

Cloud accounting and the performance of deposit money banks in Nigeria

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Abstract: The current technological era of the 4th Industrial Revolution (4IR) and the realities of the COVID-19 pandemic brought about challenges and opportunities for DMBs; these challenges necessitated this study. The study examined empirically the relationship between cloud accounting and improved customer service delivery, which have effect in the financial performance of deposit money banks (DMBs). The study adopted cross-sectional survey research design. The structured Lickert scale questionnaire was raised from the objectives of the study and administered to the information technology and communication (ICT) unit of the sampled DMBs. The outcomes of the administered questionnaires were analyzed using the descriptive statistics and Spearman's Rank Correlation Coefficient. Results show that cloud accounting has a significant positive relationship with financial performance of DMBs. In addition, Information Technology Trust has a positively significant moderating effect on the relationship between cloud accounting and financial performance DMBs. Also, the study revealed that Visualized Transaction Reporting and Self-service Transaction Reporting have significant positive relationship with productivity and profitability of DMBs. In conclusion, cloud accounting significantly moves in the same direction as financial performance. Hence, the study recommends that banks should do more investment in cloud accounting technologies for improve customer service delivery in their operations, which will in the end boost financial performance.

Keywords: Cloud accounting, Deposit money banks, Financial performance, Information technology trust, Self-service transaction reporting, Virtualized transaction reporting.

1. Introduction

Over the years, the banking sector has been a major economic driver of any nation, and its financial performance is of great importance to all stakeholders. In this new technological era of the 4th industrial revolution (4IR), keying into cost-efficient, effective, and growth-driven technological investments is crucial to achieving easy accessibility of accounting information, improved customer service delivery, and safeguard of depositors' funds, improved productivity, profitability, and overall financial performance. Ganyam and Ivungu (2019) posited that financial performance is a compendium of a firm's financial state, the willingness and ability to redeem its financial commitments, and the capability to continue in business in the future. Salami, Akande, and Alalade (2022) asserted that despite the efforts by regulatory authorities to advocate for improved smooth service delivery through innovative technological usage in the sector, Deposit Money Banks (DMBs) have continued to witness operational inefficiencies such as unceasing network failures and downtimes, transaction errors and electronic fraud.

DMBs are banks that the regulatory body has given license for the mobilization of deposits from surplus units and to disburse them to deficit units and they are allowed to perform a wide range of other financial services activities (Central Bank of Nigeria (CBN), 2022). While, Alemu and Mohammed (2016) stated that there is an observed paradigm shift from traditional means of transacting business

with relevant stakeholders to contemporary business models driven by innovative and computerized computing systems. Ibrahim, Sallha, and Rashid (2020) added that with the advent of the internet, the cloud became one of the disruptive innovations. Nedelcu, Stefanet, Tamasescu, Tintoiu, and Vezeanu (2015) made a revelation that the system offers customers and other stakeholders a seamless experience in accessing information and communication from the comfort of their homes or anywhere. Meanwhile, Staten (2009) is of the view that cloud accounting –an off shoot of computerized computing system– promises to deliver better accounting functionalities in a cost-efficient way. Egayi and Udeh (2020) added that investments in cloud accounting aids in achieving corporate agility as it permits firms to adjust to technological changes, reduce capital expenditure, and have easy information accessibility from anywhere provided there is internet connectivity. This study was motivated by several daunting challenges and problems faced by Deposit Money Banks (DMBs) in Nigeria in achieving optimal financial performance. Nkiri and Ofoegbu (2022) asserted that the major determinants of failures of banks are profitability and liquidity. More so, the Coronavirus (COVID-19) pandemic also brought its challenges for banks as according to KPMG (2022) the pandemic drove banks' costs higher, especially those in retail banking with the following factors causing it: (i) upsurge in arrears and collections necessitating extra staff; (ii) rise in on-shoring and multi-sourcing of service providers to improve resilience in operations; (iii) reduced productivity of staff due to reduction in the demand for traditional accounts and products; (iv) increase in telecom and insurance cost with more staff working from home and higher fraud cost. They further added that many of the banks may be looking for ways of slashing costs or complete re-engineering of operations by digitalization and use of technologies that will improve self-service enabled by robotics and Artificial Intelligence (AI) hosted in the cloud. The realities of COVID-19 necessitated disruptive business processes leading businesses to speedily transform digitally and any company that fails to key into the current disruptive innovations might risk the loss of market share (Aibinu, 2022). The banking industry experiences heightened competition and this fierce competition and the advent of the internet have forced banks to start rethinking their information and communication technology (ICT) strategies for better productivity and profitability.

