ISSN: 2714-3643
October, 2023

ACCOUNTING INFORMATION SYSTEM AND FINANCIAL REPORTING QUALITY: OVERVIEW OF THEORY AND EMPIRICAL RESEARCH

[1]Lodikero Olusola, and [2]Akeredolu Adeparubi
[1 &2] Department of Accountancy; Rufus Giwa Polytechnic, Owo, Ondo State, Nigeria
lodikeroolu@gmail.com

Abstract
The technological development in accounting practice is a major trend that has grown substantially over the years and is today more prominent than ever. This paper examined whether Accounting Information Technology improves the qualities required of financial reports, and its compliance with relevant standards and regulations. It also pointed out the way for future research in order to improve the alignment between adopted technology and organization performance, in this particular case, the support of management information systems to accounting and management. The main objective of this study was to review the theoretical and empirical literature on the effect of accounting information system on reporting quality to ascertain research gaps from past studies. The study concluded that past studies on the effect of accounting information system on reporting quality are limited and have yielded positive results. Furthermore, it was discovered that most studies were carried out in advanced economies, where advanced computerized accounting information system techniques have been in practice.
Keywords: Accounting, Accounting information system**,** Data quality, Financial performance

Introduction

In today's society, digitalisation is, perhaps, the strongest force for change globally. More of our activities, both private and professional, are taking place in the digital world. For many companies that operate in the accounting industry, it is crucial to get acquainted with the changing digital landscape and get involved in digitalisation to keep up with developments in order to survive (Kairos, 2016).

Many organizations are automating and integrating business processes through accounting information systems (Hla and Tera, 2015). An accounting information system is a manual or computerized system that enhances control and synergies within an organization to assign quantitative values to past, present and future economic events. Data collection, data maintenance, data information, accounting system and knowledge management, data/security management and information generation are the key functions performed by accounting information systems. Information systems try to exploit environmental conditions to improve the quality and quantity of information and improve the delivery mechanism to users. This provides users with useful information in different formats to meet their different needs (Alzoubi, 2019).

Despite the continuous production of accounting information in accordance with legal requirements and financial and accounting regulations to improve financial performance, resource misuse and lack of accountability still exist (Bukenya, 2020). Reliability, relevance, accuracy, timeliness, and clarity, in that order, determine the true measure of the perceived quality of accounting information. For financial information to serve its intended purpose, it must be of high quality to ensure sound decision-making.

Recognizing management's commitment to efficient accounting information and quality reporting systems is widely recognized as the most important factor in business success (Iskandar, 2015). The use of AIS as a computer-based application brings a new trend of change from the conventional way of accounting to a computerized way which most people are not prepared for or find very difficult to adapt to (Eb, Pretorious, Awosejo, and Zuva, 2013). Organizations are designing more sophisticated accounting information systems to meet strategic goals and enhanced performance. This study, therefore, examines the impact of computerized accounting system on financial reporting quality to examine: the extent to which computerized accounting contributes to financial reporting quality and how an Enterprise Resource Program improves the outputs of the accounting information system, by reviewing empirical researches on AIS.

Literature Review

The effect of AIS implementation on financial reporting quality has been studied by several researchers using different analytical methods. This paper is a review of theories and empirical study on the effect of accounting information system on financial reporting quality. It employed the secondary source of information by making use of available relevant literature on accounting information systems with respect to enhancing financial reporting quality.

Theoretical Framework

Several theoretical underpinnings underlie the impact of subject-matter of accounting information system on reporting quality. Some of these theories include: Contingency theory, Theory of Reasoned Action and its Derivatives in User Acceptance, Activity Theory et cetera.

a. Contingency Theory

Contingency theory suggests that an accounting information system should be designed in a flexible manner so as to consider the environment and organizational structure confronting an organization (Nzomo, 2013). Gordon and Miller (2016) laid out the basic framework for considering accounting information systems from a contingency perspective where the accounting information systems also need to be adaptive to the specific decisions being considered within a framework.

