



International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Effect of Cloud-Based Technology on Professional Accountants in Nigeria

Emovon Felix Osayabor¹, Gina Oghogho Olufemi², Agbo Innocent Sunny³

¹Postgraduate student, Department of Accountancy Igbinedion University, Okada, Edo State, Nigeria

²Department of Accountancy Wellspring University, Benin City, Nigeria Mail: atugina18@gmail.com

³Department of Accountancy Igbinedion University, Okada, Edo State, Nigeria Mail: blessedsamsun@gmail.com

ABSTRACT

This study has been carried out to investigate the effect of cloud-based technology on professional accountants in Nigeria. The objective of this study is to analyze or investigate the effect of cloud-based technology on professional accountant's efficiency in Nigeria. The methodology adopted for this study is library approach which focuses on content review of extant literature on cloud-based technology and its impacts on professional accountants in Nigeria. We concluded that the application of cloud-based accounting is fundamental and important as it helps to reduce cost, as companies are able to expand IT resources without IT expenditure. We recommended that the cloud computing should be adopted by companies since it has many advantages such as providing expenses of buying hardware and software, reducing the size of enterprises etc. Also, firms should ensure the training and retraining of professional accountants on the use of cloud technologies for efficiency and effectiveness and to ensure data security and safety from possibly cyber security threats.

Keywords: Cloud Computing, Cloud-Based, Technologies, Professional Accountants, and Cloud Accounting.

1. Introduction

Today, companies must operate in a rapidly changing business environment where they no longer operate within organizational boundaries, but in a wider network of service partnerships, forming large inter-organizational systems (Granlund et al., 2013). Due to the prevailing environmental conditions and the market, individuals have adopted virtual accounting services for their finances instead of traditional personal accounting. The accounting profession is strongly challenged to adopt these technologies or face the consequences of being left behind. Tech-savvy accountants know that cloud-based office and accounting platforms have been around for over a decade. The platform provides organizations with quick access to information anywhere as long as the organization is connected to the Internet (Jose, 2015). A report published by ICAEW (2020) quoted Oliver Deacon as saying that working in the cloud requires three key elements: people, tools and processes, and once the organization has moved to the cloud, its tools and processes can be used anywhere (ICAEW, 2020). Accountants are encouraged to move their financial processes to the cloud because it provides excellent output that is amazingly error-free, in addition to access to remote locations (Delalio, 2020). The cloud computing platform can be deployed on laptops, tablets, smartphones and iPads, providing global access as long as there is an internet connection. Among other advantages, it offers easy access anytime anywhere in the world, timeliness of information, scalability, affordability and better collaboration between departments (Jose, 2015). Cloud-based platforms such as Xerox, Sage business cloud, etc. can be easily integrated with other systems such as inventory, payroll, time tracking and e-commerce (ICAEW, 2020).

Dimitriu and Matei (2015) claim that cloud software allows accounting people to access data from anywhere in the world as long as there is an internet connection. The emergence of cloud computing has unimaginable weaknesses and consequences for manual data storage and processing, and has brought solutions to socialization problems, rapid technological innovation, massive dissemination of statistics, and widespread use of applications from the Internet and other parts of the world. Accounting professionals must be ready to fully embrace the advancements made in the modern environment, as it is essential to move forward with the current realities. Chua (2013) asserted that when cloud computing, digital technologies replace the human factor involved in the manual accounting process, accountants who do not adapt to the new technology will face great threats. This paper examines the impact of cloud-based technology on the effectiveness and efficiency of professional accountants in Nigeria.

1.1 Research objectives

The purpose of this study is to examine the impact of cloud-based technology on the performance and effectiveness of professional accountants in Nigeria.

2. Methodology

The methodology used in this study is a library approach that focuses on a content review of existing cloud-based technology literature and its implications for professional accountants in Nigeria.