Given these issues and approaches deployed to resolve them, the fundamental question is, would the productivity and profitability of DMBs be enhanced through the efficient and effective application of cloud accounting resources in the banking sector? Specifically, will the use of Visualized Transaction Reporting (VTR) and Self-service Transaction Reporting (STR) which are the indicators of cloud accounting in this paper have any significant relationship with Productivity and Profitability which are the measures of financial performance? It is against the foregoing background that this study becomes expedient. This study included the moderating role of information technology Trust (ITT) into the relationship between cloud accounting and financial performance of DMBs.

While some studies have been directed in the area of cloud accounting (Alemu & Mohammed, 2016; Ghofirin & Primasari, 2022; Peters & Agwor, 2021) and its impact on the business decision (Strauss, Kristandi, & Quinn, 2014); financial reporting (Owolabi & Izang, 2020); reducing cost (Ahmed, 2020) and organization performance (Mirrazavi, 2016). Specifically, Alemu and Mohammed (2016) adopted public cloud, community cloud, and private cloud, as implementation strategies and dimensions of cloud accounting. Strauss et al. (2014) used enterprise resource planning systems and customer relationship management in conceptualizing cloud technology and their effect on management accounting and decision making. Furthermore, Mirrazavi (2016) developed models and paradigms of cloud performance evaluation systems. The authors used quality management systems, performance pyramid, and management-by-objectives as various performance evaluations of cloud computing. In addition, Ahmed (2017) who investigated cloud-based information systems and organization performance used Software as a service (SaaS), Platform as a service (PaaS), and Infrastructure as a service (IaaS), as cloud technology dimensions. They measured organizations' performance with efficiency, product quality, and customer welfare. However, this study, in a bid to add to the existing literature introduced Virtualized Transaction Reporting (VTR) and Self-service Transaction Reporting (STR) as dimensions of cloud accounting, while using productivity and profitability as measures of financial performance. The study

further examined the moderating effect of information technology Trust (ITT) in the relationship between cloud accounting and financial performance as it relates to DMBs in Nigeria. Specifically, the study was set to achieve following objectives: (i) Ascertain the relationship between Virtualized Transaction Reporting and productivity of DMBs, (ii) determine the relationship between Virtualized Transaction Reporting and profitability of DMBs, (iii) ascertain the relationship between Self-service Transaction Reporting and productivity of DMBs, (iv) determine the relationship between Self-service Transaction Reporting and profitability of DMBs, and (v) ascertain the moderating effect of IT Trust on cloud accounting and the performance of DMBs.

The remaining part of this study is structured as follows: section (2) literature review, Section (3) the methodology, section (4) presentation and analysis of data, including results and discussion, and lastly, section (5) conclusion and recommendations.

