# CLOUD-BASED ACCOUNTING INFORMATION SYSTEMS AND FINANCIAL INFORMATION QUALITY: A REVIEW OF LITERATURE

# AKINBODE, FEYISAYO AANUOLUWAPO1

Olabisi Onabanjo University, Ago-Iwoye, Nigeria. akin.feyi71@gmail.com

# OKEWALE, JOEL ADENIYI<sup>2</sup>

Olabisi Onabanjo University, Ago-Iwoye, Nigeria. jade.okewale@oouagoiwoye.com

# BILEWU, OLUKAYODE ABIODUN<sup>3</sup>

Olabisi Onabanjo University, Ago-Iwoye, Nigeria. kayusb@yahoo.com

# OMOBA, OPEYEMI OMOTOLA4

Olabisi Onabanjo University, Ago-Iwoye, Nigeria. omobaopeyemi175@gmail.com

#### Abstract

Accounting has become more user-friendly and convenient due to the steady transition from manual procedures to computerised alternatives. The practice of accounting has changed in the modern world as a result of technological advancements and ongoing development. Recent years have seen the development of new and more intelligent accounting techniques, cloud accounting being one of the most recent. This study examines Nigerian firm's financial information quality and the development of cloud-based accounting information systems; computerised accounting system, accounting software, cloud accounting and data storage,

<sup>&</sup>lt;sup>1</sup> Department of Accounting, Olabisi Onabanjo University, Ago-Iwoye, Nigeria. akin.feyi71@gmail.com 08168120093, 08070777433

<sup>&</sup>lt;sup>2</sup> Department of Accounting, Olabisi Onabanjo University, Ago-Iwoye, Nigeria. jade.okewale@oouagoiwoye.com 08158593590

<sup>&</sup>lt;sup>3</sup> Department of Accounting, Olabisi Onabanjo University, Ago-Iwoye, Nigeria. kayusb@yahoo.com 08031812243

<sup>&</sup>lt;sup>4</sup> Department of Accounting, Olabisi Onabanjo University, Ago-Iwoye, Nigeria. omobaopeyemi175@gmail.com 08051124055

cloud accounting and data efficiency, cloud accounting and data minning. The study's findings indicated that cloud accounting greatly lessens the difficulties that accountants may encounter and encourages them to work more effectively, wisely, and conveniently. The study recommends that government should establish top-notch data centres, lower the price of data and accessories to encourage more businesses to adopt the new technology and to improve efficiency in financial and other accounting functional reporting, that organisations may be encouraged to increase their investments in automated accounting and provide their accounts personnel with effective training.

**Keywords**: Cloud-based accounting, financial information quality, data storage, data efficiency and data minning.

**JEL Classification**: M41, C88

#### 1. INTRODUCTION

The field of accounting has undergone significant transformation due to advancements in technology, particularly with the development of accounting software. Among these innovations is cloud accounting, a system that leverages cloud computing technology to perform accounting functions over the internet. Cloud accounting allows users to access financial data and software applications remotely from any device with an internet connection. This flexibility has reshaped how businesses manage their financial operations, offering real-time access to financial information and improved work-life integration for accounting professionals. Unlike traditional accounting systems that require on-premise installation and maintenance, cloud accounting operates entirely off-site. Financial data is sent to the cloud, processed, and returned to users, eliminating the need for extensive IT infrastructure and reducing operational costs. Businesses can collaborate with accountants more efficiently, accessing up-to-date financial data anytime, anywhere.

Despite its potential, the shift from traditional accounting systems to cloud-based solutions is gradual, influenced by factors such as data security concerns, system reliability, and the cost of implementation. As cloud technology continues to evolve, understanding its adoption dynamics becomes essential for businesses aiming to enhance their financial management practices and remain competitive in today's digital economy.

# 2. STATEMENT OF PROBLEM

The field of accounting has experienced remarkable advancements with the advent of modern technology, particularly through the introduction of cloud accounting. Cloud accounting leverages cloud computing technology to perform accounting functions over the internet, enabling access to financial data anytime, anywhere, from any internet-enabled device. This technological innovation has revolutionized traditional accounting by reducing reliance on on-premise software and minimizing IT maintenance costs. Despite its potential, the adoption of cloud accounting remains uneven, particularly among small and medium-sized enterprises (SMEs). While cloud accounting promises enhanced accessibility, real-time data

processing, and improved work-life balance for accountants, concerns about data security, privacy, and system reliability persist. Additionally, many businesses face challenges related to the initial cost of implementation, internet connectivity issues, and a lack of technical expertise.

Given these considerations, understanding the factors influencing the adoption of cloud accounting is crucial. Research is needed to explore how businesses can overcome implementation barriers while maximizing its potential benefits. Addressing these issues will provide valuable insights into how cloud accounting can be effectively integrated into business operations, ensuring greater efficiency, productivity, and financial management.