3. Literature Review

3.1 Cloud Computing

John McCarthy coined the term “cloud computing” in 1961 (Keshavarzi et al., 2013). The cloud is a flexible resource deployment environment that includes various stakeholders and that provides a multi-precision calculated service for a certain level of data quality (Schubert and Jeffery, 2012). The American National Institute of Standards and Technology (NIST) defines cloud computing as a model that enables convenient, on-demand access to a shared set of network computing resources (such as networks, applications, and services) that can be quickly provisioned and released With minimal management effort or service delivery interaction (Mell and Grance, 2011). Ebenezer et al. (2014) show that cloud computing can still be successfully applied in accounting. Youssef et al. (2008) see cloud computing as a new computing paradigm that allows users to temporarily utilize the computing infrastructure provided by a cloud provider as a service over a network, possibly at one or more levels of abstraction. From these definitions, it can be concluded that cloud computing is an emerging technology that allows organizations or businesses to access computer resources (hardware and software) provided by another organization through the Internet. Cloud computing is a shared service architecture that supports business processes for efficiency and profitability, and has significant implications for an organization's financial and accounting processes (Brandas et al., 2015).

Sekar and Maniatis (2011) show that cloud computing offers users the opportunity to reduce operating costs and capital costs due to the infrastructure provided to them. Today, managers are focused on reducing costs and are eagerly looking for modern accounting solutions, according to which, in addition to automated tasks and detailed reports, they also want a flexible system that adapts to different business needs or market conditions (Shkurti and Muza, 2014). To solve these problems and facilitate the work of the accountant, cloud computing has been developed and improved, and over time more and more institutions accept and recognize its usefulness as an effective way to save time, energy and money (Vaquero et al, 2009).

3.2 Application of cloud computing model in Nigeria

Cloud computing can be applied in the context of accounting and when it is done, we have what is called cloud computing, which literally means the use of accounting software and data over the Internet (Onyali et al., 2016). It is a new accounting model designed to support business operations by providing the real-time accounting information that managers need to perform their traditional planning, control and decision-making roles. This represents a paradigm in the way companies process and store data (Shah et al., 2011). In this accounting model, the organization acquires the use of accounting software from a service provider rather than from the software itself (Egiyi and Udeh, 2020). The service provider hosts the accounting software on a remote server, while the organization can access its accounts on any device using an application or browser anywhere there is an internet connection.

Infrastructural epilepsy in Nigeria, especially power, is a major constraint that limits access to only the major cities of the country outside the rural communities. Government agencies and private sector IT sponsors have made great efforts to get businesses (big and small) to adopt cloud computing technology in Nigeria. However, adoption has been slow because fear of the unknown does not hold up against the myriad benefits of cloud technology. Muhammed et al. (2015) stated that the 2013 CISCO and World Wide Worx survey on cloud adoption in enterprises (small, medium and large), ranked South Africa and Kenya ahead of Nigeria. However, cloud computing has been adopted by some of the country's major business units, which has brought innovation to business operations as well. For example, Google is said to be collaborating with Descasio Ltd to provide cloud services to organizations such as Coscharis Group, Transcorp Corporation and many others (Nnadozie, 2016).

3.3 Advantages of a cloud-based accounting system

The motivation of companies to outsource part of their financial operations to the cloud is based mainly on emphasizing its basic universality, improving competitiveness and strengthening the efficiency of financial management processes. A comparison of a traditional accounting system with accounting software as a service shows that the respondent believes that software as a service (SaaS) can indeed provide a better return on investment (Cloud Accounting Institute, 2013). Advantages of cloud computing includes:

- **Collaboration:** A cloud-based accounting system can significantly increase the mobility and freedom of companies and their accountants. Managers are adopting mobile tools such as smartphones and mobile Internet devices to speed up decision-making and improve performance. An advanced mobile platform improves the accuracy, speed and versatility of decision making and responsiveness to customers (Laudon and Laudon, 2010). Industrial partnerships are often based on opportunistic cooperation. Businesses need to be flexible and partnerships need to be flexible. The cloud provides an opportunity to seize opportunities and remain dynamically integrated in different geographic business environments (Barthe-Delanoie et al., 2014).