b. Theory of Reasoned Action and Its Derivatives in User Acceptance

Theory of Reasoned Action (TRA) defines relationships between beliefs, attitudes, norms, intentions, and behavior. According to this theory, an organizational behavior (for example, use or rejection of technology) is determined by one's intention to perform the behavior, and this intention is influenced jointly by the organizational attitude and subjective norm, defined as "the organization's perception that most businesses/clients who are important to it think it should or should not perform the behavior in question" (Zozak, 2005). According to TRA, attitude towards a behavior is determined by beliefs about the consequences of the behavior and the affective evaluation of those consequences. Belief is defined, by Zozak (2005), as the organizational subjective probability that performing a given behavior will result in a given consequence. Affective evaluation is "an implicit evaluative" to the consequence; thus the attitude construct in TRA is general in nature and is not anchored to any given belief set. This approach represents an information processing view of attitude formation and change which states that external stimuli influence only through changes in the organization's belief structure (Zozak, 2005).

c. Activity Theory

Activity theory is an approach to understanding human work and technology which emphasizes the long-term well-being of workers or users. Eschewing "one best way" task design for user-determined task procedures, action theorists seek to design work practices that are enriching and that lead to development of skills and knowledge. Activity theorists argue that acceptance of technology is contingent on the extent to which it meets these goals in the context of the user's own work. Activity theory largely aligns itself with the broad humanistic aims and the methods of the socio-technical approach.

Conceptual Framework

a. Concept of Information System

According to Bateman and Snell (2004), Information system is an arrangement of people, data, process and information technology meant to interact to collect, process, store, and provide as output the information need to support an organization. Stair (2010) defined Information System as a set of interrelated elements or components that collect (input), manipulate (process), store, and disseminate (output) data and information, and provide a corrective reaction (feedback mechanism) to meet an objective.

b. Accounting Information Systems

Bodnar, George and Hopwood (2004) defined Accounting Information System as a collection of resources, such as people and equipment, designed to transform financial data into information. This information is communicated to a wide variety of decision makers. It then means accounting information systems collect, record, store and handles data to provide information to decision-makers via advanced technology or simple system or in between the two.

Characteristics of Accounting Information

In order for accounting information to achieve its desired goals, it should have the following basic properties: it should be appropriate, credible, timely, understandable, important, and must possess financial data quality (Ahmed, 2006).

a. Financial Data Quality

Miller (2002) acknowledged the concept of accounting information quality as a new model to achieve tremendous benefits that indicate the need of administration to communicate with shareholders to understand their needs and serve them fast and in the best possible way. Such characteristics aim to help administrators when developing accounting standards and assist accountants in the preparation of financial statements in assessing the accounting information that results from the application of alternative accounting methods and distinguish between what is a necessary clarification and what is not according to the users of accounting information.

b. Quality of Accounting Information and Financial Performance

The key components of effective financial management include: access to relevant information; use of that information to enhance management standards; and assurance that the information is accurate, relevant and secure (Barrett, 2004). Accounting information systems maintain and produce the data (for example, financial statements containing information about accounts and their balances) used by organizations to plan, evaluate, and diagnose operations and financial position (Peters et al, 2001). Therefore, the aim of the regulators should be to make an accounting system that offer maximal benefits at lowest possible cost.

According to Goitom (2003), the better the quality of accounting information, the greater the possibility for a business success and this is possibly because accounting can be viewed as an information measurement and communication system to serve macro and micro-economic activities. Investment decisions made in a vacuum are gambles; useful decisions are made depending on useful information (Sserwanga, 2003). Sometimes decision makers may be fed with irrelevant and useless information than they can use, they may overlook information on serious problems (Stoner, Freeman, and Gilbert, 1995).

c. Accounting Information System and Data Quality

The output of accounting information system (AIS) depends on the quality of data; garbage in garbage out is the result of poor data quality and, therefore, data quality is important to AIS (XU, 2019). The processes of data collection, storage, and utilization must work properly in order to achieve high data quality (Lee and strong 2018). According to Xu (2019), inaccurate and incomplete data may damage a firm's competitive ability. These studies also agreed that input control and competent employees are important to data quality of accounting information system.

Empirical Review

Extant literature about the quality of accounting information and how it affects decision-making, financial performance, profitability, organizational effectiveness, strategy management, foreign ownership and timeliness of financial report has been studied by several researchers using different analytical methods.

Gopisetti and Srinvas (2020) found from their conceptual study on accounting information systems that Managerial decision making normally relies upon an effective information system. In the present era, this accounting information system is metamorphically changed as Management Information System with greater improvement of different elements. Hence, accounting information system is a perfect tool of providing the environment with information for decision making and also eliminates the paper work as well as reduces the cost very significantly. However, it can be asserted that accounting information system can help the business enterprises in the global context to make rational decisions in a swift manner for the betterment of the businesses.