# 3. CONCEPTUAL REVIEW

## 3.1. CLOUD-BASED ACCOUNTING INFORMATION SYSTEMS

They are digital platforms that businesses, notably information and communication technology (ICT) companies, use to expedite accounting and financial procedures through cloud computing infrastructure, claim Oyewobi & Adeyemi (2024) (Weathers et al., 2024). These systems store, process, and analyse financial data without the need for on-premise installations by utilising distant servers, sophisticated software, and internet access. Cloud-based AIS offers scalability, allowing organisations to modify resources according to needs and lowering infrastructure costs. Features like general ledger management, accounts receivable and payable, financial reporting, and budgeting are accessible through web browsers or mobile apps (Karanikola et al., 2023). In addition to incorporating cutting-edge security measures like encryption and access controls to safeguard sensitive data and guarantee compliance, they provide real-time access and collaboration, which boosts productivity. Cloud-based AIS is a contemporary and affordable solution that enhances the quality of financial reporting in Nigeria's everchanging ICT sector. Instead of using the actual location of the information records, client login credentials are used to limit access to cloud accounting apps and data (Daniel, 2024).

# 3.2. FINANCIAL INFORMATION QUALITY

Financial reporting quality refers to how accurately and truthfully a financial statement tells us about the state and performance of an organization's finances. Therefore, as would be expected, a financial statement must provide precise information about the company's activities, cash flow creation, and financial status in order to be considered to have high quality features.

The benefits and significance of high-quality financial reporting have been affirmed by numerous accounting and financial scholars (Chan-Jane and Chae-Jung, 2015; Jaballah et al., 2014), but they have also cautioned that subpar financial reporting could negatively impact financial decisions and business performance. Put another way, the calibre of financial reporting may have an impact on managers' readiness to engage in inefficient practices. For example, the quality of the financial reporting may enable better contracts to prevent investment efficiency. It might also

enhance investors' ability to make decisions. Therefore, it is expected that highquality financial reporting will lead to less inefficient and needless investments.

For financial reports to be of good quality and fulfil their intended purpose, they must meet specific qualitative requirements. In their conceptual frameworks, the IASB and FASB boards agree that following the objective and qualitative requirements of financial reporting information results in good quality. Depending on how they impact the information's usability, the qualitative features—which are what give financial data its utility—are classified as either fundamental or enhancing. Two fundamental qualitative attributes are accuracy and relevance: To create high-quality financial statements, these qualities are coupled with additional qualifying traits as timeliness, comparability, verifiability, and understandability. For the financial report's data to be helpful in making decisions, it must also be trustworthy. When there are no glaring biases or omissions, the information can be independently verified, and it accurately portrays the topic, it is considered dependable. The faithful representation concept states that all economic events should be truthfully and accurately reflected in financial accounts.

# 3.3. COMPUTERISED ACCOUNTING SYSTEM

A computerised accounting system is an accounting information system that generates reports according to user specifications by processing financial events and transactions in accordance with generally accepted accounting principles (GAAP). Both computerised and manual accounting systems have two components. It must first operate according to a set of precise ideas known as accounting principles. Another is that a user-defined framework for record-keeping and report generating exists. The framework for data processing and storage in a computerised accounting system is known as the operational environment, and it is made up of both software and hardware. The operational environment is determined by the type of accounting system being utilised. Software and hardware depend on one another. The hardware structure is determined by the type of software. Furthermore, a number of variables, like the number of users, the degree of secrecy, and the kind of operations carried out by the many departments that make up an organisation, influence the choice of hardware. Computerised accounting systems are commonly employed by many organisations to manage their business operations. In recent years, the use of computerised accounting systems has led to great growth in service businesses, such as the banking sector. Users of computerised accounting systems have benefited from the availability and use of the internet since it creates a virtual environment that allows accounting processes to be carried out remotely or even internationally (Osmond, 2017).

# 3.4. ACCOUNTING SOFTWARE

Accounts Payable, Accounts Receivable, Journal, Payroll, and other functional modules are examples of application software that records and processes accounting transactions. These tools are used by bookkeeping teams and professional accountants to automate routine tasks and manage accounts. Like ERP, payroll, and invoicing software, it serves as an accounting information system. Accounting

software helps with accounting, cost reduction, transparency, precise forecasting, productivity, tax compliance, and more. SAGE, Peachtree, QuickBooks, Wave Accounting, and others are examples of accounting software (Sekyere et al, 2017).

Accounting information systems are hardware and software combinations designed to collect and process transaction data in order to produce accounting information. The production of timely, high-quality accounting information and its delivery to decision makers in the appropriate format depend heavily on the accounting software component of computerised accounting information systems. Software packages based on accounting principles, procedures, and business logic are essential to computerised accounting information systems because they allow the systems to perform accounting tasks automatically. The accounting system's software component facilitates smooth processing and is equipped with the ability to quickly and accurately reconcile ledgers and accounts, record transactions, update accounts, and validate data without the need for human participation. The fact that internal controls, automated data processing, relational databases, and automated reporting are all incorporated into the framework of the accounting software framework in a logically organised manner to improve the system's performance and dependability highlights the crucial nature of accounting software and its significance.

