 17        | 23.3       |
|               | 40 years and above | 11        | 15.1       |
|               | Total              | 73        | 100        |



|                          |                    |    |      |
|--------------------------|--------------------|----|------|
| <b>Marital Status</b>    | Married            | 45 | 61.6 |
|                          | Single             | 23 | 31.5 |
|                          | In a relationship  | 5  | 6.8  |
|                          | Total              | 73 | 100  |
| <b>Educational Level</b> | SSCE               | 2  | 2.7  |
|                          | B.Sc/B.A           | 44 | 60.3 |
|                          | MSc.               | 24 | 32.9 |
|                          | PhD.               | 3  | 4.1  |
|                          | Total              | 73 | 100  |
| <b>Work Experience</b>   | Less than a year   | 11 | 15.1 |
|                          | 1-3 years          | 32 | 43.8 |
|                          | 4-10 years         | 28 | 38.4 |
|                          | 10 years and above | 2  | 2.7  |
|                          | Total              | 73 | 100  |

Source: Field Survey (2024)

From the table above the percentage of male and female that responded to this research questionnaire were 57.5% and 42.5% respectively, which indicates higher percentage of male response to male in eateries in the deposit money banks in Bayelsa State. From the table above, respondent between the age 20-25 years has 16.4% percentage, 26-30 years had 45.2%, 31-40 years has 23.3% while 40years and above has 15.1% which indicates that the majority of the staff in deposit money banks in Bayelsa State are young individuals within the age range of 26-30 years.

Table 4.2 above further shows the marital status of the respondent. The result shows that most of the respondents 61.6% (45) respondents are married, 31.5% (23) respondents are single while 6.8% (5) respondents are in a relationship. This implies that the majority of workers in deposit money banks in Bayelsa State are married.

The table above also shows the educational level of the respondents. The result shows that respondents with SSCE certificate are just 2.7%, while those with B.Sc./B.A. certificate had the highest response 60.3% followed by respondent who had MSc. Which were 32.9%. The result further shows that while those with PhD certificates are 4.1%. This suggests that the majority of staffs in deposit money banks in Bayelsa state have B.Sc./BA has their highest certificate. This shows that most staff are educated and have diverse skills and can work effectively.

The working experience of this staff was also discovered. The result shows that the majority of the respondents 43.8% (32) have 1 to 3 years of working experience followed by those who had 4 – 10 years of working experience who had 38.4% and 15.1% (11) respondents has less than a year working experience while only 2.7% (2) respondents had working experience of 10 years and above

#### **4.4 Descriptive Analysis**

The respondents were asked to indicate the extent to which they agreed with statements on cloud accounting on the financial reporting quality of deposit money banks in Nigeria. The responses were placed on a five-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree). Also, a mean score of above 3.00 is regarded to measure the level of satisfaction on the test variables. When the mean is above the cutoff point of 3.00 it implies that the statement is satisfactory otherwise it is unsatisfactory. The result is presented in the tables below

**Table 3: Respondents Opinion on Enhancing Qualitative Characteristics**

| S/N | Statements                                                                                                                                                                      | SA<br>(5)   | A<br>(4)   | I<br>(3)    | D<br>(2) | SD<br>(1) | Total       | Mean |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------|-------------|----------|-----------|-------------|------|
| 1   | Publishing high-quality financial statements is important to capital lenders, investors, and other financial stakeholders                                                       | 58<br>(290) | 6<br>(24)  | 7<br>(21)   | 2<br>(4) | 0<br>(0)  | 73<br>(339) | 4.64 |
| 2   | Users can recognize and comprehend similarities and differences between items thanks to comparability                                                                           | 46<br>(230) | 19<br>(76) | 6<br>(18)   | 2<br>(4) | 0<br>(0)  | 73<br>(328) | 4.49 |
| 3   | all identifiable items in the financial statements should be able to be independently verified at any point in time                                                             | 71<br>(355) | 2<br>(8)   | 0<br>(0)    | 0<br>(0) | 0<br>(0)  | 73<br>(363) | 4.97 |
| 4   | the timeliness of financial information decreased following the adoption of IFRS.                                                                                               | 18<br>(90)  | 19<br>(76) | 34<br>(102) | 2<br>(4) | 0<br>(0)  | 73<br>(272) | 3.73 |
| 5   | The financial statement must be prepared, categorized, and presented in a way that is easy for financial report users to understand in order for it to be deemed understandable | 62<br>(310) | 8<br>(32)  | 3<br>(9)    | 0<br>(0) | 0<br>(0)  | 73<br>(351) | 4.81 |

