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Cloud Based Accounting Information System And Performance Of Quoted Banks In Rivers State

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ABSTRACT
Accounting profession has evolved over the years and the continuous advancement of information technology has metamorphosed into the discovery of the most recent seamless accounting practice known as cloud accounting information system. This study examined the relationship between cloud-based accounting information system and performance of quoted banks in Rivers State. Information quality, system quality and service quality constitute the constructs of cloud-based accounting information system while net profit margin and return on assets were used to measure the performance of the quoted banks in Rivers. Cross-sectional survey research design was adopted for this study with the targeted population focused. Data was obtained from primary sources through the administration of a well-structured questionnaire to the respondents. The reliability of the research instrument was tested using the Crombach's Alpha. Data collected were analyzed using descriptive and Ordinary Least Square (OLS) multivariate regression. The findings revealed that all constructs of Cloud-based accounting information system; SYSQ, INFQ & SERQ relate significantly with performance of quoted banks in Rivers State in the period of this study. We thus, concluded that cloud-based accounting information system has exhibited its technological endowment on performance of quoted banks in Rivers State in the period of this study. The study recommended that Nigerian banks must develop strategies to invest adequately in different cloud-based accounting information system (system quality, information quality and service quality) for sustaining competitive advantage in this current knowledge economy in order to achieve robust performance.
Keywords: Cloud-Based Accounting Information System, Performance, System Quality, Information Quality. Service Quality

INTRODUCTION

In the recent past, managing organizational activities that involved large customer bases and substantial accounting data was primarily a manual process. Traditional methods such as ledgers, journals, and other original entry books were manually processed to generate accounting information, which led to delays in recording transactions, maintaining ledgers and books of accounts, and preparing financial statements, among other accounting tasks (Bashorun, Omopupa, & Dahiru, 2020). However, in today's knowledge-based and technology-driven economy, there is an increasing demand for prompt, efficient, and high-quality accounting services, which has garnered considerable attention globally, including in both developed and developing countries. Technology has significantly impacted accounting practices, with firms worldwide adopting dynamic accounting technologies for not only automating processes but also for predictive analysis that better serves clients and enhances the effective utilization of their knowledge (Rubino, 2022). It is crucial to recognize that accounting technology is constantly evolving, and staying abreast of these changes is essential for firms and accountants to remain competitive in the 21st-century business environment. This technological evolution is notably reflected in cloud accounting, which has transformed traditional paper-based processes and systems into streamlined, cloud-based accounting workflows that can be accessed anytime and anywhere (Dimitriu & Matei, 2015). Through cloud accounting, firms can now process and store their financial records online, enabling accountants, shareholders, and other stakeholders to collaborate in a digital environment and easily share financial data regardless of their physical location (Asiaei & Rahim, 2016). Satya (2018) describes cloud accounting as web-based data storage on a remote server, accessible via an internet connection. Marr (2022) further elaborates that cloud-based accounting technology is a form of cloud computing that encompasses networks, data storage, applications, security, and development tools, all of which are delivered through the Internet. Cloud accounting is now integral to modern accounting practices, aligning with the rapid pace of technological change. It is revolutionizing how businesses operate, particularly as online transactions increase, necessitating that accounting practices move beyond desktop computers and office servers. The advent of cloud accounting allows nearly all data and comprehensive financial transactions to be stored and accessed from any location. As accounting principles and practices continue to advance rapidly in today's business landscape, technological advancements and the emergence of cloud accounting have significantly enhanced the potency of the accounting system (Dianasmith, 2017). Consequently, Johnson (2019) advises that cloud accounting software must adapt quickly to meet the evolving expectations of customers as the demand for cloud accounting becomes more evident. Typically managed by cloud service providers (CSPs), cloud services involve storing accounts on a server, with companies choosing either dedicated or shared cloud services depending on their budget. Cloud accounting software is generally considered reliable because it allows access from any device with an internet connection, making it particularly beneficial for small business owners. With software that integrates into a broader ecosystem, cloud accounting is perceived as faster, more consistent, and cost-effective (Rao, Jyotsna & Sivani, 2017). The automation of accounting processes can be traced back to the 1950s (Matei, 2015), but cloud accounting has significantly enhanced accounting practices. Although accounting software has been in use for decades, its capabilities have progressively advanced, leading to greater sophistication in recording, storing, and interpreting financial data.

Cloud accounting's availability over networks is facilitated through standard mechanisms that support various client platforms, including mobile phones, laptops, and PDAs. Adopting cloud accounting systems enables organizations to achieve efficient and sustainable online data services for their target markets. Gartner reports that cloud accounting is the top trend likely to transform the business landscape (Pcurari & Nechita, 2013). Moreover, an IDC report (2019) projects that spending on cloud accounting will increase from $229 billion in 2019 to nearly $500 billion by 2023, indicating a more than 200 percent growth in cloud services adoption within businesses by 2023. Traditional accounting relies on desktop computers with installed software, while cloud accounting operates as an internet-based application that requires no installation or maintenance on desktop systems (Dimitriu & Matei, 2015). Cloud accounting offers advantages such as lower maintenance costs, automatic updates of financial information, real-time financial reporting, and enabling management to focus on business growth (Khanom, 2017). Additionally, cloud accounting is cost-effective, particularly for users with limited budgets, as it is cheaper to finance over time compared to traditional accounting software (Cong & Du 2010). Budgeting, which involves allocating resources like time or money over a specific period, also benefits from the efficiency of cloud accounting systems (Beredugo, Azubike & Okon, 2019). To capitalize on these innovations and economies of scale, forward-thinking accountants are increasingly leveraging cloud-based accounting technology to gain an up-to-date view of business operations, save time through automation, and improve the accuracy of accounting practices—benefits that traditional accounting methods often fail to deliver.

In response to these developments, companies in Nigeria are increasingly recognizing the business value of cloud accounting and are expected to transition to cloud-based systems. However, there is a mixed reception, with some firms embracing the innovation and others expressing concerns about security and privacy breaches, unauthorized access, high IT service costs, and weak access controls. Despite this, many companies in Nigeria continue to use traditional accounting methods, which can hinder performance due to slower data processing, increased error rates, and the potential for fraud. Given the significant role cloud computing plays in reducing costs and simplifying information retrieval, many firms have adopted automated accounting systems to enhance their efficiency and credibility in reporting across various departments. Against this backdrop, this study examines the relationship between cloud-based accounting and the financial performance of quoted banks in Rivers State.

Statement of the Problem.

The demand for efficient and effective data recording and the delivery of high-quality reports, particularly in accounting, has gained significant attention worldwide, both in developed and developing nations. Accounting information is crucial for planning, controlling, and decision-making processes. The limitations of manual accounting, such as delays, inefficiencies, and errors, spurred the development of accounting software, which eventually evolved into the use of computers for storing and retrieving information. However, the costs associated with maintaining these systems paved the way for the emergence of cloud accounting. Cloud-based technology, representing a new era in innovation, has introduced unprecedented methods for connecting accounting professionals globally. Accountants are increasingly recognizing cloud computing as a means to optimize their activities through various cloud applications. Due to the significant role cloud computing plays in reducing the cost and complexity of information retrieval, many firms have adopted automated accounting systems to improve efficiency and enhance the credibility of their reports across different departments. Cloud accounting now permeates all aspects of modern accounting, adapting to the rapid pace of technological change. This shift is fundamentally altering how industries conduct business, especially with the increase in online transactions.