# 3.5. CLOUD ACCOUNTING AND DATA STORAGE

According to Ace Cloud (2018), cloud accounting is a portable, integrated accounting solution that leverages financial data from a server via an electronic device's internet connection and appropriate accounting software. Because they require a great deal of manual data entry, traditional accounting systems cannot keep up with the needs of modern accounting; in contrast, cloud-based accounting drastically cuts down on the time that accountants must spend on these tasks (Akpan et al, 2023). Cloud accounting makes it possible to share files over the company network to a large number of PCs, tablets, laptops, and similar devices. Files can be recovered even if the accountant is not available right away. Government regulations, worries about data security, and a lack of infrastructure all impede the growth of cloud accounting in Nigeria. It also makes it possible to regulate the extent of access that individuals have to your data. Despite a lot of work, most Nigerian corporate circles are gradually becoming less resistant to embracing this new technology trend. Their reluctance to allow a third party to handle their technology assets is the source of the opposition, claims Ogunjobi (2015). Since the Nigerian Uniform Bank Account Number (NUBAN) was adopted, cloud computing has had a major impact on the country's financial sector.

According to Iwuchukwu (2017), infrastructure and software costs are now shared by all banks rather than being borne exclusively by individual banks, which reduces operating costs and boosts bank profitability. Udofia (2015) claims that the MDX partnership was yet another important advancement in cloud computing. The partnership was founded on Microsoft Azure's enterprise-grade infrastructure, which is pay-as-you-go, flexible, and fully secures the privacy of the company's accounting environment.

IT companies and global data organisations are actively tackling the problem of managing big data in terms of how this data could be useful to people. Therefore, it seems sense to say that the cloud has opened up a wide range of prospects for both individuals and businesses. By storing their data on the cloud, businesses can benefit from secure data storage. It is impossible to overestimate the significance of backing up important documents to a different hard disc. Your papers will remain securely kept in the cloud even if a natural disaster, such as a fire, limits your ability to access your physical location. The capabilities of cloud architecture have greatly expanded in recent years. This power is demonstrated by the cloud's ability to be used reliably and safely.

# 3.6. CLOUD ACCOUNTING AND DATA EFFICIENCY

Rao et al. (2017) state that the process of improving data efficiency involves making data simple to use, manage, and access. However, configuration and setup are the main considerations when it comes to arranging data in a way that makes it easier to find and access. While transferring older archive information to slower, less expensive alternatives, data efficiency aims to make the most frequently accessible data easier to retrieve by keeping it on costly, high-power storage systems. By doing this, network users can acquire important information faster without straining the company's budget or resources.

Traditional accounting systems often struggle with updating accounting data. If a figure needs to be altered, it must be manually put into all the forms, ledgers, and other places the figure was used. Every location is updated by cloud accounting whenever new data is entered. Cloud accounting saves energy, money, and time. Users would not need to buy and install updates as accounting methods and tax rules change because the expense of updating is covered by the annual or monthly subscription. Investor trust will increase as a result of this approach, which will raise the calibre of financial data in the financial statement.

Cloud accounting technology is the best option to provide the target market with a dependable and durable online data solution. In order to reduce operating and capital expenses, these services must be outsourced due to the high cost of upkeep. In a similar vein, it has been stated that the Nigerian Airspace Management Agency (NAMA) implemented Windows Server 2012, which facilitated several features and decreased expenses. The collaboration of Cisco, NetApp, and Microsoft to provide dependable cloud services to its clients and users is a prime example. NetApp is used by the top eight (8) banks in Nigeria as well as the Central Bank of Nigeria (CBN).

#### 3.7. CLOUD ACCOUNTING AND DATA MINING

In order to create predictions about the future, data mining is a technique that entails identifying patterns, correlations, and anomalies within the enormous amount of data sets (Gandy, 2019). Ping (2021) claims that identifying important patterns in sizable databases is a necessary step in the mining or knowledge extraction process from massive amounts of data. Similarly, but in the context of computer science, Meiryani et al. (2021) define data mining as a semi-automatic or automatic technical process that involves analysing large amounts of scattered data

to transform it into knowledge and make sense of it by finding intriguing and helpful relationships and patterns.

Data mining can help improve the quality of financial information in several ways. Wu (2021) provides an example of how data mining techniques can be used to acquire financial statement data. The necessity for data mining to enhance the quality of financial information has increased due to the rise in digital data collecting, which increased the volume of data stored in databases, data warehouses, and other data repositories (Wang, 2021).

Since data mining technologies can help ameliorate both information-rich and information-poor scenarios, they can be used to extract critical information that may be hidden in the vast amount of data. These figures could be useful in raising the standard of financial data (Akpan et al., (2023). In a separate study, Min (2021) claimed that businesses' need for precise financial data is what led to the growth of accounting-relevant data. Data analysis for accounting reasons has consequently grown increasingly challenging. It is preferable to employ specialised data mining tools for this purpose, even while simple tools like reporting, queries, spreadsheets, and database systems can be used for basic data analysis. Understanding the foundations of information technology and the statistical tools made possible by data mining can help accountants explain accounting occurrences and forecast future financial issues.

# 4. THEORETICAL REVIEW

#### 4.1. AGENCY THEORY

The study's foundation is agency theory, which Jensen and Meckling (1976) developed. The theory of agency provides recommendations for enhancing principals' and agents' information management efficacy. The principle gives up some of his decision-making power when he designates the agent to perform a task on his behalf. There are three main categories of presumptions that undermine agency theory. Every participant behaves selfishly, is risk averse, and has bounded rationality. Their distinct risk functions have different objectives and attitudes, even when both parties seem to be acting cooperatively. In a simple agency model, the agent is less risk adverse than the principal. In addition, the agent is solely focused on short-term financial gain, while the principle considers long-term economic performance.

