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## To Study the Effects of Information Technology on the Quality of Accounting Information and Its Role in The Adoption of Cloud Accounting

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Sayeed Sultan Ahmad Hossaini<sup>1</sup> & Fateme Samandi<sup>2</sup>

Corresponding Author – Sayeed Sultan Ahmad Hossaini

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### Abstract:

*This research has been studied under the title "To Study the Effects of Information Technology on the Quality of Accounting Information and Its Role in the Adoption of Cloud Accounting" and it tries to achieve the objectives of the research. The objectives of this research are: To understand the effects of IT on the quality of accounting information and to clarify the role of IT in the adoption of cloud accounting. The current research is based on second-hand data, which initially defined and explained the concepts and studied past literature. Finally, based on the information studied, the results of the research have shown that information technology affects the quality of accounting information and its role in the adoption of cloud accounting.*

**Keywords:** Information, Technology, Cloud, Accounting, Computing

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### Introduction:

With the entry of technology into the business market, accounting has also been affected by technology and is progressing rapidly. This evolution has made all the old accounting methods obsolete and replaced them with new methods, which will undoubtedly lead to great advantages for competition. When software accounting replaced traditional accounting, the speed and accuracy of accounting changed drastically. Years ago, after the introduction of the concept of the network and the emergence of the Internet, accounting changed again, which led to increased capabilities. The Internet and cloud space have provided accountants and managers with access to information from anywhere and at any time. The creation of web-based accounting software has eliminated information limitations. In this type of accounting, company information is stored on the company's central computer so that

users can access the information via the network. The creation of the cloud in the concept of the network provides the ability to store information in places other than personal computers that were available online. Cloud accounting is also a concept that has been recently introduced in accounting where cloud accounting providers provide space for companies to perform accounting operations in the cloud. Cloud accounting is a type of accounting where the entire process is done online in a data center.

IT simply means all the computer hardware and software used for collection and storage. According to the ITAA<sup>1</sup> definition, information technology is the development and implementation of information systems in addition to the study, design, and management of information systems. Since transforming traditional

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<sup>1</sup> Information Technology Association of America

accounting to computerized accounting, accounting has also been associated with information technology. Cloud accounting connects accountants and accounting to large networks which increases the effects of information technology on accounting. In this study, the researcher will try to study the **"Effects of Information Technology on the Quality of Accounting Information and Its Role in the Adoption of Cloud Accounting"**.

#### **Scope, Importance, and Need of Study:**

The research will be carried out in the scope of the **"To Study Effects of Information Technology on the Quality of Accounting Information and Its Role in The Adoption of Cloud Accounting "**. Since this title consists of two unique (Cloud Accounting and IT<sup>2</sup>) issues, it can be significantly important to clarify the relationship between these two variables. Explaining how IT can play a major role in the impact of accounting information and how it can help accounting system users make decisions about using cloud accounting makes clear the importance of doing so.

#### **Conceptual Framework:**

In this section we will discuss some of the necessary concepts.

#### **Cloud Accounting:**

Cloud accounting is a type of accounting system that does not require installation on local devices and its most important feature is that it is accessible at any time and place where there is internet (PRICHICI and Ş. IONESCU 2015). In other words, this type of accounting provides all accounting techniques such as recording, organizing, reporting, etc. online to users and stakeholders.

#### **With Using Cloud Accounting, Companies Will Be Able To:**

By using cloud accounting, companies can focus more on their business and are also able to avoid any major investment in creating technology in their organization by paying a small fee. (Khanom 2017). They can use this system at any time and place and easily benefit from the skills of its experts.

#### **Importance of Cloud Accounting:**

We can name some of the importance of cloud accounting as Speed, Security: (Pyke 2022), Automatic update (Luther 2021), Paperless, Accuracy: (Envoice 2022), Access from any place and any time (Nathan 2023), Customization, Centralization (Xero 2023).