Unlike traditional desktop-based accounting systems, cloud accounting allows for the storage and management of financial data from virtually anywhere. The rapid advancement of accounting principles and practices in today's business environment, driven by technology and the emergence of cloud accounting, has significantly strengthened accounting systems. In Nigeria, the adoption of cloud computing in accounting is seen as particularly important due to its cost-effectiveness and efficiency in reporting and delivering financial data. Moreover, the credibility of financial data directly influences the decision-making of creditors and other economic stakeholders regarding the risks and prospects of their investments. With the rise of cloud-based accounting, businesses are now equipped with the necessary tools to provide advanced services that are easily accessible to users and customers. This marks a significant shift in accounting practices, moving away from time-consuming, paper-based processes to IT-driven models that execute tasks more effectively and efficiently.

The integration of technology, particularly computers, into the accounting field has become a crucial component of the business cycle, significantly aiding firms in managing resources effectively. Notably, the issue of data and file loss, once a major concern for accountants, has been drastically reduced, if not entirely eliminated, by ongoing technological innovations. Cloud accounting's primary goal is to create remote clusters of servers that allow easy access to IT resources at a minimal cost. However, previous research on cloud computing has yielded mixed results. Some studies (e.g., Oyanda, 2016; Greenman, 2017; Chiang, Chen & Hsu, 2019; Xu, Liang, Jain, & Gu, 2019) view cloud computing as a way to reduce information costs and optimize time for greater productivity. In contrast, other literature (e.g., Amirul, Mail, Bakar & Ripain, 2017; Smith, 2018; Babur et al., 2019) considers it a constraint on employment opportunities and a barrier to the growth of SMEs. In light of these perspectives, this study examines the relationship between cloud-based accounting information systems and the performance of quoted banks in Rivers State.

Objectives of the Study

The broad objective of this study is to examine the relationship between cloud-based accounting information system and performance of quoted banks in Rivers State with the specific objectives as follows:

AO1: Investigate the relationship between system quality and performance of quoted banks in Rivers State.

AO2: Scrutinize the relationship between information quality and performance of quoted banks in Rivers State.

AO3 Examine the relationship between service quality and performance of quoted banks in Rivers State.

Research Questions

In line with the above aim and objectives, the study asked the following research questions;

RQ1: What is the relationship between system quality and performance of quoted banks in Rivers State.

RQ2: Information quality does not relate to performance of quoted banks in Rivers State.

RQ3 What is the relationship between service quality and performance of quoted banks in Rivers State.

Research Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance in this study:

$Ho_{1:}$ There is no significant relationship between system quality and performance of quoted banks in Rivers State.

$Ho_{2:}$ There is no significant relationship between information quality and performance of quoted banks in Rivers State.

$Ho_{3:}$ There is no significant relationship between service quality and performance of quoted banks in Rivers State.

The remainder of this study examined the literature review, methodology, results and discussion, conclusion and recommendations.

LITERATURE REVIEW

Theoretical Framework

This study is anchored on the technological acceptance theory. This is because organization especially banks rely upon the technological advancement and interactions with global business space for its data sources and safety for efficient performance. Basically, company survives meaningfully by adopting new technologies like cloud accounting and effectively interacts with its internal and external environment for sound results. Thus, the interaction with external and internal users through cloud accounting information system improves banks performance.

Technology Acceptance Theory

This research is based on the information system success model of DeLone and McLean (1992) and DeLone and McLean (2003). In this model, six variables related to the success of an information system are presented: system quality, information quality, use, user satisfaction, individual impact, and organizational impact (DeLone and McLean, 1992). DeLone and McLean (2003) revised the model by presenting the system quality, information quality, service quality, users, user satisfaction, and net benefits. According to Al-Mamary, Shamsuddin and Hamid (2018), one of the most studied dimensions of information system success is system quality because system quality shows the size of the information processing system related to how well hardware and software work together. The quality of information is a measure of the quality of the information system. Information system research focuses more on the output quality of the information system, namely, the quality of the information produced by the system, especially in the form of reports.

CONCEPT OF PERFORMANCE OF ORGANIZATION

The concept of performance is one of the most widely used terminology in the areas of business administration, and has attracted the attention of other disciplines in social sciences particularly in some areas of economics. In general, the concept of performance relates to the act that guides the completion of expected work. This is characterized as comprehensiveness and continuity. For that reason, it is considered as the determinant of a business organization's success (Hamdan, 2013). However, organizational performance is meaningful and very crucial to the organizations towards realizing the firm's objectives. This is in consideration of being the benchmark to the organization especially on whether or not the organization accomplishes its vision and mission. In order to ensure whether or not organization remains strong and competitive, the level of organizational performance can be utilized as a determining factor with the view to keep track of future success (Ahmad, 2015). Moreover, organizational performance comprises of the actual output or results of an organization as assessed against its own intended objectives. As argued by Mitchell (2002), the four main criteria to measure organizational performance includes the followings: (1) Relevance: this can be defined as the degree to which an organization's parties feel that the organization is relevant to their individual needs and requirements. (2) Efficiency: can also be defined as the degree to which an organization exploits its resources excellently and comes out with a larger value of its inputs. (3) Effectiveness: can be explained as the degree to which a company or organization is successful in achieving its goal. (4) Financial Viability: can be explained as how viable an organization was; in both the short and long term period. Daft (2009) organizational performance refers to the "degree to which an organization realized itsgoals". However, Mondy, (1990) defined it aptly as "the degree to which an organization produce the intended output" As Daft rightly argued. Organizations pursue multiple goals, and such goals must achieve in the face of competition, limited resources, and disagreement among interest groups. Oguntimehin (2001) submitted that organizational performance is the ability to produce desire results. Rational perspectives focus on the achievement of previously set goals and on output variables such as quality, productivity and efficiency. Open system perspectives focus on the exchanges with the environment; this includes information processing, profitability, flexibility and adaptability Campbell, (2010). Every employee in a company contributes to organizational performance. Essentially, organizational performance focused on organizational goal achievement, efficiency and effectiveness.

Cloud-Based Accounting Information System

The concept of cloud-based accounting information system synthesis cloud accounting with the aid of computer on online network through information technology (IT). The relationship between cloud accounting and cloud computing is that while Cloud computing is the delivery of computing services such as software, information and shared resources via computers and other devices over a network (usually the internet), Cloud accounting involves the access of accounting software and data via the internet. End users access cloud based applications through a web browser or mobile applications while the software and data are stored on remotely located servers, often provided by a third party. Cloud accounting involves access to accounting software and data through an internet browser. The software is provided on a subscription basis and the data is stored on a remote server. This differs from a traditional accounting system that involves the purchase of software and installation on either a workstation or local server. Access to the cloud accounting applications and data is controlled through user login access, as opposed to the physical location of the data files. This means that data sharing is easier and avoids the requirement to physically move data from one computer site to another. According to Pyke (2009), BuyyasiBroberg (2009), cloud computing can be defined as an abstract collection of services, accessible from any location disposing of a mobile device with internet connectivity, provided through a parallel and distributed system of virtualized computers that are interconnected, and can be dynamically supplied and presented as a computing resource, or group of resources unified, as agreed by the service provider and the user. Armbrust (2010) believes that cloud computing technology covers informatics applications provided through internet, as well as the hardware and software equipment used in data centers as for supplying these services. Chinyao Low (2011) presents cloud computing starting from the comparison with the e-mail, office software and ERP systems, and adding the ubiquitous resources shared between more users. Cloud computing features according to (Aggarwal & McCabe, 2013) include service selection based on demand, wide access to network, resource coalition, fast flexibility, agility, high s capability, and confidentiality.