The unequal dissemination of knowledge can lead to conflicts of interest. Since the agent usually has more knowledge about the principal's actions and intentions than the principal does, the principal cannot fully verify the agent's skills and abilities while hiring them or while they are employed by the principal. Expenses related to possible conflicts of interest are known as agency charges. Information is a commodity that may be purchased. This implies that the principal might theoretically invest in official information systems to monitor the agent's behaviour. By investing in information systems that display the agent's behaviour, the principal can choose to enter into a contract based on behaviour or consequence. One could argue that in the absence of monitoring measures, the principal has greater faith in

the agent. In the context of the cloud, trust is defined as knowledge about a provider's security that is gathered via gathering data about a system.

Numerous fields, including marketing, banking, insurance, social work, public health, agriculture, and communication, have successfully used this principle. Most CPAs in the accounting industry are aware of the many benefits of doing accounting work in the cloud. Because of the cloud's purported benefits, users of cloud accounting software are initially encouraged to move from their conventional approach of handling accounting activities to the cloud. Accounting agents believe that using cloud accounting can improve the output quality of the information generated throughout the accounting process since their customers may be more completely integrated into the process and will also help to reduce the problem of information asymmetry.

# 4.2. THE TECHNOLOGY ACCEPTANCE MODEL (TAM)

Fred Davis developed the Technology Acceptance Model (TAM) in 1989 as a theoretical framework to explain and forecast people's acceptance and adoption of new information technologies. According to the idea, perceived usefulness (PU) and perceived ease of use (PEOU) are the two main characteristics that influence customers' intentions to utilise a technology. Perceived ease of use is the idea that using a technology requires minimal effort, whereas perceived usefulness is the idea that adopting a technology will boost performance. According to TAM, people are more likely to embrace a technology if they believe it to be practical and userfriendly, and adoption is also influenced by outside factors including facilitating circumstances and subjective standards. As a theoretical framework to explain and predict people's acceptance and adoption of new information technologies, Fred Davis created the Technology Acceptance Model (TAM) in 1989. The concept states that customers' intentions to utilise a technology are primarily influenced by two factors: perceived usefulness (PU) and perceived ease of use (PEOU). Perceived usefulness is the belief that implementing a technology would improve performance, whereas perceived ease of use is the belief that employing a technology involves little effort. People are more likely to adopt a technology if they think it is useful and easy to use, according to TAM. Adoption is also impacted by external variables including favourable conditions and subjective criteria.

#### 4.3. THE INSTITUTIONAL THEORY

A sociological paradigm known as "Institutional Theory," which was created by Meyer and Rowan in 1977, examines how institutions—such as governing bodies, customs, and cultural values—affect organisational behaviour and decision-making. It asserts that organisations are influenced by outside forces to follow accepted customs, laws, and procedures in their surroundings. These pressures fall into three categories: mimetic, normative, and coercive. While normative pressures originate from societal norms and ideals within a society or business, coercive pressures are derived from formal regulations and laws implemented by governmental organisations.

Mimetic pressures arise when organisations react to uncertainty by copying industry leaders or successful peers. Regarding this study, Institutional Theory sheds light on the variables affecting Nigerian ICT companies' adoption of cloud-based Accounting Information Systems (AIS) and financial reporting procedures. It implies that in reaction to institutional constraints from regulatory agencies, industry standards, and cultural values, these companies may use cloud-based AIS and financial reporting procedures. To achieve legitimacy and compliance, for example, cloud-based AIS may be used in response to industry norms that promote transparency or regulatory regulations. The adoption decisions of ICT enterprises may also be influenced by normative pressures from stakeholders, which may mould ideas of appropriate financial reporting procedures.

# 4.4. THE RESOURCE-BASED VIEW (RBV) THEORY

Wernerfelt created the Resource-Based View (RBV) Theory in 1984. It is a paradigm for strategic management that emphasises the importance of firm-specific capabilities and resources in attaining superior performance and competitive advantage. According to RBV, a company's competitive advantage stems from its special combination of resources and competencies that are valuable, uncommon, hard to replicate, and non-substitutable (VRIN). Resources are the company's owned or controlled material and immaterial assets, while capabilities are the company's capacity to use these resources efficiently in order to accomplish strategic objectives. Businesses are urged to concentrate on building and utilising internal resources and competencies in order to produce long-lasting advantages that are difficult for rivals to imitate. Additionally, RBV emphasises the value of dynamic capabilities, which allow businesses to innovate and adjust to changing market conditions.

Regarding this study, RBV provides information about the internal factors influencing Nigerian ICT enterprises' adoption of cloud-based Accounting Information Systems (AIS) and financial reporting procedures. It implies that a company's distinct set of resources and competencies, such as organisational culture, human capital, and technology infrastructure, affects its adoption of cloud-based AIS. Businesses with greater resources and skills are better able to use cloud technologies to improve the quality of financial reporting and obtain a competitive edge. Furthermore, RBV highlights the importance of dynamic capabilities in promoting the effective adoption and deployment of cloud-based AIS, highlighting businesses' capacity for innovation and adaptation in the face of shifting market conditions and technical advancements.