2.Literature Review

2.1. Conceptualization

The concept of cloud accounting has been explored by many scholars, just as accounting has evolved over the past decades with user-friendly innovations (Thirmal-Rao, Iyotsna, & Sivani, 2015). Different definitions have been put forward by scholars. However, the definition of Peters and Agwor (2021) that suggests that, ‘cloud accounting basically provides accounting services through cloud computing without the user necessarily acquiring licenses for computer hardware and software’, is considered very strategic to this study. In this study, cloud accounting conceptualized to mean an internet-based automation of accounting processes of data entry, data analysis, processing, storage, reporting, retrieval, and auditing by a cloud computing service provider accessible from anywhere, anytime, and any device that has internet. The idea is that a cloud computing firm sells accounting services through remote servers and the accounting applications are used for a fee based on pay-as-you-consume. The payment of a stipulated fee grants the financial organization or the accountants representing the organization online access to manage and record financial records online. With less emphasis on storage of information in hard drives, flash drives, memory cards, discs, and other hardware storage systems. The cloud accounting is indicated by Virtualized Transaction Reporting and Self-Service Transaction Reporting. McAfee (2011) observed that cloud computing operates like a virtualized system of information storage and retrieval network environment where relevant individuals, groups, or organization can have access with the help of a mobile or any kind of device that have internet services. IBM (2009) asserts that virtualization refers to a software platform comprising of resources, servers, and data that effectively house multiple users at the same time. Virtualization is a fundamental technology enabler for the infrastructure services of data centre powered by the internet (Laadan & Nieh, 2010). Virtualization, therefore, powers the dynamic cloud infrastructure in recoding and reporting transactions of a business organization. Cloud accounting can hardly be implemented without data center infrastructures where all relevant authorized parties (individuals, groups, or organizations) meet and explore resources. This data center is termed “virtualization”. Virtualized transaction reporting (VTR) is an automated platform where data resources are automatically reported or retrieved by authorized individuals or groups (Mohammadi & Mohammadi, 2014).

Self-service Transaction Reporting (STR) is one of the interesting qualities of cloud accounting. The self-service element of cloud accounting reports financial transactions seamlessly with any kind of computerized device (Alemu & Mohammed, 2016). The idea of Self-service reporting is the accounting practice that does not need the physical presence of the accountant of the organization before accessing various financial records. These financial records can be conveniently accessed in real-time with even in-house devices such as smart phones, tablets, and other mobile devices (Gonçalves & Ballon, 2011).

Information Technology Trust (ITT) being a concept that is multi-faceted has been largely discussed across many disciplines (Costa, Roe, & Taillieu, 2001). Trust is a vital ingredient that can spark up an organization’s performance to an enviable height. Trust is what the firm earns as they relate to various publics or stakeholders. Trust therefore from the IT perspective is an important fact that

determines user intention to use a particular system or technology (Corritore, Kracher, & Wiedenbeck, 2003). IT trust is a psychological state in which a potential or actual user of a technology believes that by using the system, the outcome of an activity will be improved. It measures the extent to which users perceive risk associated with the use of a technological device (Briggs, Simpson, & De Angeli, 2004).

Financial performance is one of the widely discussed concepts in the strategic competitiveness literature and is key to measuring organizations' survival. The financial performance is recognized by many as the end result of activities or goals of almost every profit-oriented organization (Mugo, Wanjau, & Ayodo, 2012; Nkiri & Ofoegbu, 2022). Financial performance indicates a firm's growth as it relates to profitability, growth rate, status of shares, sales, net profit, and operating profit margin (Huang, Savita, & Zhong-jie, 2022). Similarly, Mwanja (2009) argued that the conceptualization of financial performance with financial organizations is largely dependent on three important factors: organization operational efficiency, size, and asset management. Feng and Chen (2007) corroborated that the financial performance of banks is more often measured with indices such as return on asset, return on investment, dividend per share, earning per share, and so on. Schryen (2013) measured financial performance from an economic view profit. He argued that economic measures are among the most widely used performance measurement, they include; capacity utilization, profitability, product quality, and customer welfare. In view of the foregoing, of financial measures, this study adopted productivity and profitability as measures of financial performance of DMBs.

Productivity represents the correlation between input and output (Bakhtiar, Irwansyah, & Zulmiardi, 2018; McCarthy, 2005) and productivity achievement varies from substantial improvement to poor performance (McCarthy, 2005). Productivity ratio states output divided by input. The higher the output with the same level of input, the better improved the productivity (Bakhtiar et al., 2018). They further added that productivity is the level of efficiency in the production of goods and services as well as the efficient utilization of inputs such as capital, personnel, energy, time, machinery, and facilities to achieve a very valuable output. Liu and Sickles (2021) is of the opinion that bank outputs largely depend on the technology utilized. Productivity is taken as the level of output achieved with the efficient utilization of resources such as cloud accounting systems. The study weighed the benefits of cloud accounting in DMBs (such as reduction in customer waiting time, the flexibility of usage, speed of transaction processing, and reduction in network failures in traditional IT systems) over the cost of its deployment. Meanwhile, profitability measured financial performance. Gul, Irshad, and Zaman (2011) asserted that profitability is expressed in terms of Return on Equity (ROE), Return on Assets (ROA), Return on Capital Employed (ROCE), and Net Interest Margin (NIM). Profitability in this study is taken as the overall returns or margins a firm makes on a business decision.