Grande, Estebanes and Colomina (2018) researched on the impact of accounting information system on performance measures and found that considering the average returns, the results indicate that firms which use accounting information system for the whole of their management get a superior figure regarding the other groups of firms which show a negative average. There is no significant relationship between a firm's productivity and the use of accounting information system.

Hla and Teru (2015), examined the efficiency of Accounting Information System on performance measures using the secondary data in which it was found that the biggest impact Information Technology has made on accounting is the ability of companies to develop and use computerized systems to track and record financial transactions in facilitating management decision making, internal controls, and quality of the financial report. The study recommended that businesses, firms, and

organizations should adopt the use of AIS because adequate accounting information is essential for an effective decision-making process and enables all levels of management get sufficient, adequate, relevant and true information for planning and controlling activities of the business organization.

Murungi and Kayigamba (2015) focused their study on the impact of Computerized Accounting System on Financial Reporting in the Ministry of Local Government in Rwanda, evaluating the nature of computerized accounting system and how it affects the quality of financial reports. Primary data were collected by administering questionnaire. From the findings, 98% of the respondents admitted that the Ministry used both cash based and accrual based system of computerized accounting, 38% of the respondents agreed that computerized accounting improves accountability, while 31% of the respondents maintained that the system provides financial statements on time. With increased improvements and versions of accounting packages, the study recommended that finance and accounting staff should have constant and continuous training by the authorized dealers of the packages so that they remain well equipped with the knowledge and experience of the package.

Henry, Adeniran and Olawale (2014) examined the extent to which Accounting Information Management has enhanced the profitability of Nigerian banks. From their findings, it was observed that the availability of sufficient accounting information has positively impacted on the profitability of Nigerian banking industry and that pragmatic policy options need to be taken in the banking industry to effectively manage credit quality and cash flow among other explanatory variables to enhance banking industry performance in the country.

Abu-Musa (2020), investigated the significant perceived security threats of computerized accounting information system, through their frequency of occurrence, in Saudi organizations. Results reported that introduction of computer viruses to the system, accidental and intentional entry of bad data by employees, employees' sharing of passwords; accidental destruction of data by employees, unauthorized document visibility; suppression and destruction of output; and misdirecting prints and distributing information to people not allowed to receive them are the most perceived major security threats to computerized accounting information system in the Saudi organizations.

Fowzia and Muhmuda (2021) concluded, based on their study on appreciation of Computerized Accounting System in Financial Institutions in Bangladesh, that new technologies are changing the environment in modern accounting practice. So, to reply to this change, accounting information providers must have skills and abilities and a broader set of knowledge than previous generations. "The idea of accounting information system is quite well established and numerous commercial packages as well as tailor-made systems have been urbanized. However, the business world is best by accounting system that has different levels of efficiency and excessive costs for such information."

Findings

Advancements in Information Technology (IT) have enabled companies to computerize their information systems. It was found, in the course of this study, that the use of computerized accounting information systems has brought opportunities for companies to perform the accounting functions more effectively and efficiently because the use of computerized Accounting Information Systems has brought about significant time and cost savings. Use of information technology to perform accounting functions has brought a chance for companies to progress toward paperless offices.

Conclusion and Recommendation

Accounting Information System had been widely used by many organizations to automate and integrate their business operations. Indeed, many businesses adopt this system to improve their business efficiency and increase competitiveness. The qualitative characteristic of any Accounting Information System can be maintained if there is a sound internal control system to ensure the achievement of operational goals and performance.

The biggest impact IT has made on accounting is the ability of companies to develop and use computerized systems to track and record financial transactions. Paper ledgers, manual spreadsheets and hand-written financial statements have all been translated into computer systems that can quickly present individual transactions into financial reports.

Reports issued to users have been improved by computerized accounting systems. Improved reporting allows users to determine if an organization is a good investment for growth opportunities and has the potential to be a high-value entity.

Furthermore, empirical literature of prior studies reviewed have shown that the adoption of Accounting Information System does increase a firm's performance, profitability, and efficiency of operations.

The vast directions of accounting information system on financial reporting quality present the most important relations between the challenges and technological responses in pointing out the way for future research in order to improve the alignment between adopted technology and organizations' performance. The study, therefore, recommends further investigations into the relationship between accounting information system and financial reporting quality, especially in technological adapting economies such as Nigeria.

References

Abu-Musa, A. A. (2020), Evaluating the Security of Computerized Accounting Information Systems: An Empirical Study on Egyptian Banking Industry", PhD. Thesis, Aberdeen University, UK.