Source: Field Survey (2024)

The descriptive analysis of the overall evaluation on enhancing qualitative characteristics (calculated as the mean of each respondent's rating of the items) demonstrated that, according to the respondents, statement 3 is the most important statement having the highest mean score of 4.97 points in a five-point scale. The following elements proved to be also the highest-rated ones: Publishing high-quality financial statements is important to capital lenders, investors, and other financial stakeholders (mean = 4.64), Users can recognize and comprehend similarities and differences between items thanks to comparability (mean = 4.49), the timeliness of financial information decreased following the adoption of IFRS (mean = 3.73), The financial statement must be prepared, categorized, and presented in a way that is easy for financial report users to understand in order for it to be deemed understandable (mean = 4.81), all having a mean score above the cutoff mean of 3.00.

**Table 4: Respondents Opinion on Software as a Service**

| S/N | QUESTIONS                                                                                                                 | SA<br>(5)   | A<br>(4)    | I<br>(3)   | D<br>(2)  | SD<br>(1) | Total       | Mean |
|-----|---------------------------------------------------------------------------------------------------------------------------|-------------|-------------|------------|-----------|-----------|-------------|------|
| 1   | SaaS is a software distribution model                                                                                     | 59<br>(295) | 3<br>(12)   | 4<br>(12)  | 6<br>(12) | 1<br>(1)  | 73<br>(332) | 4.55 |
| 2   | SaaS provides hosts application and makes them available to end users over the internet                                   | 48<br>(240) | 21<br>(84)  | 3<br>(9)   | 1<br>(2)  | 0<br>(0)  | 73<br>(335) | 4.59 |
| 3   | In the SaaS model, an independent software vendor (ISV) may contract a third-party cloud provider to host the application | 23<br>(115) | 32<br>(128) | 16<br>(48) | 2<br>(4)  | 0<br>(0)  | 73<br>(295) | 4.04 |
| 4   | The SaaS model accessibility, affordability, and scalability have all contributed to its rising popularity.               | 42<br>(210) | 16<br>(64)  | 8<br>(24)  | 6<br>(12) | 1<br>(1)  | 73<br>(311) | 4.26 |
| 5   | The accessibility of SaaS is one of its main benefits                                                                     | 57<br>(285) | 6<br>(24)   | 8<br>(24)  | 2<br>(4)  | 0<br>(0)  | 73<br>(337) | 4.62 |

Source: Field Survey 2024.

The descriptive analysis of the overall evaluation on software as a service (calculated as the mean of each respondent's rating of the items) demonstrated that, according to the respondents, statement 5 is the most important statement having the highest mean score of 4.62 points in a five-point scale. The following elements proved to be also the highest-rated ones: SaaS is a software distribution model (mean = 4.55), SaaS provides hosts application and makes them available to end users over the internet (mean = 4.59), In the SaaS model, an independent software vendor (ISV) may contract a third-party cloud provider to host the application (mean = 4.04), The SaaS model accessibility, affordability, and scalability have all contributed to its rising popularity (mean = 4.26), all having a mean score above the cutoff mean of 3.00.

**Table 5: Respondent Opinion on Infrastructure as a Service**

| S/N | Statements                                                                                                               | SA<br>(5)   | A<br>(4)   | I<br>(3)   | D<br>(2)  | SD<br>(1) | Total       | Mean |
|-----|--------------------------------------------------------------------------------------------------------------------------|-------------|------------|------------|-----------|-----------|-------------|------|
| 1   | IaaS helps companies to outsource their data center to a cloud provider.                                                 | 52<br>(260) | 12<br>(48) | 8<br>(24)  | 1<br>(2)  | 0<br>(0)  | 73<br>(334) | 4.58 |
| 2   | IaaS providers host infrastructure components such as servers, storage, networking hardware and virtualization resources | 61<br>(305) | 8<br>(32)  | 2<br>(6)   | 2<br>(4)  | 0<br>(0)  | 73<br>(347) | 4.75 |
| 3   | This cloud type is focused on providing a complete platform, for interface and applications                              | 32<br>(160) | 12<br>(48) | 17<br>(51) | 9<br>(18) | 3<br>(3)  | 73<br>(280) | 3.84 |
| 4   | IaaS enables banks to streamline development, and lower the IT costs and the need for hardware,2 software.               | 62<br>(310) | 3<br>(12)  | 4<br>(12)  | 3<br>(6)  | 1<br>(1)  | 73<br>(341) | 4.67 |
| 5   | IaaS gives customers on-demand access to computer resources                                                              | 46<br>(230) | 17<br>(68) | 7<br>(21)  | 3<br>(6)  | 0<br>(0)  | 73<br>(325) | 4.45 |

Source: Field Survey (2024).