Figure 1 illustrates the interaction between cloud accounting (CA) and performance with the technological factor (TF) and Information Technology trust (ITT) playing a moderation role.

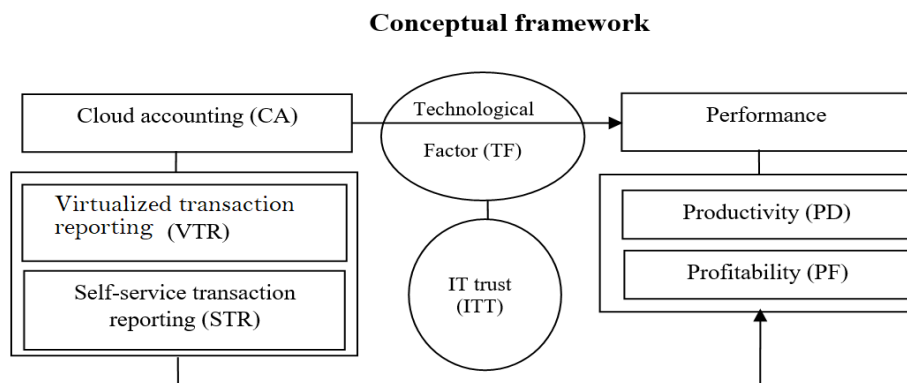


Figure 1.
Researcher's idea.
Source: Researcher's idea.

Based on our operational framework, the study's mathematical model was developed as follows:

$$\begin{aligned} \text{FP} &= f(\text{CA}) (\text{TF}) \dots \text{Model 1} \\ \text{CA} &= (\text{VTR}, \text{STR}) \dots \text{Model 2} \\ \text{FP} &= (\text{PD}, \text{PF}) \dots \text{Model 3} \\ \text{TF} &= (\text{ITT}) \dots \text{Model 4} \\ (\text{PD}, \text{PF}) &= f(\text{VTR}, \text{STR}) (\text{ITT}) \dots \text{Model 5} \end{aligned}$$

Where:

CA	=	Cloud Accounting.
FP	=	Financial Performance.
VTR	=	Virtualized Transaction Reporting.
STR	=	Self-Service Transaction Reporting.
PD	=	Productivity.
PF	=	Profitability.
TF	=	Technological Factor.
ITT	=	Information Technology Trust.

2.2. Theoretical Framework

The theoretical baseline for this study is the Technological Acceptance Model (TAM) propounded by Davis (1989) and Ujakpa and Heukelman (2018). The theory specifically addresses models of acceptance or rejection of an IT system. The TAM theory is focused on how people perceive a new or modified technology. People are usually skeptical about innovative technology. Its acceptance or rejection measures the people's attitude towards it (Davis, 1989). The model integrates technological facts and organizational or consumer behaviour concepts by identifying various factors that are responsible for accepting or rejecting an IT (Shroff, Deneen, & Ng, 2011). Davis (1989) also observed that Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) are factors that affect acceptance of technology. PEOU measures the degree to which technology users view the benefits of technology to be better than other substitutes (Davis, 1989). He states further that Perceived Usefulness (PU) is the degree to which a user perceives that by using a system there would be an enhanced performance. Ujakpa and Heukelman (2018) added that PEOU and PU jointly influence three additional constructs: Attitude to Use (ATU), Intention to Use (ITU), and Actual Usage (AU). The diagram below models the relationship between these variables.

Figure 2 Diagrammatic illustration of Technology acceptance model (TAM).