Reasons for Cloud Technology

Generally speaking, cloud accounting is recommended for a lot of reasons. It helps IT managers and data center management teams to have a whole understanding of both their internal systems and servicing IT alongside managed services in the cloud. Many initiatives recognize that cloud accounting software, infrastructure and platform delivered as on-demand services can offer strategic advantages in terms of scalability and cost-effectiveness so that systems can scale energetically to put up points in demand rather than be built for usage set-ups that rarely arise.

Maintaining Focus on the Business: For establishments whose core competency in business is not the ICT, a single application for their entire data-center is often more cost-effective and more reliable. It also helps them reallocate their limited resources to grow their business.

Business Agility: The advantages of businesses with significant technology investments are evident in the way they respond to the shifts in the market or to competitive pressures. Investing in cloud accounting leaves the company with more capital, people and time making its response to negative shifts and competitive pressures more agile. Cloud accounting allows businesses to adapt to changing technologies without the cost of having an on-site data center.

Reduced Capital Expenditures: large capital investments are minimized or entirely eliminated in favor of small monthly payments to protect capital. Protection of capital can be keeping capital and operational expense at a minimum and this protection can be very important to small and medium businesses scale. Demands of cloud services by businesses that have peak periods or varied seasonal staffing allows the businesses to grow capacity temporarily to match their periodic business peaks, without buying the software, or hardware that would go to waste if they are not used when the business is slow.

Access from Anywhere: cloud accounting allows its users to do business from anywhere there is an internet connection. This is one of the benefits of cloud accounting.

Staffing Efficiency: Cloud services help sustain efficiency in staffing by allowing the outsourcing of major technology, and technology staff in order to save the business more cost

Specifically, cloud accounting stands out when compared to traditional accounting in the following ways:

The cloud-based system does not require a one-time purchase on a server for a business website, or the purchase of a program. This helps to cancel the costs of installation and the cost of paying IT professionals. As accounting techniques and tax rules change, one would not have to buy and install updates since the yearly or monthly subscription covers the cost of updating.

Real-Time Information Updating: One of the common problems with traditional accounting systems is updating accounting information. To effect a change in a figure, it must be manually recorded in each location where the figure had been inserted for instance, in ledgers, forms, and so on. Cloud accounting populates each location when new data is entered and where necessary. Cloud accounting conserves money, time, and energy.

Accessibility to All Accounting Information: The limited access to information associated with traditional accounting systems by means of restricting access to only when a professional is available at the office to review the paper-based work or information stored on the desktop has been taken away by the advent of cloud accounting. Accounting records are as close as the mobile device as long as one has internet access. For instance, a business owner who travels very often can keep up with the financial records at any place and time and consequently make the necessary decisions with his mobile device. Giving them a chance to keep up with their roles in the office without necessarily being there.

Security of Financial Information: Cloud accounting is also important because it keeps all financial information secured. Storing information on a desktop is not a good way to store the information because the system might be attacked by a virus leading to loss of all the files stored therein. Furthermore, there is a chance that someone could steal the file from the office/personal system but if all the financial records are stored via the internet, there is no loss even if the desktop and hard drive files have been hit by a virus because it is accessible through the cloud.

Team-Wide Availability: Cloud accounting is beneficial to the entire business team because accounting data is available to all authorized users at every moment. It is easily scalable. It is very easy to add new users—just by setting up an authorized profile and password. Collaboration is made better and easier. There is no need to gather in one office and take turns to review important documents. Every authorized user can access accounting data from wherever so long as there is the internet.

I**mmediate Fixes:** In the traditional accounting system, if there were any problems with the program, users were required to wait patiently for the next version for the bugs to be fixed. Among the benefits of cloud accounting, fixing software issues immediately is among the most important.

Automatic Data Back-Up and Restoration: Another area where cloud accounting comes in is automatic data backup and restoration. This helps secure the information in the event of a break-in, fire, or other incidents that could put sensitive and important information at risk.

Constraints to the Adoption of Cloud Technology

There are constraints associated with using cloud accounting. Cloud technology requires a constant internet connection which may not be possible always especially in Nigeria where the internet is yet to get to many areas. Moreover, it does not function well at low-speed. Security is another major concern for using the cloud because some confidential files might go viral as a result of a single mistake or service disruption. As cloud storage becomes more familiar, the data they hold becomes more and more of a target. When someone turns data over to the cloud, it is entrusted to a group of people who will never be met in real life. Some companies usually of large size with lots of sensitive data like banks and health care institutions would benefit from keeping their data safe restricted to the office space. Allowing working outside the company might prove risky because an insecure Wi-Fi collection allows unauthorized people to access the data. Many finance companies who operate an on-premise finance system fear to move to something as unfamiliar as the cloud with concerns bordering timing, software updates, financial data ownership and security, availability, recovery, and cloud ERP so they find it difficult to adapt to new systems.

State of Cloud Accounting in Nigeria

Low infrastructure, anxiety over the safety and security of data, and government policies are factors that slow the growth of cloud accounting in Nigeria. Despite the lots of effort, there has been a slowly dwindling reluctance to embrace this new technological nd in most of Nigeria's business circles. Ogunjobi (2015) stated that the resistance stems from their reluctance to allowing a third party to manage their technology assets. Cloud accounting technology provides the best path towards achieving efficient and sustainable online data service to the target market. Due to the cost of maintenance, there is a need to outsource these services so as to reduce capital and operational expenses. Similarly, according to Nnadozie (2013), Nigerian Airspace Management Agency (NAMA) deployed Windows Server 2012 which enables several functions and saves cost. An instance could be the collaboration between CISCO, NetApp, and Microsoft to provide robust cloud services to their users and subscribers. NetApp is used by the Central Bank of Nigeria (C.B.N.) as well as the top eight (8) banks in Nigeria. The introduction of Nigerian Uniform Bank Account Number (NUBAN) is a milestone in the Nigerian banking sector brought about by cloud computing. Iwuchukwu (2017) reported that the cost of infrastructure and software provisions are no longer borne by the individual banks alone, but are shared among banks to reduce the operational costs and thus, boost their profitability. According to Wyse, a cloud provider offers its services to Electronic Test Companies (ETC) in the conduct of examinations in Nigeria. With this development, testing will be fast and reliable; devoid of inherent fraud that characterizes the traditional paper-based examinations (Wyse, 2011). Udofia (2015) stated that another milestone in cloud technology was the MDX partnership. It was a partnership built on Microsoft Azure's enterprise-grade infrastructure which is flexible, mostly available, and fully secures the privacy of the company's accounting environment on a pay-as-you-go agreement. IT organizations and multinational data outfits are currently faced with the problem of dealing with big data concerning how these data can add value to individuals.

Forms of Cloud Accounting Services

All cloud services are provided as a service and are offered in three forms according to (Khanom, 2017) such as; SaaS, PaaS, and IaaS.