Ahmed, B. (2006). "The Role of Accounting Information Systems in the Rationalization of Administrative Decisions in the Palestinian Businesses: An empirical study on limited contribution in private companies in Gaza Strip," Unpublished Master Thesis, Islamic University, Gaza.

Alzoubi, A. (2019). The Effectiveness of the Accounting Information System Under the Enterprise Resources Planning (ERP). *Research Journal of Finance and Accounting. Vol. 2., 10-18.*

Barrett, P. (2004). Financial Management in The Public Sector - How Accrual Accounting and Budgeting Enhances Governance and Accountability, Auditor-General for Australia.

Bodnar, George H & Hopwood, Willim S. (2004). Accounting Information Systems. Ninth Edition. Upper Saddle River, New Jersey: Pearson Education Inc.

Bukenya, M. (2020). Quality of Accounting Information and Financial Performance of Ugandan Public Sector. *American Journal of Research Communication*. Vol.2. 183-203.

Eb, A., Pretorious, P., Awosejo, J. & Zuva, T. (2013). The Role of Accounting Information Systems in Accounting Firm*. International Journal of Advanced Computer Research.* Vol. 1. 21-31.

Fowzia, R., & Mahmuda, N. (2021). Appreciation of Computerized Accounting System in Financial Institutions in Bangladesh. *World Review of Business Research*, 1(2), 1-9.

Goitom, G. (2003), Accounting Policies, Professionalism, Competence and Quality of Accounting Information in Public Enterprises in Ethiopia, Unpublished dissertation at Makerere University Business School.

Gopisetti R, & Srinvas. G. (2020). Accounting information systems (AIS)- a conceptual study. *Indian Streams Research Journal*, 9(1), 1-14.

Gordon, L. A. & Miller, D. (2016). A contingency framework for the design of accounting information systems, *Accounting Organizations and Society*, 1(1), 59-69.

Grande, U. E., Estebanes, P. R., & Colomina, M. C. (2018). The impact of accounting information system on performance measures: empirical evidence in Spanish SME. *The International Journal of Digital Accounting Research*, 11(2), 25-43.

Henry, W., Adeniran, G. & Olawale, N. (2014). Effects of Accounting Information Management on Profitability of Nigerian Banking Industry*. International Journal of Humanities Social Sciences and Education (IJHSSE)* ,Volume 1, 100-105.

Hla, D. & Teru, S. (2015). Efficiency of Accounting Information System and Performance Measures – Literature Review*. International Journal of Multidisciplinary and Current Research*. Vol. 3. 976-984.

Iskandar, D. (2015). Analysis Of Factors Affecting The Success Of The Application Of Accounting Information System. *International Journal of Scientific & Technology Research* . Vol. 4. 155-162.

Kairos, F. (2016). Nyckeln till framtiden - framtidens redovisning, revision och rådgivning i detdigitalalandskapet.FAR.Retrieved20January2021,fromhttps://www.tidningenbalans.se//wp-content/uploads/2016/09/Nyckeln-till-framtiden.pdf.

Lee, Y.W., & Strong, D. M. (2018). Knowing -why About Data Processes and Data Quality. *Journal of management information system*.20 (30), 13-39.

Miller, P. (2002).Finding Customer Focus through the Power of Competition Quality Financial Reporting*. The Journal of Accountancy*.

Murungi, S. & Kayigamba, C. (2015). The Impact of Computerized Accounting System on Financial Reporting in the Ministry of Local Government of Rwanda. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS),* Vol. 6, 261-265.

Nzomo, S. (2013). Impact of Accounting Information Systems on Organizational Effectiveness of Automobile Companies in Kenya. Research Project submitted in fulfillment for the requirement of the award of degree in master of Business Administration, University of Nairobi.

Sserwanga, A. (2003). Presumptive Income Tax Law and Quality of Financial Reporting, Unpublished dissertation at Makerere University Business School, Kampala, Uganda.

Stoner J, Freeman E, & Gilbert D Jr. (1995). *Management* (6th ed.), England: Prentice Hall international Inc.

XU, H. (2019). Data Quality Issues for Accounting Information System Implementation: Systems Stakeholders and Organizational Factors. *Journal of Technology Research*. Vol. 1. 1-11**.**

Zozak, S. (2005). The role of information technology in the profit and cost efficiency improvements of the banking sector. *Journal of Academy of Business and Economics*, February 1.