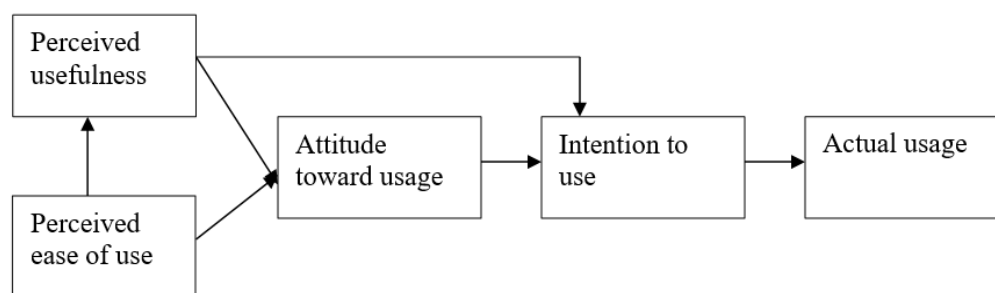


Figure 2.

Technology acceptance model (TAM).

Source: Davis, Bagozzi, and Warshaw (1992).

The effective deployment of cloud accounting is largely dependent on the acceptance of this technology by relevant stakeholders (Thatcher, McKnight, Baker, Aarsal, & Roberts, 2010). This theory

is considered very germane for this study as the actual usage of Cloud Accounting is influenced by several perceptions of users in Nigeria.

2.3. Empirical Review

A handful of studies investigated the relationship between cloud accounting and financial performance (Ahmed, 2017; Thirmal-Rao et al., 2015). Ahmed (2017) argued that the adoption of cloud-based technology in accounting practices had significantly reduced inventory cost, hardware cost, and other related costs, thus increasing the chances of making a good profit. The author further argued that cost reduction and increase in profitability lead to enhanced performance. Furthermore, Thirmal-Rao et al. (2015) argued that with CA, management has the opportunity to improve productivity and operational efficiency with the invention of cloud-based computing systems. They are of the conviction that cloud accounting is positively significant influencing financial performance. Owolabi and Izang (2020) corroborated that deploying CA improves financial reporting quality.

On Virtualized Transaction Reporting (VTR) and Financial Performance (FP), Mohammadi and Mohammadi (2014) opined that virtualized platforms reduce cost and improves security and stakeholders' confidence. Schryen (2011) argued that VTR offers real-time accounting activities where records or transactions are transmitted across different services in the cloud. This virtual transmission enhances operational efficiency. The outcome or result of this process is more beneficial to the organization than its associated costs. By storing, recording, and reporting business dealings through virtual space, the financial organization can improve productivity and efficiency thereby enhancing business performance (Mell & Grance, 2011). Dimitrov and Osman (2012) argued that firm performance in terms of reduced cost, return-on-investment, and profitability can be enhanced with the proper virtual cloud computing deployment model.

Studying Self-service Transaction Reporting (STR) impact on financial performance, Gonçalves and Ballon (2011) is of the opinion that self-service accounting reporting with the help of cloud virtualization can be done anywhere and anytime thereby reducing the cost of data transportation and storage which in turn increases profitability. Self-service provisioning systems like cloud computing has a way of eliminating labour cost and improving accountants' productivity. Gonçalves and Ballon (2011) stated that because it is uniquely convenient, accounting professionals can take this innovative advantage and drive the business process and activities to a greater height. They also stated that self-service reporting is an IT mechanism for reaching stakeholders for on-the-spot demand for financial transactions thereby earning stakeholders' confidence and trust while improving financial performance.

Information Technology trust (ITT) in organization performance can hardly be over-emphasized especially when the business processes are more of IT applications and software like in the case of cloud accounting. Thatcher et al. (2010) postulated that for cloud accounting to yield the desired results, top management personnel must believe that such technology can drive the operations of the firm to a profitable end. Kivijarvi, Leppanen, and Hallikainen (2013) stated that financial performance that is hinged on IT-related capacities must satisfy or convince relevant stakeholders of its capacity to achieve stated objectives or goals. They went on to conclude that technology trust is a crucial factor in determining financial performance in a technology-driven industry. It is worthy to note that most studies in cloud accounting were conceptual studies predominantly from other climes other than Nigeria, also with very little or no concentration in the banking sector, at a time when cloud accounting is strategic to business survival following the digital economy development and COVID-19 experience. This study surveyed Deposit Money Banks in Nigeria to arrive at a robust findings, conclusion and recommendations.