The RBV indicates that companies with superior technological infrastructure, a highly skilled workforce, and organisational capabilities are more likely to successfully integrate cloud technologies into their accounting systems and use them to enhance the quality of financial reporting in Nigeria's ICT sector, where businesses operate in a highly competitive and quickly changing environment. This study intends to identify the ways in which ICT companies in Nigeria can improve the quality of their financial reporting and achieve a leading position in the market by concentrating on the firm-specific resources and competencies that facilitate successful cloud-based AIS implementation. Therefore, the RBV acts as a theoretical

underpinning that guides the investigation of the connection between the adoption of cloud-based AIS and the calibre of financial reporting in the Nigerian ICT sector.

#### 4.5. SYSTEM THEORY

According to system theory, organisations should be viewed as an open framework that converts inputs into outputs within the internal and external environments on which they depend (Miller and Rice 1967). The info process yield outcome model of monitoring execution is based on system theory and assesses not just the yields but also the total commitment that a person makes inside the framework to completing their assigned tasks. The knowledge and abilities that a person contributes to a profession are contained in data sources. Information and skills are estimated to assess worker needs for improvement and adaptation. Because the organisation depends on the globe for both data sources and yield recognition, this theory will be used in this task. As a result, they ought to develop means of accommodating natural demands. In essence, a business cannot thrive without interacting with both its internal and external environments, particularly when using new technologies like cloud accounting.

# 4.6. INNOVATION DIFFUSION THEORY

Rogers created the Diffusion Theory in 1962. It is among the earliest theories in social science. It was first used in communication to describe how an idea or product gathers traction over time and diffuses (or spreads) within a particular demographic or social structure. Researchers Ghosal & Bartlett (1988) and Strang & Soule (1998) also backed it. A theory called the assumptions of diffusion of innovations aims to explain how, why, and how quickly new concepts and technologies proliferate. The notion was made popular by communication studies professor Everett Rogers in his 1962 book Diffusion of Innovations, which is currently in its fifth edition (2003). Rogers (1983) listed the following as the essential components of diffusion research:

Innovation: Considering what the analysed unit currently knows, innovation is a broad category. An innovation that can be studied could be any concept, method, or item that a person or other adoption unit views as novel (Rogers, 1983).

Adopters: The smallest analytical unit is an adopter. Although adopters are typically individuals, they can also be organisations (such as hospitals, schools, or enterprises), social network clusters, or nations (Meyer, 2004).

Communication channels: Diffusion occurs between individuals or groups by definition. Information can go from one unit to another through communication channels (Rogers, 1983). Diffusion requires, at the very least, that parties establish communication patterns or capabilities (Ghosal & Bartlett, 1988).

Time: Innovations are rarely adopted immediately; rather, they require time to be embraced. According to the Ryan and Gross (1943) study on the adoption of hybrid maize, adoption took place over a period of more than ten years, and in the initial years following adoption, the majority of farmers only planted a small portion of their fields to the new maize (Rogers, 1983).

Social system: According to Strang and Soule (1998), the social system is made up of both internal (strong and weak social interactions, distance from opinion leaders) and external (surfactants, mass media, organisational or governmental mandates) impacts. According to Rogers (1983), a social system's multiple roles add up to its overall impact on a prospective adopter.

Diffusion is the process by which an innovation spreads over time among the constituents of a social system via specific routes, according to Rogers (2003).

Every individual in the social system must make their own innovative decisions using a five-step process because decisions are neither collective nor authoritative.

- 1. Knowledge: An individual learns about an innovation and has a basic understanding of how it works.
- 2. Persuasion: One develops a positive or negative attitude towards the invention.
- 3. Decision: A person's actions result in a decision regarding whether to accept or reject the innovation.
- 4. Implementation: The act of putting an innovation into practice.
- 5. Confirmation: An individual assesses the outcomes of an innovative decision that has previously been made. The most notable aspect of diffusion theory is that the majority of people in a social system base their innovation-decisions largely on those of the other people in the system.

According to Rogers (2003), there is a period of time after around 10–25% of system members accept an innovation before the remainder members adopt it rather quickly. There is still a chance of failure diffusion, though, Diffusion failure does not imply that no one used the technology. Instead, unsuccessful diffusion is frequently used to describe diffusion that falls short of or fails to reach 100% acceptance because of flaws in the diffusion itself, competition from other innovations, or just a lack of awareness. According to Rogers, a new idea's ability to spread is influenced by four key factors: the innovation itself, communication channels, time, and a social system. Human capital is crucial to this process. To be self-sustaining, the innovation needs to be universally embraced. An innovation hits critical mass at a certain point in the adoption rate. Innovators, early adopters, early majority, late majority, and laggards are the different types of adopters, according to Rogers (2003). Nigeria, being the largest country in Africa, can be considered a laggard in the field of e-taxation as it was introduced in 1986 and failed to adopt the invention before other African nations. This theory is pertinent to this study since business owners are taking into account the several factors that affect the propagation of a new idea, particularly when it comes to Nigeria.