- **Cost savings:** Another advantage of using cloud computing software as a service (SaaS) for companies is the ability to reduce costs, because companies can expand their IT resources without paying IT costs (Barraso and Wallance, 2012; Du and Cong, 2010) . These reduced hardware and software network management and IT costs include not only financial costs, but also human costs that would otherwise be incurred in purchasing and installing financial software for the accounting function (Du and Cong, 2010). With the cloud service, companies can quickly expand their operations without limitations

using the computing power of the cloud. This saving is particularly important for small and medium-sized businesses. For larger companies, the cloud offers relatively few savings because they usually have their own IT infrastructure. • Data quality: When resources are collected in cloud storage centers, users of cloud accounting software can access an unlimited amount of resources (Mihoob et al., 2013). Cloud computing is considered a new tool for collecting accounting data

3.4 The Challenges of Cloud-Based Accounting System

There is quiet optimism and anxiety in the Nigerian cloud computing and accounting market. Information security and safety, government policies, unstable and slow internet connections and poor infrastructure development in the country are some of the reasons for the slow growth of this technology in the country (Egiyi and Udeh, 2020; Iwuchukwu, 2017). Muhammed et al. (2015) briefly presented the challenges facing the full adoption of cloud computing in Nigeria which include: poor quality of internet services, availability of internet services in some areas, lack of privacy, fear of technical capabilities of service providers, awareness of benefits of service, suppliers cloud computing, inflexible legal framework, lack of necessary infrastructure to establish cloud computing in Nigeria and above all insecurity of life and property which discourages cloud technology providers from investing in Nigeria. Another concern with cloud accounting is the loss of control over the software that relies on the cloud accounting provider. When applications and data are managed in the cloud, users can become dependent on proprietary systems that increase costs or whose terms of service can be unilaterally and negatively changed (Armbrust et al., 2009).

4. Conclusion

Based on the above, the implementation of cloud accounting is fundamental, essential and important because it helps to reduce costs because it helps companies to increase IT expenses. The cloud computing platform also supports business processes to ensure efficiency and profitability. Some prominent Nigerian business entities have adopted cloud computing and as more professional accountants become more aware and use cloud-based technologies, accounting operations are faster and information can be accessed quickly anywhere as long as the organization is connected to the forefront of the internet. a result that is amazingly flawless and more inventive. Cloud accounting software also provides access to unlimited resources and improves collaboration between businesses.

5. Recommendations

- Cloud computing should be adopted in companies because it has many advantages, such as ensuring the purchase costs of hardware and software, speed and accuracy of operations and simplification of procedures, reduction of personnel and company redundancy.
- The company must provide training and retraining of professional accountants in the use of cloud technologies to ensure efficiency and effectiveness, as well as ensure information security and safety from potential cyber security threats.