3. Methodology

The study adopted the cross-sectional survey research design. This design is considered appropriate because the study's subjects are the human beings who have both manipulated and benefited from the use of the phenomenon under investigation. The population of the study is the 22 Deposit Money Banks

currently in operational in Nigeria in the year 2022 when the questionnaires were administered (Central Bank of Nigeria (CBN), 2022). Due to the nature of cloud accounting and because of the strategic nature of the study, the ICT personnel of the 22 Banks, both as a consumer and a manipulator of the cloud systems were sampled.

A five-point Likert scale structured questionnaire was validated by a three-jury experienced in accounting and finance digital products as well as the field of accounting, and used for data collection. The Cronbach's Alpha was used to test the internal consistency of the research instrument. If the alpha value is 0.70 benchmark or higher the instrument is considered reliable and it is considered reliable. Otherwise, is it considered not reliable. Meanwhile, the Spearman's Rank Correlation Coefficient was used as a tool for data analysis. The justification for the use of this tool was that it tests the linear relationship between two variables (Temizhan, Mirtagioglu, & Mendes, 2022). That is, the relationship between cloud accounting proxied by VTR and STR and financial performance proxy by profitability and productivity of DMBs. Partial Correlation was used to test the moderating variable, IT trust. The analyses were done with the aid of Statistical Package for Social Science (SPSS, Version 21.0) software.

4. Results and Discussion

This section of the research was devoted to presenting data with tables and percentages. Multivariate analysis was also presented here.

Table 1.
Displays the distribution of the questionnaires.

Details	Frequency	Percentage (%)
Number issued	110	100
Number returned	97	88.18
Number used	92	83.64

4.1. Questionnaire Administered

Table 1 revealed that out of 110 copies of questionnaires distributed only 97 copies representing 88.18% were returned. It was further revealed that out of the returned copies, only 92 copies representing 83.64% were found useful for the exercise.

Table 2.
Reliability results.

Variables	Cronbach alpha values
Virtualized transaction reporting	0.843
Self-service transaction reporting	0.815
Productivity	0.870
Profitability	0.879
IT trust	0.882

Table 2 revealed the results of the reliability tests. Since various test results exceeded the 0.7 benchmark earlier stated, the research instrument is reliable.

4.2. Hypotheses Testing

In this section, Spearman's Rank Order Correlation Co-Efficient Statistical Tool was used to test the hypotheses.

4.2.1. Decision Rules

Where the probability value (PV) > 0.05, that means that there is no significant coefficient that exists, hence, null hypotheses (Ho) is supported and the alternate hypotheses (Ha) is not supported.

Conversely, where the probability value (PV) < 0.05, it shows that there is significant coefficient, therefore the null hypothesis is not supported and the alternate hypothesis is supported. The degree or strength of the relationship is indicated by the correlation coefficient, +1 implied a perfect positive relationship; and 0 implied no relationship. The correlation coefficient can range in value from -1 to +1. The larger the absolute value of the coefficient, the stronger the relationship between the variables. For example, +0.9 implied a very strong positive relationship, while -0.1 implies a very weak negative relationship.

4.2.2. Test of Hypothesis One

Ho: There is no significant relationship between Virtualized Transaction Reporting (VTR) and productivity (PD) in South-South Nigeria.

Table 3.

Correlation analysis results presenting the relationship between virtualized transaction reporting and productivity.

			Virtualized transaction reporting	Productivity
Spearman's rho	Virtualized transaction reporting	Correlation coefficient	1.000	0.892**
		Sig. (2-tailed)	.	0.011
		N	92	92
	Productivity	Correlation coefficient	0.892**	1.000
		Sig. (2-tailed)	0.011	.
		N	92	92

Note: **. Correlation is significant at the 0.05 level (2-tailed).