Software as a Service (SaaS). The software distribution model which delivers a special drive software to the consumer to use the provider's applications in a row on a cloud set-up through the internet is referred to as Software-as-a-Service. This is the highest form of service. It is also referred to as on-demand software and is usually valued on a pay-per-use basis. The need to install and run the application on the cloud user's computers is eliminated which simplifies maintenance and support. SaaS provides access to applications using a subscription fee. The main disadvantage of SaaS is that the users' data are stored on the cloud provider's server. **Platform as a service** (PaaS): This is also referred to as platforms-as-a-service. It is the software distribution model whereby a computing platform is provided as an on-demand service upon which applications can be established and arranged

It is a combination of software as a service (SaaS) and infrastructure as a service (IaaS) where demand developers can develop and run their software solutions on a cloud platform without the cost and complexity of buying and managing the original hardware and software layers.

Infrastructure as a service (IaaS): The software distribution model where the basic computing structure of server, software, and network gears are provided as on-demand service upon which a platform can be reputable, and completing of applications can be established is known to as Infrastructure-as-a-Service. The aims are to avoid purchasing, housing, and managing the basic hardware and software infrastructure components but instead to obtain those resources as virtualized objects controllable via a service interface.

Cloud Network as a Service (NaaS): This is a category of cloud service where the capability provided to the cloud service user is to use network or transport connectivity services and inter-cloud network connectivity services (ITU-T, 2012). NaaS involves the optimization of resource allocations by considering network and computing resources as a unified whole (Gabrielsson, 2010).

Traditional Network as a service (NaaS): This is a cloud service which includes flexible and extended Virtual Private Network (VPN), and bandwidth on demand. NaaS is a concept of materialization that includes the provision of virtual network service by the owners of the network infrastructure to a third-party, which is the Virtual Network Provider (VNP) or Virtual Network Operator (VNO) (Carapinha, 2010).

Cloud Communication as a Service (CaaS): This is an outsourced enterprise communications solution that can be leased from a single vendor: such communications can include voice over IP (VoIP or Internet Telephony), Instant Messaging (IM), collaboration and video conference applications using fixed and mobile devices. CaaS has also evolved along the same lines as Software as a Service (SaaS). The CaaS vendor is responsible for all hardware and software management and offers guaranteed Quality of Service (QoS). CaaS allows businesses to selectively deploy communications services and models on a pay-as-you-go/ as-needed basis. An approach to eliminate large capital investments and ongoing overheads for companies whose capacity may often exceed or fall short of current demands. There is no risk of the system becoming obsolete and requiring periodic major upgrades or replacement (Rouse, 2008).

Models of Cloud Technology

According to Khanom (2017), there are four types of dispersed models of cloud technology.

Private Cloud: The cloud structure that is managed and operated for one organization only so that a steady level of control over security, privacy, and governance can be kept is known to be a private cloud. It can also be referred to as the internal cloud or on premises cloud. It may be achieved by the group or a third party and may exist on evidence or off-premise.

Public Cloud: The cloud structure that is made obtainable to the public or a large industry group and is kept by an organization selling cloud services is called a public cloud. It can also be referred to as an external cloud or multitenant cloud. The cloud may be public or private – hosted for one company's use, often behind the company's firewall, if not on the organization's premises. 37% of IT strategists are either not sure or do not understand the difference between the public and private cloud while sixty-three percent of IT strategists say they understand the difference. Just 11% say they are set on using public cloud infrastructure and services built for usage scenarios that rarely arise. (SSL Consulting, 2019).

Community Cloud: This also known as special purpose cloud, which is a cloud structure managed by several related organizations participating in a common domain or vertical market is referred to as community cloud. It may be managed by the organizations or a third party and may exist on-premise or off-premise.

Hybrid Cloud: The cloud infrastructures with a composition of two or more distinct cloud infrastructures for instance; private, community or public, but are bound together by standardized technology that enables data and application portability is known as a hybrid cloud. It provides the benefits of multiple deployments.

Dimensions of Cloud-Based Accounting Information System

Indicators of the efficacy of accounting information systems include the system quality, information quality, and service quality.

System quality

The occurrence of system variety is the phenomena known as system quality. When evaluating the quality of its information technology system, the variety of the system is one of the metrics that is evaluated. According to Alkhawaja, Abd Halim, Abumandil, and Al-Adwan (2022), the quality of a system is determined by the interactions that occur between websites and users. Evaluating different types of information processing systems falls under the purview of system quality. The updating of data, the accuracy of the system, the efficiency of the system, the usage of resources, the usability of facilities and functions, the convenience of accessing the system, and the response time are all components of system quality. The quality and usefulness of an information system was what DeLone and McLean (1992) meant when they defined "system quality." It demonstrates the information system's accessibility, responsiveness, reliability, flexibility, efficiency, and convenience. Additionally, it demonstrates the information system's adaptability and efficiency (Ebru et al., 2022). At some point in the future, good system quality will provide a suitable usage situation in which individuals will be able to expertly identify the practical functions of the information system and explore the resources that the information system delivers in an effective manner. The quality of the system, in general, was demonstrated to have beneficial effects on the overall adoption and acceptance of IS (Ulhaq, Pham, Le, Pham, & Le, 2022).

Information quality

Ibrahim, Gulihana, and Susanto (2022), defined information as data that has been managed and processed to provide meaning and improve the decision-making process. This definition of information is superior to the requirements and quality of improving information. Information can be improved by managing and processing data. According to Alzahrani, Al-Samarraie, Eldenfria, Dodoo, and Alalwan (2022), there are three factors that go into the measurement of the quality of information. These dimensions include time, content, and form. The output of information systems is what determines the information's quality, which is measured by information quality. The quality of information comprises aspects such as understandability, legibility, clarity, format, usefulness, the accuracy of information, reliability, correctness, importance, and uniqueness. The level of comprehensive support provided by the service provider is what determines the interaction quality of information systems services. These kinds of support services are, almost always, either contracted out to a third party or provided by an internal information system (IS) department or an Internet service provider (Labunska, Zyma, & Sushchenko, 2022). Both responsiveness and assurance have been called out as crucial components of the interaction quality of e-technology (Hoang, Truong, & Kumar, 2022), and this has been acknowledged in the literature. Information system theory also hypothesizes that information quality has a direct impact on behavioral intention to adopt a specific IT or IS (Kim, 2022; Zhang, Wang, Wan, Zhang, & Zhao, 2022).

Service quality

The level of user control over the system, the level of user trust in the system, new hardware upgrades, hardware standardization, a positive attitude of support staff towards users, the cost-effectiveness of information systems, and the level of user training are all related factors that affect service quality (Afshari, Bakar, Luan, Samah, & Fooi, 2009). According to the definition offered by Watini, Nurhaeni, and Meria (2021), service quality can be described as "the entire assistance provided by the service provider, such as the ICT department, or a specific unit in an organization". Help desks, hotlines, and other forms of online support may be included in information technology support services; however, this is not an exhaustive list (Tamilmani, Rana, & Dwivedi, 2021). A significant amount of empirical research (Rahi, Khan, & Alghizzawi, 2021; Shen & Yahya, 2021) has found that the service quality offered by the staff of information services departments is an essential factor in the acceptability of information systems applications. Rahi et al. (2021) assessed the level of service provided by looking at various factors connected with empathy, dependability, and responsiveness. Nevertheless, the study takes into account the quality of the technical support as a primary indicator of the dimension of service quality. According to Mailizar, Burg, and Maulina (2021), the construct of service quality may be viewed as a critical component in mapping instructors' behavioral attitudes toward system adoption. As a result, the adoption system is directly impacted by factors such as adequate and effective technical support, high-quality service, and the availability of training tools (Alazab, Alhyari, Awajan, & Abdallah, 2021; Zhou et al., 2021).