References

- Armbrust, M., Fox, A., Griffith, R., Joseph, A., Katz, R., Konwinski, A., Lee, G., Patterson, D., Rabkin, A., Stoica, I. & Zaharia, M. (2009). Above the clouds: A Berkeley View of Cloud Computing. *Electrical Engineering and Computer Sciences*, University of California at Berkeley.
- Barrasso, R. & Wallance, M. (2012). Cloud Storage–Bursting through the hype. *ISACA Journal*, 5, 6-8.
- Barthe-Delanoe, A. M., Truptil, S. & Benaben, F. (2014). Event driven agility of interoperability during the run-time of collaborative process. *Decision support system*, 59, 171-179.
- Brandas, C., Megan, O., & Didraga, O. (2015). Global perspective on accounting information system: Mobile and cloud approach, *procedia economics and finance*, 88-93.
- Chua, F. (2013). Technological trends: their impact on the global accountancy profession, *The Association of Chartered Certified Accountants*.
- Cloud Accounting Institute (2013). *Cloud solutions best practices: 2013 benchmark study*.
- Delalio, J. (2020). 3 action steps to make your business resilient in hard times, retrieved on 12 October, 2020. From: www.eisneramper.com/cloud-accounting-resilient-covid-19-04201.
- Dimitriu, O. & Matei, M. (2015). Cloud accounting: A new business model in a challenging context, *procedia economics and finance*, 32, 665-671.
- Du, B. H., & Cong, Y. (2010). Cloud computing, accounting, auditing and beyond, (October), 66-71.
- Egiyi, M. A. & Udeh, S. N. (2020). Overview of cloud computing in Nigeria, *International Journal of Academic Management Science Research*, 4(6), 81-88.
- Granlund, M., Mouritsen, J. & Vaassen, E. (2013). On the relations between modern information technology, decision making and management control. *International Journal of Accounting Information System*, 14(4), 275-277.
- ICAEW (2020). COVID reveals the benefits of cloud working, retrieved on 12 October, 2020. From <https://www.icaew.com/insights/features/2020/may-2020/covid-reveals-the-benefits-of-cloud-working>.

- Iwuchukwu, U. A. (2017). The state of cloud computing, Technology solution groups, retrieved 13 October 2020, from: <https://www.adp.com/spark/articles/2020/02/mobile-technology-changing-traditional-accounting-practices.aspx>
- Jose, M. (2015). The benefits of cloud computing, Technology solutions group, retrieved 13 October, 2020 from <https://www.kmco.com/resource-center/article/looking-forward/benefits-cloud-computing-accounting/>
- Laudon, K. C., & Laudon, J. P. (2010). Management Information system – managing the digital firm, 11th ed., Upper Saddle River, NJ: Pearson.
- Mell, P. & Grance, T. (2011). The NIST, Definition of the National Institute of Standard and Technology.
- Michoob, A., Molina-Jimenez, C. & Shrivastava, S. (2013). Consumer-centric resource accounting in the cloud. *Journal of Internet Services and Applications*, 4(1), 8.
- Muhammed, K., Zaharadden, I., Rumana, K. & Turaki, A. M. (2015). Cloud computing adoption in Nigeria: challenges and benefits, *International Journal of Scientific and Research Publications*, 5(7), 1-7.
- Nnadozie, C. E. (2016). The challenges of cloud computing adoption in Nigeria, *International Journal of Computer and Information Engineering*, 10(11), 1970-1975.
- Onyali, C. I., Okafor, T. G. & Egolum, P. (2016). The use of cloud computing and accounting packages for corporate business transactions in Nigeria: An explorative study, *Journal of business and management*. 18(7), 113-117.
- Schubert, L. & Jeffery, K. (2012). Advances in clouds, (online). Available: <https://www8.cs.umu.se/kurser/5DV095/VT13/literature/schubert2012advances.pdf> [2014-06-01].
- Sekar, V. & Maniatis, P. (2011). Verifiable resource accounting for cloud computing services, 2011 ACM 9781-4503-1004-8/11/10, Chicago, Illinois, USA.
- Shan, H., Malik, M. S. (2011). Strategic management accounting: A messiah for management accounting. *Australian Journal of Business and Management Research*, 1(4), 1-7.
- Shkurti, R. & Muza, E. (2014). An analysis of cloud computing and its role in accounting and its role in accounting industry in Albania. *Journal Business Research*, 97-102.
- Vaquero, L. M., Rodwro-Merino, L., Caceres, J. & Lindner, M. (2009). A break in the clouds: towards a cloud definition. Ozdemir. *ACM SIGCOMM Computer Communication review*, Vol. 39, 50.
- Youseff, L., Baurico, M. & Da Silva, D. (2008). Towards a unified ontology of cloud computing, The grid computing environment workshop.