Table 3 above reveals a Spearman Rank Correlation Coefficient of 0.892 and a significant probability value (PV) of 0.011 which indicates a strong positive and significant correlation between VTR and the productivity of banks in South-South Nigeria. Therefore, the null hypothesis is not supported by the findings because of the PV (0.011) < 0.05 level of significance.

4.2.3. Test of Hypothesis Two

Ho: VTR has no significant relationship with profitability (PF) in South-South Nigeria.

Table 4.

Relationship between virtualized transaction reporting and profitability correlation analysis results.

			Virtualized transaction reporting	Profitability
Correlations				
Spearman's rho	Virtualized transaction reporting	Correlation coefficient	1.000	0.850**
		Sig. (2-tailed)	.	0.001
		N	92	92
	Profitability	Correlation coefficient	0.850**	1.000
		Sig. (2-tailed)	0.001	.
		N	92	92

Note: **. Correlation is significant at the 0.05 level (2-tailed).

From Table 4 the Correlation Coefficient is 0.850 and PV is 0., these indicate that there is a significantly strong positive relationship between VTR and the profitability of banks in South-South Nigeria. Therefore, the result does not support the null hypothesis.

4.2.4. Test of Hypothesis Three

Ho: Self-service Transaction Reporting (STR) has no significant relationship with PD in South-South Nigeria.

Table 5.

Relationship between self-service transaction reporting and productivity correlation analysis result.

			Self-service transaction reporting	Productivity
Spearman's rho	Self-service transaction reporting	Correlation coefficient	1.000	0.714**
		Sig. (2-tailed)	.	0.002
		N	92	92
	Productivity	Correlation coefficient	0.714**	1.000
		Sig. (2-tailed)	0.002	.
		N	92	92

Note: **. Correlation is significant at the 0.05 level (2-tailed).

Table 5 reveals a Coefficient of 0.714 and PV of 0.002 which shows that there is a moderately positive and significant association between STR and the productivity of banks in South-South Nigeria. Therefore, we do not support the null hypothesis.

4.2.5. Test of Hypothesis Four

Ho: There is no significant relationship between STR and profitability in South-South Nigeria.

Table 6.

Relationship between self-service transaction reporting and profitability correlation analysis result.

			Self-service transaction reporting	Profitability
Spearman's rho	Self-service transaction reporting	Correlation coefficient	1.000	0.911**
		Sig. (2-tailed)	.	0.001
		N	92	92
	Profitability	Correlation coefficient	0.911**	1.000
		Sig. (2-tailed)	0.001	.
		N	92	92

Note: **. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS 21 Output, 2022.

Table 6 reveals a Coefficient of 0.911 and a PV of 0.001 implying a strong positive and significant correlation between STR and the profitability of banks in South-South Nigeria. Therefore, the null hypothesis is not supported by the findings.

4.2.6. Test of Hypothesis Five

Ho: IT trust has no significant moderating influence on the relationship between cloud accounting and financial performance in South-South Nigeria.

Table 7.

Presentation of the results of the moderating effect of IT trust on the relationship between cloud accounting and financial performance.

		Cloud accounting	Financial performance
Cloud accounting	Coefficient	1.000	0.861**
	Sig. (2-tailed)	.	0.001
	N	92	92
Financial performance	Coefficient	0.861**	1.000
	Sig. (2-tailed)	0.001	.
	N	92	92

Note: **Significant at the 0.05 level (2-tailed).

Decision: **Table 7** above reveals a strong positive moderating effect of 0.861 and a PV of 0.001 on the relationship between Cloud accounting and financial performance. These show that IT trust has a significantly strong positive moderating influence on the relationship between cloud accounting and financial performance of banks in South-South Nigeria. Therefore, the null hypothesis is not supported because the PV (0.001) < 0.05 level of significance.

Table 8 displays the summarize results and findings.

Table 8.

Summary of results and findings.