# 5. EMPIRICAL REVIEW

Cloud accounting has emerged as a transformative tool for enhancing financial performance and reporting quality in various industries. This empirical review synthesizes findings from recent studies that examine its impact across different sectors in Nigeria.

Daniel (2024) explored the effect of cloud accounting on the financial performance of listed deposit money banks (DMBs) in Nigeria. Utilizing an ex-post facto research design, the study relied on secondary data from the annual reports of 15 out of 19 listed DMBs, covering the financial years 2013 to 2022. Through judgmental sampling, the study focused on banks with relevant data. Findings indicated that computerized accounting systems and accounting software significantly influenced the return on assets (ROA). The study concluded that cloud accounting positively affects financial performance by enhancing operational efficiency, data accuracy, and timely reporting.

Similarly, Owolabi, Oyegoke, and Olalere (2023) investigated the relationship between cloud accounting adoption and financial reporting quality among DMBs. The study sampled 10 out of 14 listed banks over a decade using a purposive sampling technique. Findings confirmed that cloud accounting adoption enhances financial reporting quality by ensuring real-time data processing, reducing human error, and facilitating compliance with regulatory standards. The authors recommended that banks intensify efforts to adopt cloud technologies to sustain and improve financial reporting accuracy.

Weathers et al. (2024) examined the use of ABLE (Achieving a Better Life Experience) accounts among Supplemental Security Income (SSI) recipients, focusing on strategies to improve participation. Established under the ABLE Act of 2014, these tax-preferred savings accounts are designed for individuals with disabilities. By analyzing Social Security program data, the study assessed ABLE account prevalence, participation rates, demographic and socio-economic disparities, state-level differences, and the impact of tax incentives. Findings indicated that, as of December 2021, 36,610 SSI recipients held ABLE accounts, with a median balance of \$3,222. Despite this, participation rates were low, at only 1.1% among SSI recipients with disabilities onset before age 26. Significant disparities were identified across demographic and socio-economic groups and between states. The authors emphasized the need for evidence-based strategies to increase ABLE account usage and improve financial access for individuals with disabilities. However, the study's methodology may have limitations in accounting for external factors affecting participation rates.

Sahayaraj and Muthurajkumar (2023) explored log data integrity in cloud-based applications, addressing issues related to confidentiality, privacy, and forensic analysis. They critiqued existing models that depend on third-party entities or cloud service providers (CSPs), highlighting potential security vulnerabilities. To address these challenges, the researchers proposed an innovative mechanism utilizing machine learning classification techniques for efficient log data processing and novel structures to ensure progressive integrity. The proposed system demonstrated tamper-proof characteristics and high efficiency, showing promise for both private and public cloud deployments. This approach offers significant advancements in addressing log data security in cloud environments. However, the study notes that the scalability and practicality of these solutions in real-world applications require further testing and validation.

Obasan and Kuola (2022) examined cloud-based accounting in Nigeria's manufacturing sector, focusing on Twinstar Industries Ltd., Ogun State. The study aimed to evaluate the impact of cloud accounting on firm policies and operational performance. A survey involving 261 staff members achieved an 87.7% response rate. Using Analysis of Variance (ANOVA), the findings highlighted that cloud-based accounting significantly influences policy formulation and operational efficiency. Immediate access to financial data enables management to respond swiftly to market changes and optimize operational processes.

Oyewobi and Adeyemi (2024) explored the intersection of cloud-based Accounting Information Systems (AIS) and financial reporting quality within Nigeria's Information and Communication Technology (ICT) sector. The study involved eight listed ICT firms on the Nigerian Exchange Group, examining the 2013-2022 financial period. Using a panel regression technique, the study found that cloud-based AIS adoption significantly improved financial reporting quality. Notably, cloud security investment was identified as a key determinant of reporting quality, while cloud expenditure growth showed no statistically significant effect. The authors suggested strategic allocation of resources toward security and system optimization to maximize the benefits of cloud-based AIS.

Akpan, Igbekoyi, Ogungbade, and Osaloni (2023) investigated how cloud accounting affects financial information quality among selected firms in Nigeria. Using a cross-sectional survey design, the study targeted a diverse group of professional accountants, auditors, and IT experts across various industries. A sample size of 400 respondents from Lagos State was determined using Taro Yamane's sampling formula. Data collection involved a well-structured questionnaire, with reliability tested through Cronbach's Alpha and content validity assessments. Findings based on Ordinary Least Squares (OLS) regression analysis indicated that cloud accounting techniques significantly enhance financial information quality by promoting transparency, data accuracy, and decision-making efficiency.

Yahaya et al. (2022) investigated the impact of cloud-based computing on the performance of deposit money banks in Kogi State, Nigeria. The study aimed to assess how cloud-based computing influences bank performance, focusing on relationships between top management support and perceived usefulness, organizational competency and perceived ease of use, intention to use, and service quality. The research targeted a population of 1,318 employees across four banks, using the Godden sample size formula to select 259 respondents. Of these, 226 completed the structured questionnaires, yielding an 87% response rate. Reliability was established through a pilot study using the test-retest method and Cronbach's alpha. Data were analyzed on a five-point Likert scale, and hypotheses were tested with simple linear regression. Findings revealed significant positive relationships between cloud-based computing variables and bank performance. The study recommended periodic reviews of cloud-based strategies to enhance competitive edge and align services with global best practices.