The descriptive analysis of the overall evaluation on infrastructure as a service (calculated as the mean of each respondent's rating of the items) demonstrated that, according to the respondents, statement 2 is the most important statement having the highest mean score of 4.75 points in a five-point scale. The following elements proved to be also the highest-rated ones: IaaS helps companies to outsource their data center to a cloud provider (mean = 4.58), This cloud type is focused on providing a complete platform, for interface and applications (mean = 3.84), IaaS enables banks to streamline development, and lower the IT costs and the need for hardware, 2 software (mean = 4.67), IaaS gives customers on-demand access to computer resources (mean = 4.45), all having a mean score above the cutoff mean of 3.00.

#### 4.4.1 Test of Hypotheses

The two hypotheses stated in the first chapter of this research were tested using Ordinary Least Square regression through the use of SPSS software version 23 to determine the effect of cloud accounting on the financial reporting quality of deposit money banks in Nigeria. The hypotheses were tested as per the rule of thumb that provides to accept the null hypotheses if the calculated p-value is greater than 0.05% otherwise reject it. The results of the analyses are shown in the tables below.

**Table 6: Regression Estimate Cloud Accounting on Financial Reporting Quality**

| Coefficients <sup>a</sup>                          |            |                             |            |                           |       |      |
|----------------------------------------------------|------------|-----------------------------|------------|---------------------------|-------|------|
| Model                                              |            | Unstandardized Coefficients |            | Standardized Coefficients | T     | Sig. |
|                                                    |            | B                           | Std. Error | Beta                      |       |      |
| 1                                                  | (Constant) | 3.845                       | .556       |                           | 6.913 | .000 |
|                                                    | SaaS       | .094                        | .044       | .107                      | 2.112 | .138 |
|                                                    | IaaS       | .305                        | .098       | .288                      | 3.106 | .003 |
| a. Dependent Variable: Financial Reporting Quality |            |                             |            |                           |       |      |

Source: SPSS Version 23

**HO1: Software as a service has no significant effect on enhancing qualitative characteristics of financial statements.**

The result above shows that software as a service has a positive coefficient value of 0.094 and a p-value of 0.138. This shows that software as a service has a positive but no significant effect on enhancing qualitative characteristics of financial performance of deposit money banks in Nigeria. This coefficient value of 0.094 suggests that an increase in software as a service will enhance the qualitative characteristics of financial statement among deposit money banks in Nigeria but this increase is not significant. The null hypothesis is therefore accepted which states that software as a service has a positive but no significant effect on enhancing qualitative characteristics of financial statement

**HO2: Infrastructure as a service has no significant effect on enhancing qualitative characteristics of financial statement.**

The result above shows that infrastructure as a service has a positive coefficient value of 0.305 and a p-value of 0.003 this shows that infrastructure as a service has a positive and significant effect on enhancing qualitative characteristics of financial performance of deposit money banks in Nigeria. This coefficient value of 0.305 suggests that increase in infrastructure as a service will lead to enhance the qualitative characteristics of deposit money banks in Nigeria. The null hypothesis is therefore rejected and the alternative hypothesis is accepted which states that infrastructure as a service has a positive significant effect on enhancing qualitative characteristics of financial statement

#### 4.4.2 Analysis of Variance

The results of analysis of variance (ANOVA) to test the significance of the simultaneous effect of cloud accounting on the financial reporting quality of deposit money banks in Nigeria is obtained as in Table 4.7.