Hypotheses	Correlations	P-value	Decision
Ho ₁	0.892 (Strong positive relationship)	0.011 (Significant)	Ho ₁ not supported
Ho ₂	0.850 (Strong positive relationship)	0.001 (Significant)	Ho ₂ not supported
Ho ₃	0.714 (Moderate positive relationship)	0.002 (Significant)	Ho ₃ not supported
Ho ₄	0.911 (Strong positive relationship)	0.001 (Significant)	Ho ₄ not supported
Ho ₅	0.861 (Strong positive moderating effect)	0.001 (Significant)	Ho ₅ not supported

4.3. Discussion of Findings

Firstly, the results revealed that VTR has a positive and significant correlation with productivity of DMBs. This means that as VTR increases, so did productivity improve. This corroborates the argument of [Schryen \(2011\)](#) who posited that virtualized transaction reporting offers real-time accounting activities that result in better performance. The results of this study further reported that VTR has a strong positive and significant association with profitability in the DMBs in Nigeria. This finding is also in agreement with [Mell and Grance \(2011\)](#) assertion when they argued that by storing, recording, and reporting business dealings through virtual space, the financial organization can improve productivity and efficiency thereby enhancing business performance. Furtherance to it, this findings is also in consonance with the finding of [Dimitrov and Osman \(2012\)](#) they reported in their study that firm performance in terms of return-on-investment, and profitability can be enhanced with virtual cloud computing deployment.

The outcome of the research revealed that STR has a significant and positive relationship with productivity in DMBs in Nigeria. This means that as STR goes up, productivity goes up. This finding, however, corroborates the opinion of [Gonçalves and Ballon \(2011\)](#) that self-service reporting with the help of cloud virtualization can be done anywhere and anytime thereby reducing the cost of data transportation and storage which in turn increases profitability. Similarly, the study affirmed that STR

has a significant and positive association with the profitability of DMBs in Nigeria. This finding also agrees with the findings of [Gonçalves and Ballon \(2011\)](#).

Lastly, results revealed that although cloud accounting has a positive and significant influence on financial performance, IT Trust moderates strongly the effect cloud accounting has on financial performance. This finding is in line with the study of [Thatcher et al. \(2010\)](#) that revealed that the effective deployment of cloud accounting is largely dependent on the acceptance of this technology by relevant stakeholders. They further postulated that before cloud accounting will yield the desired results, top management personnel must believe that such technology can drive the operations of the firm to a profitability end. [Kivijarvi et al. \(2013\)](#) argued that financial performance that is hinged on IT-related capacities must satisfy or convince relevant stakeholders of the system's capacity to achieve stated objectives or goals. They went on to mention that technology trust is a crucial factor for determining financial performance in a technology-driven industry.

5. Conclusion and Recommendation

In line with the aim of the study coupled with the results, it is concluded that cloud accounting proxied by Virtualized Transaction Reporting (VTR) and Self-servicing Transaction Reporting (STR) has a significant and positive relationship with financial performance measured by productivity and profitability of Deposit Money Banks in Nigeria. It further concludes that IT Trust has a significant moderating influence on the relationship between cloud accounting and financial performance.

The study, therefore, recommends that Deposit Money Banks (DMBs) in Nigeria should use more cloud accounting technologies because of the positive and significant relationship between cloud accounting and financial performance. Hence, DMBs are advised to take advantage of Virtualized Transaction Reporting and Self-servicing Transaction Reporting prowess of cloud accounting as it affords relevant stakeholders a delightful accounting and reporting experience as well as operational efficiency.

This is one of the early quantitative studies on cloud accounting and, financial performance. This study used novel variables such as Visualized Transaction Reporting (VTR) and Self-service Transaction Reporting (STR) as dimensions of Cloud accounting. The findings added to the literature by supporting that cloud accounting has a significant association with financial performance measured by productivity and, the profitability of Deposit Money Banks (DMBs) in Nigeria.

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Institutional Review Board Statement:

The Ethical Committee of the Faculty of Business Administration, University of Nigeria, Enugu Campus, Nigeria has granted approval for this study (Ref. No. UNN/GREF/CA/1/24).

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Data Availability Statement:

The corresponding author may provide study data upon reasonable request.

Competing Interests:

The authors declare that they have no competing interests.

Authors' Contributions:

All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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