Similarly, Okere (2022) examined the effect of cloud accounting on the performance of publicly listed manufacturing firms in Nigeria, employing both primary and secondary data. A survey research design and ex-post facto approach were adopted. Primary data were gathered through surveys, while secondary data were used to achieve specific objectives. Ordinary least squares regression was applied to test the hypotheses. The study evaluated a random sample of 10 manufacturing firms and found that cloud accounting and its associated costs significantly influenced firm performance. Recommendations included implementing initiatives to reduce cloud accounting costs and developing accounting regulations to harmonize cloud accounting costs with manufacturing firms' cost structures.

Sumini et al. (2021) conducted a study in Indonesia titled Cloud Accounting: The Development of Accounting Information Systems in Industry 4.0. The research focused on the requirements for implementing cloud accounting and the progression of accounting information systems within the context of Industry 4.0 in Indonesia. Employing a qualitative research methodology, the study gathered insights from accounting service providers, practitioners, and accountants through interviews, questionnaires, and focus group discussions. The findings revealed that 90% of respondents agreed that the increasingly digitalized accounting systems associated with Industry 4.0 represent a significant advancement in accounting information systems.

Egiyi and Udeh (2020) provided a comprehensive review of cloud accounting's evolution in Nigeria, focusing on its advantages over traditional accounting models. They highlighted its superiority in terms of data accessibility, real-time reporting, and process automation. However, they also emphasized potential risks such as data breaches, system downtimes, and compliance issues. The authors suggested robust security protocols and regulatory compliance measures to mitigate these risks and enhance cloud accounting adoption.

# 6. SUMMARY OF FINDINGS

The reviewed studies collectively underscore the significant positive impact of cloud accounting on financial performance and reporting quality across different sectors in Nigeria. Deposit money banks benefit from improved ROA, real-time financial reporting, and enhanced compliance. Manufacturing firms experience better operational efficiency and policy development through timely access to critical financial data. ICT firms achieve superior financial reporting quality driven by cloud-based AIS and security investments. Across all sectors, the primary drivers of cloud accounting's success include data accuracy, operational efficiency, and compliance assurance. Conversely, some studies identified challenges such as cloud expenditure management and data security risks. These findings highlight the need for a balanced approach involving both investment in cloud infrastructure and strategic management to ensure cost-effective and secure implementation.

## 7. CONCLUSION AND RECOMMENDATIONS

The study carried out investigation on the effect of cloud accounting on financial information quality of selected firms. The claim that cloud accounting greatly improves financial performance, operational effectiveness, and reporting quality across a range of Nigerian industries is supported by empirical data. Regardless of how cloud accounting affects the quality of financial information, the research study's findings indicated that cloud accounting greatly lessens the difficulties that accountants may encounter and encourages them to work more effectively, wisely, and conveniently. Future studies could examine new technologies like blockchain integration and artificial intelligence in cloud-based systems, as well as longitudinal studies that monitor the long-term effects of cloud accounting adoption.

The study thus offered the following suggestions to further enhance the calibre of financial data in particular companies in light of the research findings:

- To encourage businesses to invest in cloud accounting, the government should establish top-notch data centres. For obvious reasons, several businesses are afraid to use subpar data centres. If the government makes investments in this area, businesses in this sector will undoubtedly feel more secure.
- 2. Lower the price of data and accessories to encourage more businesses to adopt the new technology.
- To improve efficiency in financial and other accounting functional reporting, organisations should be encouraged to increase their investments in automated accounting and provide their accounts personnel with effective training.

#### REFERENCES

- Abidde, M. O. (2021). Cloud computer based accounting and corporate financial performance: A study of some listed manufacturing companies in Nigeria. *IOSR Journal of Business and Management* (IOSR-JBM), *23*, 12-19, e-ISSN: 2278-487X, p-ISSN: 2319-7668.
- Akpan, J. U., Igbekoyi, O. E., Ogungbade, O. I., & Osaloni, B. O. (2023). Effect of cloud accounting on financial information quality of selected firms in Nigeria. *International Journal of Research and Innovation In Social Science* (IJRISS), 7(1), 1175-1193.
- Al-Emran, M., Mezhuyev, V., & Kamaludin, A. (2020). Determinants of cloud computing adoption in higher education: A case of Malaysia. *Telematics and Informatics*, 47(10), 13-31.
- Alshammari, F., Alshammari, M., & Alshammari, N. (2021). Cloud computing adoption factors and security concerns: A meta-analysis. *Journal of Information Security*, 12(2), 171-184.