System Quality and Organizational Performance

The quality of the system have a significant impact on the acceptance of the system. In addition its effect on the efficiency and effectiveness of the organizational performance in organizations. That's where the system that is ease of use and easy of learn will produce good quality of information.

Information Quality and Organizational Performance

At the organization’s level, the relationship between information quality and its impact on performance has a mixed finding, especially when relying on how to measure its benefits. In order to provide a solid stand on this phenomenon, further research is required. Nevertheless, high information quality within the context of information space can lead to greater organizational impact especially in the case of market information support and internal organization’s efficiency (Bharati & Chaudhury, 2015). Moreover, information quality in AIS is usually conceived in terms of accounting report and analysis (Al-Hiyari, AL-Mashre, & Mat, 2013; AlZwyalif, 2012) in order to be significantly related to context of management commitment. It is equally reported that it affects user performance and organizational performance simultaneously (Bukenya, 2014; Radlovački, Beker, Kamberović, Pečujlija, & Delić, 2011), while other studies consider it as the perceived usefulness and perceived ease of use indirectly (Ali & Younes, 2013). Similarly, Noori (2010) investigated the information quality on the performance of Iraqi organizations using data collected through questionnaires. Result shows the existence of significant positive relationship between information quality and organizational performance. From another end, (Kharuddin et al., 2010) examined the influence of AIS on SME performance among selected enterprises and further compared its effects on the adopters of AIS and non-adopters. When compared with non-adopters, the result shows a significant improvement in firm performance among adopters of AIS.

Service Quality and Organizational Performance

Ace Cloud (2018) claims that cloud accounting is an integrated, yet transportable accounting system that uses financial data from a server with the help of suitable accounting software over an internet connection in an electronic device. File sharing across the company network to numerous different computers, tablets, laptops, and the like is ensured by cloud accounting. Even when the accountant is not immediately available, files can still be retrieved. The degree of access that people have to your data can also be controlled, and it also enables the Cloud computing has had a significant impact on the Nigerian banking industry with the adoption of the Nigerian Uniform Bank Account Number (NUBAN). In order to lower operational expenses and increase banks' profitability, Iwuchukwu (2017) noted that infrastructure and software costs are no longer solely carried by individual banks but are instead shared by all banks. The MDX collaboration, according to Udofia (2015), was another significant development in cloud computing. The collaboration was based on Microsoft Azure's enterprise-grade infrastructure, which is adaptable, generally available, and completely ensures the privacy of the business's accounting environment on a pay-as-you-go basis.

3. Empirical Review

Some studies have been conducted in many countries on cloud-based accounting information system and performance. Some of these studies are discussed below:

Weathers et al. (2024) conducted a study investigating the utilization of ABLE (Achieving a Better Life Experience) accounts among Supplemental Security Income (SSI) recipients eligible for such accounts, aiming to identify strategies for enhancing participation rates. The ABLE Act of 2014 established tax-preferred savings programs for individuals with disabilities. Through descriptive analysis of Social Security program data, the research quantified aspects including ABLE account prevalence, participation rates among eligible SSI recipients based on demographic and socio-economic characteristics, state-level variations, and the impact of tax incentives. Findings revealed that, as of December 2021, 36,610 SSI recipients possessed ABLE accounts, with a median value of $3,222. However, participation rates were modest at 1.1 percent among SSI recipients with disabilities before age 26, with significant disparities across demographic and socio-economic groups and among states. The study concludes that evidence-based strategies are necessary to bolster ABLE account participation, highlighting the importance of targeted interventions to promote greater access to financial resources for individuals with disabilities. The study's methodology may lack depth in addressing potential confounding variables or controlling for external factors that could influence ABLE account participation rates among Supplemental Security Income (SSI) recipients.

Sahayaraj and Muthurajkumar (2023) discussed the crucial issue of preserving log data integrity in cloud-oriented applications, focusing on challenges related to confidentiality, privacy, and forensic analysis. They highlight limitations in existing models that involve third-party entities or cloud service providers (CSPs), which may compromise security. To overcome these challenges, the authors propose a novel mechanism leveraging machine learning classification techniques to classify log data efficiently and introduce innovative structures to ensure log data integrity progressively. Implemented systems demonstrate efficiency and tamper-proof characteristics, suggesting applicability in both private and public cloud deployments. The article presents a promising approach to addressing log data integrity concerns in cloud environments, offering novel solutions to enhance security and efficiency in cloud-based applications. While the study proposes innovative mechanisms to address log data integrity in cloud oriented applications, the practical applicability and scalability of these solutions in real-world scenarios warrant further validation and testing.

Akpan et al. (2023) did a study to examine how cloud accounting affects the accuracy of financial information in certain Nigerian organisations. The study utilises a cross-sectional survey research design to examine a diverse population comprising professional accountants, auditors, and information technology professionals from different domains. Based on Taro Yamane's (1967) assumptions, the authors opted for a sample size of 400 respondents. The data was collected by administering a carefully designed questionnaire, and the reliability and validity of the instrument were evaluated using Cronbach's Alpha test and content validity test, respectively. The data analysis encompassed the utilisation of descriptive statistics and Ordinary Least Square (OLS) regression. All of the study's hypotheses, which examined the impact of cloud accounting on data storage, efficiency, and mining, were confirmed, indicating substantial positive correlations. The results indicate that the use of cloud accounting methods improves the effectiveness of financial information accuracy. The study suggests that companies should allocate greater resources to automated accounting systems and offer comprehensive training programmes to accounting personnel in order to enhance efficiency in financial and other accounting functional reporting. The previous study utilised primary data sources, while the current study utilised secondary data sources.

Huang et al. (2021) titled "The Impact of Cloud-Based Accounting Information Systems on Financial Reporting Quality: Evidence from Chinese Listed Firms" examined the relationship between cloud-based accounting information systems (AIS) adoption and financial reporting quality among Chinese listed firms. The study utilized financial data analysis and regression models to assess the impact of cloud-based AIS adoption on financial reporting accuracy, timeliness, and transparency. The findings revealed that firms that adopted cloud-based AIS demonstrated higher financial reporting quality metrics, including lower error rates, faster reporting cycles, and enhanced disclosure transparency compared to firms using traditional on-premise AIS. The study concluded that cloud-based AIS adoption positively influenced financial reporting quality, highlighting the strategic importance of cloud technology for enhancing transparency and reliability in financial reporting processes. The analysis conducted by Huang et al. (2021) may lack consideration of potential confounding variables or alternative explanations that could influence the observed relationship between cloud-based accounting information systems adoption and financial reporting quality among Chinese listed firms.

Alshawabkeh, et. Al. (2022) explored the relationship between Accounting Information systems (AIS) components, namely, System availability, security and integrity, confidentiality and privacy, and system quality with firm performance in Jordan, alongside the moderating influence of cloud computing. The data were collected in 2021 using a questionnaire from 263 respondents from the firms listed on Amman Stock Exchange that use cloud computing services. The findings revealed a significant relationship between the AIS components and cloud computing with firm performance, except for the system quality. In addition, cloud computing plays a significant moderating role in the relationship between System availability, and security & integrity, with firm performance. This study suggested that the AIS components substantially influence management monitoring, which may affect the firm's effectiveness and lead to better performance. With the use of cloud computing, the firm will gain more as reliable data is always available.