**Table 7: Analysis of Variance (ANOVA)**

| ANOVA <sup>a</sup>                                                                 |            |                |    |             |          |                   |
|------------------------------------------------------------------------------------|------------|----------------|----|-------------|----------|-------------------|
| Model                                                                              |            | Sum of Squares | Df | Mean Square | F        | Sig.              |
| 1                                                                                  | Regression | 3381.047       | 3  | 1127.016    | 1974.862 | .000 <sup>b</sup> |
|                                                                                    | Residual   | 47.367         | 83 | .571        |          |                   |
|                                                                                    | Total      | 3428.414       | 86 |             |          |                   |
| a. Dependent Variable: Enhancing Qualitative characteristic of financial statement |            |                |    |             |          |                   |
| b. Predictors: (Constant), SaaS, IaaS                                              |            |                |    |             |          |                   |

Source: SPSS Version 23

Based on Table 7 (ANOVA) the value of sig. 0.000 smaller  $\alpha = 0.05$ , meaning that simultaneously SaaS and IaaS can enhance the qualitative characteristics of financial statement

#### 4.5 Model Summary

The results of the analysis to test the magnitude of the simultaneous correlation (R) and the coefficient of determination (R<sup>2</sup>) of cloud accounting and financial reporting quality as shown in table 8.

**Table 8: Model Summary**

| Model Summary <sup>b</sup>                         |                   |          |                   |                            |               |
|----------------------------------------------------|-------------------|----------|-------------------|----------------------------|---------------|
| Model                                              | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1                                                  | .993 <sup>a</sup> | .986     | .986              | .75543                     | 1.483         |
| a. Predictors: (Constant), SaaS, IaaS              |                   |          |                   |                            |               |
| b. Dependent Variable: financial reporting quality |                   |          |                   |                            |               |

Source: SPSS Version 10

In Table 8 above it is obtained that  $R = .993$  indicates that the magnitude of the simultaneous relationship between the variables cloud accounting and financial reporting quality is 99.30% and  $R^2 = 0.986$ , meaning that the contribution of SaaS and IaaS simultaneously to financial reporting quality is 98.6%, while the rest (1.4%) is determined by other variables.

#### 4.6 Discussion of Findings

This study examined at ascertaining the effect of cloud accounting on the financial reporting quality of deposit money banks in Nigeria. The study specifically examined the effect of software as a service and infrastructure as a service on enhancing qualitative characteristics of financial statement.

From the descriptive analysis, majority of the respondents strongly agree that software as a service (SaaS) provides hosts application and makes them available to end users over the internet. The SaaS model accessibility, affordability, and scalability have all contributed to its rising popularity. The respondents also strongly agree that the accessibility of SaaS is one of its main benefits. The respondents further opine that infrastructure as a service (IaaS) helps companies to outsource their data center to a cloud provider. IaaS enables banks to streamline development, and lower the IT costs and the need for hardware and software. IaaS gives customers on-demand access to computer resources

The result from the regression analysis shows that software as a service has a positive but no significant effect on enhancing qualitative characteristics of financial statement. This result is in agreement with the finding of Ali *et al.* (2023) who utilized empirical analysis to examine the effects of cloud accounting on the financial report quality of a subset of Nigerian deposit money banks (DMBs). The results showed software as a service has a positive but insignificant effect. With regard to the second hypothesis, the result further shows that infrastructure as a service has a positive significant effect on enhancing qualitative characteristics of financial statement. These findings correlate with the result of Ndinanakenkpo *et al.* (2023) who utilized empirical analysis to examine the effects of cloud accounting on the financial report quality of a subset of Nigerian deposit money banks (DMBs). The results showed that infrastructure as a service has a positive but significant impact on financial reporting quality.

#### 5. Conclusions and Recommendations

Based the results of the analysis conducted, the study concludes that software as a service (SaaS) and infrastructure as a service (IaaS) positively enhances the qualitative characteristics of financial report of deposit money banks in Nigeria. This by extension implies that cloud accounting significantly impacts the financial reporting quality of deposit money banks in Nigeria. This is in agreement with the studies of Akpan *et al.* (2023), Ahmed (2023), Okere (2022) and Owolabi and Izang (2020). The study shows that comparability, verifiability, timeliness, and understandability are among the enhancing qualitative characteristics of financial reporting quality, and therefore recommends that in order to accelerate innovation, improve business performance, cut costs, and raise the caliber of financial reporting, financial institutions especially banks should embrace cloud accounting so that shareholders and stakeholders can have quick access to the financial reports of the banks because of limited time required to do so. More so, this will further boost the confidence of these stakeholders as to the timeliness of the reporting quality; also, accounting regulations should be created to reconcile the different components of software as a service to the cost structure of banks, this will be

necessary so that all practitioners of cloud accounting will be expected to follow a specific template for easy monitoring and assessments. Finally, that corporate strategies be implemented to lower the cost of cloud accounting so that in trying to improve financial reporting quality, additional unnecessary cost is not introduced that will put pressure on both the banks and ultimately the shareholders because of the likely resultant reduction in dividends.

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