- Bénet, N., Deville, A., Raïes, K., Valette Florence, P. (2022), Turning nonfinancial performance measurements into financial performance: The Usefulness of front-office staff incentive systems in hotels. *Journal of Business Research*, *142*, 317-327.
- Chen, X., Chang-Richards, A., & Ling, F.Y.Y., (2024). Digital technologies in the AEC sector: a comparative study of digital competence among industry practitioners. *International Journal of Construction Management*, 2(1), 15-22.
- Ace Cloud (2018). The impact of cloud computing in accounting industry. Retrieved from Ace Cloud.
- Daniel, K. A. (2024). Effect of cloud accounting on financial performance of listed deposit money bank in Nigeria. *International Journal of Accounting Business and Entrepreneurship* (IJABE), 3(1), 81-101.
- Dobson, D. (2020). The history of cloud accounting. http://ddobson.ca/history-of-cloud-accounting/.
- Han, H., Shiwakoti, K. R., Jarvis, R., Mordi, C., & Botchie, D. (2023). Accounting and auditing with blockchain technology and artificial Intelligence: A literature review. *International Journal of Accounting Information Systems*. Available at https://www.sciencedirect.com/science/article/pii/S1467089522000501
- Handoko, P.L.E.O., Lindawati, P.S.L.I.N., Sarjono, P., & Mustapha, P. (2023). Innovation diffusion model in auditors' acceptance of metaverse technology. *Journal of Theoretical and Applied Information Technology*, 4(2), 19-27.
- Hayes, R. M. (2014). Discussion of "Audit committee financial expertise and earnings management: The role of status" by Badolato, Donelson, and Ege. *Journal of Accounting and Economics*, 58(2–3), 231–239.
- Hiran, K.K., & Dadhich, M. (2024). Predicting the core determinants of cloud-edge computing adoption (CECA) for sustainable development in the higher education institutions of Africa: A high order SEM-ANN analytical approach. *Technological Forecasting and Social Change*, 199.
- Huang, J., Teo, T. S. H., & Ou, C. X. J. (2021). The impact of cloud-based accounting information systems on financial reporting quality: Evidence from Chinese listed firms. *Information Systems Frontiers*, 1-16.
- Imeokparia, L., Wisdom, O., & Offiaeli, G. (2023). Cloud accounting cost and financial performance of manufacturing firms in Nigeria. *Russian Law Journal*, 11(3), 3060-3068.
- Johnson, S. (2023, July). The impact of blockchain technology on accounting. Retrieved from https://www.linkedin.com/pulse/impact-blockchain-technology-accounting-shawna-johnson
- Khan, F. (2024). Contemporary Issues in Accounting: An Overview. International Journal of Business and Management Invention (IJBMI) Volume 13 Issue 7, 54-57.
- Khanom, T. (2017). Cloud accounting: A theoretical overview. *IOSR Journal of Business and Management* (IOSR-JBM), 19(6), 31-38.

- Karanikola, A., Davrazos, G., Liapis, C. M., & Kotsiantis, S. (2023). Financial sentiment analysis: Classic methods vs. deep learning models. *Intelligent Decision Technologies*, 17(1), 893–915.
- Koutsopoulos, K., & Paul, R. (2019). Factors affecting the adoption of cloud computing in SMEs: A systematic literature review. *Journal of Enterprise Information Management*, 32(1), 4-30.
- Lazanis, R. (2023, November). AI in accounting: A guide written by artificial intelligence. Retrieved from https://futurefirm.co/ai-in-accounting/
- Li, Y., Yang, C., & Wang, L. (2020). The impact of cloud computing on firms' financial performance: An empirical study. *Journal of Management Science and Engineering*, 5(2), 97-108.
- Masa'Deh, R., Almajali, D.A., Al-Okaily, M., Al-Sous, N., & Al-Mousa, M.R. (2024). Antecedents of cloud-based financial information systems usage: An integrated model. *International Journal of Data and Network Science*, *12*(2), 36-49.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363.
- Mu, L. (2024). EDAS technique and group decision making. *Journal of Intelligent & Fuzzy Systems*, 46(1), 2281-2296.
- Obasan, O. T., & Kuola, A. J. (2022). Effect of cloud-based accounting on manufacturing firms in Nigeria: A study of Twinstar Industries Ltd., Ogun State. *Fane-Fane International Multidisciplinary Journal*, 6(2), 93-104.
- Oyewobi, I. A., & Adeyemi, O. L. (2024). Cloud-based accounting information systems and financial reporting quality of listed information and communication technology firms in Nigeria. *Journal of Economics, Finance and Management Studies*. 7(4), 2089-2104.
- Qatawneh, A. (2022). The influence of data mining on accounting information system performance: A mediating role of information technology infrastructure. *Journal of Governance & Regulation*, 11(1), 141–151.
- Rao, M. T., Jyotsna, T. G., Savina, T. G. (2018). Impact of cloud accounting: Accounting professionals perspective. IOSR, *Journal of Business and Management*, 53-59.
- Sahayaraj, L. R. P., & Muthurajkumar, S. (2023). Efficient classification and preservation of log integrity through propagated chain in cloud. *Journal of Intelligent & Fuzzy Systems*, 45(3), 4669-4687.
- Sarker, J., & Islam, S. Md. (2022). Cloud accounting adoption in Bangladeshi enterprises: A theoretical review. *International Journal of Multidisciplinary Informative Research and Review*, 2(1), 20-28.
- Weathers, R., Kelly, P., & Hemmeter, J. (2024). ABLE account use among Supplemental Security.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2) 171-180.

Zhang, Y., Chen, Z., & Ye, Y. (2020). The impact of cloud security investment on firm financial performance: Evidence from the U.S. Market. *International Journal of Information Management*, 52(1), 20-44.

282