Al-Okaily, Alkhwaldi, Abdulmuhsin, Alqudah, and Al-Okaily (2022) examined the factors influencing the usage of cloud-based accounting information systems (AIS) in the crisis era (i.e. the COVID-19 pandemic) by expanding the unified theory of acceptance and use of technology (UTAUT) with new related critical factors. A quantitative research approach based on a crosssectional online questionnaire was used for collecting empirical data from 438 potential and current users of cloud-based AIS. Structural equation modeling based on analysis of a moment structures 25.0 was applied in the data analysis. The outcome of the structural path revealed that performance expectancy, social motivation, COVID-19 risk (COV-19 PR) and trust (TR) were significantly influencing users' behavioral intention (BI) toward using cloud-based AIS and explained 71% of its variance. While, contrary to what is expected, the impact of effort expectancy and perceived security risk (SEC) on BI was insignificant. In addition, BI was revealed to influence the actual usage behaviors and explained 74% of its variance. The outcome factors: communication quality (CQ) and decision quality (DQ) were significantly influenced by the usage of cloud-based AIS.

Nkeiru (2021) investigated impact of cloud computing on performance of Nigerian banking industry with particular references to GT Bank Plc., Zenith Bank Plc. and Access Bank Plc. Using annual data for the period 2008-2017, the study employed the Ordinary Least Square (OLS) technique to examine the effect of private cloud, community cloud, public cloud and hybrid cloud on profit after tax of Nigerian Banking sector. The result revealed that the study shows that private cloud has a significant effect on profit after tax of Nigerian Banking sector. It was also observed that community cloud influences profit after tax of Nigerian Banking sector. The study further shows that public cloud has significant effect on profit after tax of Nigerian Banking sector. It was equally observed that hybrid cloud has significant effect on profit after tax of Nigerian Banking sector. Based on the findings, the study recommends that the unreliability of power supply in the country needs to be taken seriously and resolved as soon as possible. This is because electricity is very essential especially in the running of data centers. There should be intensified awareness creation by cloud service providers geared at sensitizing the public on the benefits and risks of cloud adoption by organizations in Nigeria. More cloud service providers are needed in the country to encourage competition which will result to the driving down of the cost of its services. This would make the technology more appealing to organizations. Cloud providers in Nigeria should be able to provide free trials of their services to their targeted organizations at a stipulated period of time to encourage them to adopt the technology.

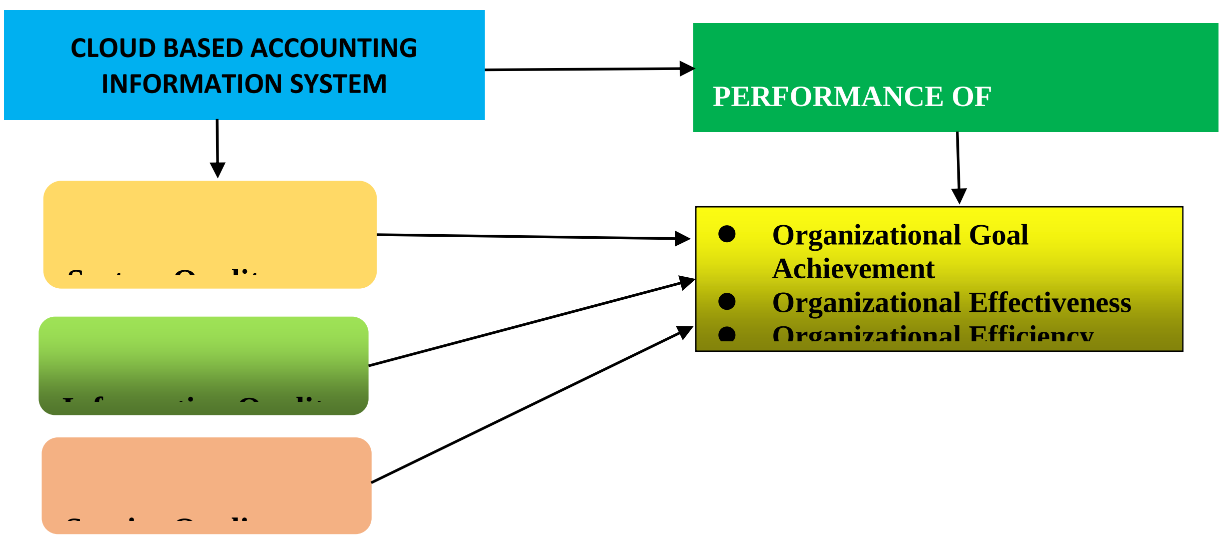
Dalkiliç, Temiz, and Özkan (2021) determined whether the quality of accounting information has an impact on firm performance and firm value. This study focus on manufacturing firms listed on the Borsa Istanbul. In this study, accounting based information quality models are used to determine the accounting information quality. Panel regression analysis is used to investigate the relationship between firm performance/value and accounting information quality. The regression analysis results showed that accrual based accounting information quality indicators has a positive effect on firm performance indicators. According to the findings, firms' reporting of real profit amounts has a positive effect on firm performance and firm value indicators.

Marsintauli, Novianti, Situmorang, and Djoniputri (2021) evaluated cloud-based accounting systems in terms of compliance with accounting standards, security systems using the Parkerian Hexad theory and the functions of each part of Accurate Online. The form of this research is qualitative and quantitative. The data collection method was carried out by distributing questionnaires and interviews to Accurate Online users. The sample of this research was obtained as many as 113 samples. The results of this study indicated that Accurate Online has passed all levels of technological readiness and is on a scale of 9 in technological readiness, which has become a trusted cloud-based accounting information system that has proven to be successful in operating the technology, as well as in providing the benefits of ease of management corporate financial transactions.

Shkurti (2021) tried to analyze the current situation of accounting and financial reporting in Albania and the impact that web reporting and cloud computing have had on the simplification of accounting procedures. Several tools such as online reporting and Extensive Business Reporting language are presented and their impact on the use of the accounting systems and other financial reporting instruments in Albania is explained. The study finds that cloud computing has been used extensively by the private companies offering accounting information systems in Albania whereas Extensive Business Reporting language and the IFRS Taxonomy have not attained great recognition in Albania.

Omotilewa et al., (2021) conducted cross-sectional research on accounting software in computerized business environment and quality of corporate reporting, and reported that accounting software had a positive significant effect on reliability and accuracy of corporate reporting with efficiency.

Ezuwore-Obodoekwe, Okoye, and Obinabo (2020) investigated the impact of cloud accounting on the performance of the Nigerian banking sector, using annual data from 2008 to 2017 and adopting the Ordinary Least Squares (OLS) technique. The study's results reveal that private cloud computing has a significant influence on the profit after tax of the Nigerian banking industry. Additionally, the community cloud has an influence on the Nigerian banking sector's revenues after taxes.



Sources: Safaa, Ezzat & Sawsan (2022); and Ahmed, (2018)

Fig. 1: Conceptual Framework on Cloud based Accounting Information System and Performance of Quoted Banks in Rivers State.

2.4: Gap in Literature.

A cursory look at the reviewed literature has shown that scholars such as Al-Okaily, Alkhwaldi, Abdulmuhsin, Alqudah, and Al-Okaily (2022) in Malysia Alshawabkeh, Kadir, Nor, and Hassan (2022) in Jordan, Dalkiliç, Temiz, and Özkan (2021) in Turky, Marsintauli, Novianti, Situmorang, and Djoniputri (2021) in Pakistan were foreign based with mixed findings. The broad international findings may not be applicable in Nigeria as research methods and results are influenced by and usually reflect economic, social or legal factors unique to those countries in which the studies took place.