#### **Cloud Computing:**

Cloud computing consists of computing resources, virtual servers, physical servers, development tools, cloud service, and storage space in a remote centre that is accessible through the Internet. These servers are served by monthly subscription to those who need to use them. This helps users to reduce costs and increase efficiency (IBM 2023). Cloud computing has three different models. These models are IaaS<sup>3</sup>, PaaS<sup>4</sup> and SaaS<sup>5</sup>. There are also three types of cloud services which are public cloud, private cloud, or hybrid cloud (Microsoft 2023).

#### **Traditional Accounting:**

As mentioned earlier, accounting has been used by humans since long ago. Before the introduction of accounting technology, it was recorded manually in different books such as journals and ledgers. Accounts in this accounting system are divided into three categories: Personal, Real, and Nominal (Mahavidyalaya 2015). Traditional accounting is a type of accounting that is done manually or by computer systems that

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<sup>2</sup> Information Technology

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<sup>3</sup> Infrastructure-as-a-Service

<sup>4</sup> Platform-as-a-Service

<sup>5</sup> Software-as-a-Service

are not accessible remotely(Infosys BPM 2021).

**Information Technology:**

IT is composed of two words: technology and information. It means that information is collected, stored, processed, protected, transmitted and displayed through computers and computer software(Motamem 2018). Technology means a set of processes, methods, tools, and machines that are used to provide services or produce a product. In addition, it can be said that information is all data that is collected and used at a specific time for a specific purpose(Hamidi et al. 2011).

IT is used in various dimensions, fields, and industries such as the healthcare industry, finance and administration, e-commerce, e-education and e-government. IT is the basis for the electronification of various areas of human life (Reza 2010).

**Accounting Information:**

Accounting is the art of collecting, recording, classifying, analyzing, and reporting information. An accounting information system is a method for collecting accounting information. The users of this system are shareholders, partners, customers, government, suppliers, and banks (Fontinelle 2023).

Accounting information varies in different companies. In general, accounting information is related to costs, customer information, revenues, employee information, and financial information. In addition, there are other data such as purchase requisitions, checklists, payroll, inventory, general ledger, trial balance, and financial statement information (Tuovila 2020). Accounting information systems include various components such as people, software, data, information technology infrastructure, procedures and instructions, and internal control.

**Research Methodology:**

Since the subject is a new topic, descriptive research method will be used to explain and clarify the subject. In this research, Secondary Data (books, articles, theses, newspapers, magazines, government documents and reports) will be used to study the subject. The data obtained during the research from second-hand sources of information will be presented in the form of tables and charts.

**Hypothesis:**

**H<sub>0</sub>:** There are no effects of information technology on the quality of accounting information.

**H<sub>1</sub>:** There are effects of information technology on the quality of accounting information.

**H<sub>0</sub>:** Information technology has no role in the adoption of cloud accounting.

**H<sub>1</sub>:** Information technology has role in the adoption of cloud accounting.

**Limitations:**

This research was conducted due to the limited time of research based on secondary-Data. This research needs to be done in the form of research based on primary-Data. The time limit did not allow meetings and interviews with entrepreneurs in the field of technology and cloud accounting.

**Objectives & Findings:**

To understand effects of information technology on the quality of accounting information.

The information technology system consists of hardware, software, databases, etc., which creates communication between different devices and enables access to data (video, audio, numerical text, etc.) for different users. The information available in an organization is considered as the main and most important resources. because the progress and development of a company depend on the accuracy and precision of an

organization's information. For this reason, an efficient information system can help in its usefulness and even guarantee that the use of the IT system is aimed at achieving this goal. Because the use of this system increases the speed and power of processing as well as accuracy.

Accounting is the heart of the organization, or rather the information heart of the organization. In this part, all the information of the organization is collected, recorded, sorted and stored simultaneously and finally presented in the form of reports to stakeholders and users. Manual analysis of accounting information in organizations was very time-consuming and with a very high error rate. Sorting information and presenting financial reports was limited to the end of the financial periods. Also, access to information by users of financial statements (government, shareholders, partners, customers, students, etc.) was very difficult and limited. Until the emergence of the information technology system and its integration with the cloud, information was transferred from paper and manual systems to various computer systems. This transfer made information accessible at any time and place, so access to information became very fast. This feature of the system makes reports and information up-to-date, and information can be used at any time.

