IMPLEMENTATION OF E-ACCOUNTING APPLICATIONS IN CLOUD TECHNOLOGY: AN ACCOUNTING PROCESS

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Introduction

Significant advancements in computer sciences have been observed since the creation of the first mechanical computer by Charles Babbage in the first half of the 19th century and the invention of the first programmable, electronic, general-purpose digital computer in 1945 (Öztürk & Kula, 2021). Business functions across various industries have increasingly integrated advanced hardware and software systems, with the accounting sector being no exception. Brabetea and Goagără (2022) suggest that a continuous evolutionary process, characterized by the consistent adoption of new information technologies, has contributed to the development and modernization of the accounting profession.

Current business models have been significantly influenced by globalization, dynamic digitalization, information and knowledge competition, and dissemination (Lutfi, 2021). In addition, the present technological era has led to great investment in data processing computerization in different activities, industries, and sectors. In essence, technological progressions are linked with the use of technological methods and applications, and eventually, these have led to several changes in business processes (Lutfi, 2022). Information technology (IT) plays a significant role in the field of E-accounting, which refers to the use of electronic methods and technologies to manage financial information and accounting processes.

In the past years, the COVID-19 era has seen rapid development in information systems due to the limitation of physical contact. Modern accounting procedures have evolved to include e-accounting as a necessary component, allowing businesses to automate their financial operations and better manage their financial resources.

What is E-Accounting?

In the era of globalization, it requires all aspects of work to continue to innovate to create conditions that are effective and efficient. E-accounting has gained prominence due to its efficiency, accuracy, and cost-effectiveness. "Electronic accounting," often known as "e-accounting," is the practice of recording, managing, processing, and analyzing financial data and transactions using digital technology, software, and electronic systems. It includes a range of technological solutions intended to speed up accounting procedures, increase accuracy, and boost the effectiveness of financial record-keeping and reporting.

E-accounting involves making use of accounting software and computers to record, store and analyze financial data (Esmeray & Esmeray, 2020), and it makes sure that the information of critical financial is controlled, accurate and safe from corruption of data (Uzrail & Bardai, 2019). E-accounting (or online accounting) is the application of online and Internet technologies to the business accounting function. Similar to email being an electronic version of traditional mail, e-accounting is the "electronic enablement" of lawful accounting and traceable accounting processes which were traditionally manual and paper-based.

E-accounting involves performing regular accounting functions, accounting research, and accounting training and education through various internet-based or computer-based accounting tools, such as digital tool kits, various internet resources, international web-based materials, institute and company databases which are internet-based, web links, internet-based accounting software and electronic financial spreadsheet tools to provide efficient decision making (Adewale, 2022).

E-accounting accuracy facilitates speed and lowers the cost of handling business operations (Cong et al., 2019); it eliminates some of the tedious and time-consuming tasks associated with manual accounting (Jędrzejka, 2019), and it facilitates all the procedures (calculations), including additions and deduction, is done automatically by software (Uzrail & Bardai, 2019). E-accounting helps to prepare financial statements and ensures high reliability (Abualoush et al., 2018) and it helps to record, keep, and move data by using a software system easier than sifting through a bunch of documents (Teru et al., 2019). The entire operation of preparing accounts becomes quicker while using E-accounting and the statements or reports can be generated instantly at the click of a button. E-accounting is sometimes stored and saved in off-site locations to be safe from natural disasters, fires, earthquakes, arson, and floods (Thottoli & Ahmed, 2021). It is also more efficient than paper-based accounting, thus work will be completed faster, and time saved (Paul & Sadath, 2019). Viewing accounts using E-accounting allows taking advantage of the option to view data in different charts, tables, and formats (Akandinda, 2019; Gofwan, 2022).

E-Accounting in Cloud Environment

The term "e-accounting in a cloud environment" describes the application of cloud computing technologies to the informatization of accounting. It involves the provision of on-demand

accounting services through internet-based applications, allowing multiple users to access accounting software from anywhere and at any time (Sastararuji et al., 2022). E-accounting (or online accounting) is the application of online and Internet technologies to the business accounting function. As email is an electronic version of traditional mail, e-accounting is the "electronic enablement" of lawful accounting and traceable accounting processes which were traditionally manual and paper-based (Akintunde, 2022). The transition from traditional manual accounting to computerized accounting and digitalization has facilitated the work of accounting professionals, initially simplifying primary recording, classifying, and summarizing functions. Sabuncu (2022) states that digital transformation features the use of web-based accounting programs operating with cloud technology, enabling automatic data transfer to all official accounting programs and the automatic creation of documents.

Cloud accounting offers several advantages over traditional accounting information systems. It reduces the cost of construction and maintenance of accounting systems for enterprises and provides high-quality services such as seamless integration with external information systems and efficient processing of financial transactions (Chen et al., 2022). A large number of accounting software vendors have already shifted their products to the cloud and provide various forms of cloud accounting solutions (Dimitriu & Matei, 2015). Major accounting firms such as KPMG, PricewaterhouseCoopers, Ernst & Young, Deloitte, Sage or SAP own and present their own cloud offerings (Marsintauli et al., 2021).

The dynamic nature of the cloud accounting environment presents new challenges and risks for enterprises. The accounting cloud service operates in a dynamic and changing environment, with cloud storage located away from enterprise entities. This introduces new situations such as the reconstruction of accounting information processing processes and the need for seamless dynamic configuration. These changes increase the information risk for enterprises, making it crucial to assess the credibility of the accounting cloud service, propose a credibility analysis framework based on complex network analysis to evaluate the credibility of accounting cloud services (Chen et al., 2022). Online accounting solutions make it easier for different individuals to access accounting information outside of the workplace in a secure manner (Teru et al., 2019). Cloud accounting adoption has become increasingly important, especially in the context of the COVID-19 pandemic. Small and medium-sized enterprises (SMEs) can benefit from cloud-based accounting by becoming more efficient, financially organized, and flexible (Sastararuji et al., 2022).

Overall, e-accounting in a cloud environment offers numerous advantages for enterprises, including cost reduction, seamless integration with external systems, and efficient financial processing. However, the dynamic nature of the cloud environment and the need for credibility assessment pose challenges that need to be addressed. The sophistication of this online accounting-based technology offers convenience but also raises an important question, Does the data stored on third-party servers offer security, free from leakage of company information or is it a threat? This crucial consideration of knowing the benefits felt by companies and users and the risks that arise in its application needs further investigation. Understanding the factors influencing cloud accounting adoption can help organizations make informed decisions regarding the implementation of cloud-based accounting systems.

Conclusion

In conclusion, IT plays a crucial role in e-accounting by enabling automation, providing software solutions, facilitating cloud computing, ensuring data security, enabling data analysis, supporting electronic transactions, ensuring compliance and reporting, providing audit trails, offering cost savings, and enabling data integration. The enhanced real-time data capabilities of cloud accounting make it ideal with proper preparation and monitoring. Accounting information deals with handling sensitive financial information and confidential data such as employee details. This data is valuable to cybercriminals and can be used for identity theft, financial fraud, and other malicious activities. Organizations need to invest in proper security infrastructure, such as encryption, and multi-factor authentication, to prevent any type of data breach. It is also crucial for firms to constantly monitor the security protocol and provide training programs to help all tasks conducted in line with the data security landscape. E-accounting has become increasingly important, allowing businesses to efficiently manage their financial operations and resources while ensuring accuracy, reliability, and accessibility of financial information.

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