Moreso, the studies in Nigeria such as Ezuwore-Obodoekwe, Okoye, and Obinabo (2020), Effiong, Udoayang, and Davies (2020) and Nkeiru (2021) focused on cloud accounting and performance of banks in with varied degree of findings and conflicting results.

Empirical studies on cloud computer-based accounting and financial performance reviewed across Nigeria, other Africa countries and the rest countries of the world above pointed out various research gaps which the current study seeks to fill. From the foregoing extant empirical review, the following gaps were clearly identified:

RG1 Some of the previous studies were internationally based whose business and environmental peculiarities are quite different from Nigeria and as such, the research findings from these countries would be foolhardy to be applied in Nigeria.

RG2 Many of the previous studies' findings were mixed, conflicting and contradictory.

A blistering look at the foregoing inconsistency is a worrisome phenomenon; hence, prompting an empirical investigation to examine the relationship between cloud-based accounting and performance of quoted banks in Rivers State.

METHODOLOGY

This study adopted this study adopted cross-sectional correlation research design. These research designs were selected because this design enabled the researcher to observe two or more variables at the point in time and was useful for describing a relationship between two or more variables. The population for this study consists of the licensed conventional banks by the Central Bank of Nigeria (CBN) that have branches in Rivers State. The sampling was done using both the purposive and simple random sampling technique. The former is used in selecting the part of the population that is considered useful for the study while the latter is used is selecting the participants from the identified sample. The corporate managers making the sample must satisfy the following characteristics. Firstly, they must have held managerial position for not less than 1 year and must belong to the quoted banks with national spread. The data for this study was collected from secondary and primary source of data collection. While the relevant secondary data will be collected from the Nigerian Exchange Group (NEG) and quoted deposit money bank's website, the primary data was sourced from the respondents through structured questionnaire.The data was be analyzed with the aid of SPSS 27.

3.8 Model Specification

Based on the conceptual framework and hypotheses stated earlier, the model for this study was specified as follows:

Functional Expression of Model:

OP =***f***(SYSQ, INFQ, SERQ)…………………………...………1

Where:

OP = Organizational Performance

SYSQ, INFQ, SERQ = System Quality, Information Quality and Service Quality

Mathematical Expression of Model:

OP $= \alpha 0 + \alpha 1SYSQ + \alpha 2INFQ + \alpha 3SERQ$……………………..……………..………2

The above equation 1 is trans-modified into econometrics form by adding constant term ($\alpha 0$) and error term (ε) in the model below:

Econometric Expression of Model:

OP $= \alpha 0 + \alpha 1SYSQ + \alpha 2INFQ + \alpha 3SERQ + \varepsilon$ …………………………………..…3

Where:

OP = Organizational Performance

SYSQ = System Quality

INFQ = Information Quality

SERQ = Service Quality

αo, $\beta 0$ = Constant

$\alpha 1 - \alpha 3$ = Regression Slope

ε = error terms

RESULTS AND DISCUSSION

This chapter presents the data collected through structured questionnaire and secondary data, analyzes of the data with the aid of Statistical Package for Social Science version 27, interpretation and discussion of the results.

Reliability Statistics

Cronbach's Alpha was used to test the reliability of the research instrument. The reliability result was 0.955 which reflected a high level of consistency. The outcome of the test is given in Table 9 below.

Table 1. Reliability Statistics Results

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.956	.946	5

Source: SPSS 27 Output of Research Data, 2023

Constructs of multi-item scale were tested by Cronbach Alpha with the aid of the Statistical Package for the Social Sciences (SPSS) version 27 to measure the reliability of the data. A Cronbach's Alpha of 0.70 and above is acceptable but he higher the Cronbach's alpha coefficient is, the greater the internal consistency of the items in the scale (Gliem and Gliem, 2003). Therefore, this study adopts 0.70 as the minimum of Cronbach's Alpha. Since all the study variables have the Cronbach's Alpha that is higher than 0.70, they are all reliable. Consequently, a Cronbach Alpha of 0.946 based on Standardized items is an indication that the research instrument's scale and the items, to a large extent, exhibit high internal consistency as shown in table above. That means, the internal consistency of the measures used in this study can be considered good for constructs.

Descriptive Statistics

Descriptive statistical analysis conducted by the study included frequency distribution, mean and standard deviation.

Table 2. Descriptive Statistics Results

	Minimum	Maximum	Mean	Std. Deviation
System Quality	1.10	4.13	2.31	1.34
Information Quality	.69	4.26	2.12	1.47
Service Quality	.69	4.23	2.13	1.47
Organizational Performance	.02	2.66	.96	.89

Source: SPSS 27 Output of Research Data, 2024

The above table indicated that the all the variables have an average of 2.31, 2.12, 2.13, 0.96 and 0.55 with a minimum of 1.10, 0.69, 0.69, 0.02 and 0.05 respectively. They also have standard deviation of 1.34, 1.47, 1.47, 0.89 and 0.50 respectively.

Correlation Analysis

Pearson Product Moment correlation analysis was conducted with the aid of Statistics Package for Social Sciences (SPSS) 27 to investigate the relationship between cloud-based accounting information system and performance of quoted banks in Rivers State. The results presented in table 3 below.

Table 3: Correlation Results on the relationship between cloud-based accounting information system and performance of quoted banks in Rivers State.

Variables		SYSQ	INFQ	SERQ	OP
SYSQ	Pearson Correlation				
	Sig. (2-tailed)				
INFQ	Pearson Correlation	.974**			
	Sig. (2-tailed)	.005			
SERQ	Pearson Correlation	.977**	.999**		
	Sig. (2-tailed)	.004	.000		
OP	Pearson Correlation	.734	.832	.752	
	Sig. (2-tailed)	.013	.002	.031	

Source: SPSS 27 Output of Research Data, 2024

The quoted banks in Rivers State performance (goal achievement, effectiveness and efficiency) revealed strong positive correlation with the overall dimensions of cloud-based accounting (SYSQ, INFQ & SERQ) as flagged by the coefficients of (0.743, 0.832 & 0.752) respectively. This suggests that bank management and their team have really appreciate value relevance of cloud accounting facilities seamlessly.

Regression Analysis

The researchers further conducted a multivariate regression analysis to determine the actual nature of the relationship between the predictor and criterion variables of the study. The findings are presented in the table 4 of this study below.

Table 4: Multivariate Regression Results

Variables	**Standardized Coefficient β**	**t-statistic**	**P-value**
SYSQ	0.932	4.155	0.005
SERQ	0.859	2.947	0.026
INFQ	0.791	1.965	0.007
	R^2 = 0.83 Adj R^2 = 0.70 F = 6.294 (0.002)		

*Significant at 5% (0.05) level of significance

Source: Authors' Desk, 2024 via SPSS 27

The result of the multivariate regression is presented in table 15 of model 1 explains the empirical statistical relationship between the dependent variable (goal achievement, effectiveness and efficiency) and the independent variables. The explanatory power $\mathbf{R^2}$ of the regression model shows that SYSQ, INFQ & SERQ revealed strong ability to predict organizational performance proxy – goal achievement, effectiveness and efficiency as accounted for about 83% of the cross sectional variations in the dependent variable of **OP**.