Financial calculations by a computer system cause the percentage of user errors to be very limited and perhaps even to zero because many of these calculations are done automatically by the system itself. Even the use of IT allows accountants to do better in document classification and filing so that the documents can be accessed and used very quickly and easily when needed. Another application and capability of IT is to increase the security of an organization's data, which increases the quality of information and data.

A quality accounting system has three characteristics:

- To be relevant
- Reliability
- Comparability

IT helps to record information in a regular and timely manner, and this system also helps to ensure that the information is always up-to-date and accurate. which will lead to timely prediction and evaluation. Also, accurate and up-to-date information will increase trust and impartiality of information, which will lead to stability in the procedure and accurate disclosure of information.

- **To clear the role of information technology in the adoption of cloud accounting.**

In cloud accounting systems, financial and accounting information can be accessed by users from any place and time, because accounting information is stored in a cloud space, which is provided to them from different portals with access permissions limited to the role of the user. Information technology creates communication and data transfer and helps to promote electronic communication. Therefore, there is a relationship between establishing this communication and information technology.

Due to the many advances in the field of data storage and analysis, information technology systems help cloud accounting software to process and analyse more information accurately and in the shortest time. At first, information technology was used in simple programs that were reported in a limited way. Later, with the advancement of information technology, databases were used in larger software that were provided as multi-user through the server. With the advent of the Internet and new developments in this field, this information was transferred to the Internet to be accessible from any place and time. In cloud accounting, information technology helped to make the information accessible and analysed through the Internet.

Accounting software and data were accessed and viewed without the need to be installed on the user's system. A strong information technology helps cloud accounting to receive, store, and analyse accounting information from various portals. Accounting information stored in a single server has higher security and better integrity. Duplicate information will be lost, and it will increase the intensity of databases and the speed of analysis. In addition, the ability to recover information and the risk of its loss is reduced, and users can recover this information when needed.

Information technology increases automation through logical connections between databases, which also enhances the automation feature of cloud accounting software.

Since data security has been expressed as a positive and negative feature of cloud accounting, strengthening this security will increase the popularity of cloud accounting. New technologies and databases help protect data from the risks of theft, misuse, and unwanted deletion by increasing data security systems. Information technology increases the comparability of accounting information through the processing of accounting information through computer systems and leads to the removal of data communication limitations with comparable standards.

Information technology and cloud accounting help the company to make the business work more uniform and reduce the costs of data maintenance, productivity, and continuity of the business. Information technology helps cloud accounting to be more productive by using timely updates, immediate access to information, reducing mobility and travel, accessing databases, developing accounting software and providing the required infrastructure. Information technology increases the unique features of cloud accounting, which include

cost reduction, comparability, availability, flexibility, innovation, etc.

#### **Conclusion & Suggestions:**

This research was titled **"Investigating the Impact of Information Technology on the Quality of Accounting Information and Its Role in the Adoption of Cloud Accounting"**. After reviewing the information, the researcher concluded that accounting information is particularly affected by IT. Information technology helps to increase the quality of information by increasing the speed of access, non-duplication, unity of resources, etc. Information technology helps to make accounting information relevant, reliable, and comparable, and it can also increase the order and availability of timely and accurate information. Timely, clear, and accurate information will lead to timely forecasting and evaluation. Accurate and up-to-date information also increases the trust and impartiality of information, consistency of procedure, and accurate disclosure of information. Strong information technology helps cloud accounting to receive, store, and analyse accounting information from various portals. By analysing information by IT, duplicate operations and information are eliminated, increasing the speed of databases and the speed of analysis. In addition, the possibility of recovering information and the risk of its loss are reduced, and users can retrieve this information if needed.

The automation feature of accounting software is enhanced by IT through logical connections between databases, and by increasing data security systems, it helps protect data security from the risks of theft, misuse, and unintentional deletion. IT processes information through computer systems and increases the comparability of accounting information, leading to the elimination of data communication limitations with comparable standards. Cloud accounting and IT help



companies streamline operations, which will lead to reduced data maintenance costs, and increased productivity and business continuity.

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