This implies that the remaining 17**%** variation in **OP** cannot be explained because it may be related to other variables which are not depicted in this model. The implication is that there may be number of variables which can have impacts on financial performance of listed manufacturing firms in Nigeria that needs to be studied. The Adjusted R Square (adj. R^2) is another important factor in regression analysis. Adjusted R^2 tells how well the data points fit a regression line showing the percentage of variation explained only by the independent variables that actually affect the dependent variable. A value of 0.70 in this study indicates true 70% of variation in the outcome variable is explained by the predictors in the model.The F-ratio in the ANOVA tests whether the overall regression model is a good fit for the data. The table shows that the independent variables proxies statistically and significantly predict the dependent variable, F = 6.294, p (0.002) < .05 (i.e., the regression model is a good fit of the data).The coefficients model displays positive relationship between cloud computer-based accounting and financial performance of quoted deposit money banks in Nigeria. Furthermore, the coefficient value of (0.932, 0.859 & 0.791) for SYSQ, INFQ & SERQ means that a unit change in SYSQ, INFQ & SERQ will improve OP by about0.932, 0.859 & 0.791) respectively. Their overall P-values (0.005, 0.026 & 0.007) are all found to be statistically significant since levels are less than standard alpha (0.05) level.

Hypothesis Testing Results

HO_1: There is no significant relationship between system quality and performance of quoted banks in Rivers State.

The analysis result of the effect of cloud-based accounting information system facilities on banks performance (goal achievement, effectiveness and efficiency) in table 4 shows coefficient (β = 0.932) that positively relates with OP. This means that a unit change in the system quality would improve Op by about 0.932 of the quoted banks in Rivers State. Interestingly, the p-value = 0.005 is less than 0.05% standard alpha value. Therefore, the null hypothesis was rejected and on the basis of this, the study concluded that SYSQ significantly relates to OP of quoted banks in Rivers State in the period of this study.

HO_2: Information quality does not significantly relate to performance of quoted banks in Rivers State.

The analysis result of the effect of cloud-based accounting information system facilities on banks performance (OP) in table 4 indicates coefficient of (β = 0.832) which is positively relates with OP. This implies that a unit change in the information quality would improve OP by about 0.832 of the quoted banks in Rivers State. Essentially, the p-value = 0.020 is less than 0.05% standard alpha value. Therefore, the null hypothesis was rejected and on the basis of this, the study concluded that INFQ significantly relates to OP of quoted banks in Rivers State in the period of this study.

HO_3: There is no significant relationship between service quality and performance of quoted banks in Rivers State.

The analysis result of the effect of cloud computer-based accounting facilities on organizational performance (OP) in table 4 revealed coefficient (β = 0.859) positively relates with OP suggesting that a unit change in the cloud data storage would improve Op by about 0.859 of the quoted banks in Rivers State. Also, the p-value = 0.026 is less than 0.05% standard alpha value. Therefore, the null hypothesis was rejected and on the basis of this, the study concluded that SERQ significantly relates to OP of quoted banks in Rivers State in the period of this study.

Table 5. Summary of the Findings

HO:	Null Hypotheses	Standardized Coefficients	P-Value	Relationship	Decision
Ho_1	CDM & NPM	0.932	0.005	Positive and significant	Ho Rejected
Ho_2	CDM & ROA	0.832	0.020	Positive and significant	Ho Rejected
Ho_3	CDST & NPM	0.859	0.026	Positive and significant	Ho Rejected

Source: Prepared by the Authors (2024) via SPSS 27

DISCUSSION OF FINDINGS

The study examined the effect of cloud-based accounting information system on performance of quoted banks in Rivers State. The findings of this study are discussed as follows:

System Quality and Organizational Performance

Cloud-based accounting information system significantly relates with performance of quoted banks in Rivers State in the period of this study. Cloud-based accounting information system in the dimension of system quality had a positive and significant relationship with bank performance with statistical values of ($r = 0.932$, $p = 0.005$). Based on this analysis of data and its findings, it has been proven that cloud accounting techniques will provide firms with the possibility of following up the production lines through forecasting and predictive analysis tools and their effectiveness in relation to inventory control, in addition Knowing basic information technology and statistics tools afforded by data mining may help accountants to forecast future financial situations and explain accounting events which in turn will improve organizational performance. This result agreed with the findings of Egiyi et al. (2020) and SAHA et al. (2020), whose results analysis supported the study alternative hypotheses that cloud accounting can improve financial information quality.

Information Quality and Organizational Performance

Cloud-based accounting information system significantly relates with organizational performance of quoted banks in Rivers State in the period of this study. Cloud-based accounting in the perspective of information quality had a positive and significant relationship with return on assets with statistical values of ($r = 0.832$, $p = 0.020$). In line with this analysis of data and its findings, it has been proven that the quoted banks in Rivers State would immensely benefits from the cloud accounting information system as it will provide firms with seamless operation with accuracy and reliability in real time. This findings supports the finding by Omotilewa et al., (2021) conducted cross-sectional research on accounting software in computerized business environment and quality of corporate reporting, and reported that accounting software had a positive significant effect on reliability and accuracy of corporate reporting with efficiency.

Service Quality and Organizational Performance

Cloud-based accounting information system significantly relates with organizational performance of quoted banks in Rivers State in the period of this study. Cloud-based accounting in the perspective of information quality had a positive and significant relationship with return on assets with statistical values of of ($r = 0.859$, $p = 0.026$). From the results and the findings of this study Cloud accounting positively influences organization performance as it makes it practically ease to carryout operations even remotely from the comfort of the stakeholders' home. It became clear through the above analysis that cloud accounting variable had obtained high and above average values, because cloud accounting contributed significantly to influencing the dependent variable by relying on data storage in presenting financial information. This result agreed with Sumini et al., (2021) who conducted a study on Cloud Accounting in Indonesia. The results of the study showed that 90% of the respondents agree that financial accounting information quality system has evolved to more digitalized accounting system in Industry. It was also found through the study that allowing the cloud to store accounting data in a quick and sufficient manner had a role in maximizing the efficiency of accounting operations through cloud accounting.

CONCLUSION

The study examines the relationship between cloud-based accounting information system and performance of quoted banks in Rivers State. The study analyzed cloud-based accounting information system in the dimension of system quality, information quality and service quality while performance was analyzed in the perspectives of goal achievement, effectiveness and efficiency. This study adopted cross-sectional correlation research design. These research designs were selected because This design enabled the researcher to observe two or more variables at the point in time and was useful for describing a relationship between two or more variables . The population of this study was quoted banks on Nigeria Stock Exchange with branches in Rivers State. Pearson Product Moment Correlation Coefficient and multivariate regression were statistical tools used to analyzed the relevant data with the aid of SPSS version 27.

Based on the results from the tested formulated hypotheses, we concluded that:

i. System quality significantly relates with performance of quoted banks in Rivers State in the period of this study.
ii. Information quality significantly relates with performance of quoted banks in Rivers State in the period of this study.
iii. Service quality significantly relates with performance of quoted banks in Rivers State in the period of this study.

RECOMMENDATIONS

Based on the research findings, the study thus recommended the Nigerian banks must develop strategies to invest adequately in different cloud-based accounting information system (system quality, information quality and service quality) for sustaining competitive advantage in this current knowledge economy in order to achieve robust performance.

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