

# The Effect of Cloud Computing in Facing the Challenges of Applying IFRSs in Iraqi Private Banks<sup>\*†</sup>

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## ABSTRACT

The research aims to explain the role of cloud computing technology in facilitating the application of international financial reporting standards in Iraqi banks, by preparing a checklist that included a set of paragraphs to measure the level of application of IFRSs. In those banks and then the need to use cloud computing technology, and the researchers reached a set of conclusions, including, that cloud computing technology has a role in facilitating the application of international financial reporting standards in the banks, the research sample, because of the ease it provides in preparing and saving accounting information and the possibility of accessing it in any time and from any place where the Internet service is available. The research also found that there is a shortage in the field of local knowledge and professional expertise. In addition to the difficulty of benefiting from international experiences that have succeeded in applying international financial reporting standards due to the difficulty of viewing and analyzing data prepared manually or traditionally, due to the dependence of most of the research sample banks on traditional means in managing their financial activities, which makes it difficult to upload them to the cloud and present them to experts to benefit from Their expertise that facilitates the application of international financial reporting standards. The research recommended the need to take advantage of the capabilities and capabilities provided by cloud computing technology in facilitating the application of international financial reporting standards (IFRS) in the research sample banks and reaping the benefits accrued, as well as benefiting from the experiences of international banks that have succeeded in the field of applying international financial reporting standards, especially in Arab countries. This is due to its proximity to the local environment by developing human resource skills and moving away from traditional means in preparing, preserving and communicating accounting information.

**Keywords:** *cloud computing technology; international financial reporting standards.*

## FIRST PART: RESEARCH METHODOLOGY AND LITERATURE REVIEW

### First: Research Methodology

**1. Research problem:** research problem is determined by the possibility of using cloud computing technology as one of the innovations of information technology and its various applications in facilitating the application of International Financial Reporting Standards (IFRSs) in Iraqi private banks.

The research problem can be formulated in the following questions:

A. Are there any challenges facing Iraqi private banks in applying international financial reporting standards (IFRSs)?

B. Is there a role for cloud computing technology in facilitating the application of international financial reporting standards (IFRSs) in Iraqi private banks?

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**2. Research objectives:** The research aims to achieve the following:

A. Presentation and discussion of justifications for the use of cloud computing technology in the application of international financial reporting standards.

B. Statement of the role of cloud computing technology in facilitating the application of international financial reporting standards in the research sample banks.

**3. Research Hypotheses:** The research is based on a main hypothesis:

There is a role for the use of cloud computing technology in facilitating the application of international financial reporting standards IFRS in banks, a research sample.

This hypothesis is divided into the following sub-hypotheses:

A. There is a relationship between cloud computing technology and facilitating the application of International Financial Reporting Standards (IFRSs) in the research sample banks.

B. There is a significant effect between cloud computing technology and facilitating the application of international financial reporting standards (IFRSs) in the research sample banks.

**4. Research Methodology and Analysis Tools:** To achieve the previous research objectives and reach the best methods to address the research problem, the following scientific approaches were relied upon to test the research hypothesis, which are:

A. The deductive approach: Some previous research and studies related to the topic of the current research were reviewed and benefited from in addressing the problem of the current research and achieving its objectives.

B. The inductive approach: The reality of the research sample banks was extrapolated regarding the level of application of the International Financial Reporting Standards (IFRSs) and the need to use cloud computing technology to facilitate the application of those standards by organizing a checklist that included a set of relevant paragraphs.

**5. Research Limits:**

A. Spatial limits: the limits of the spatial search are represented by a sample of banks listed in the Iraq Stock Exchange (the regular market) applying the International Financial Reporting Standards (IFRSs) according to the instructions of the Central Bank of Iraq.

B. Temporal limits: the temporal limits of the research are represented by the period from 2018-2022, which is the period during which the banks applied the international financial reporting standards according to the financial lists published in the bulletins of the Iraq Stock Exchange.

**6. Research Community and Sample :** the community is represented by a group of banks listed in the Iraq Stock Exchange (the regular market), which had to apply International Financial Reporting Standards (IFRSs) since 2016, which numbered 17 until the year 2022. As for the research sample, it was represented by six banks according to the level of Its implementation of the aforementioned standards, especially the International Financial Reporting Standard IFRS 9 and the International Financial Reporting Standard IFRS 15, with the availability of human and material capabilities to use cloud computing technology to implement these standards. Table (1) shows information about the research sample banks.

Table 1: The research sample banks

| Name of the bank            | date of incorporation | current capital In Iraqi dinars |
|-----------------------------|-----------------------|---------------------------------|
| Mansour Investment Bank     | 13/9/2005             | 250,000,000,000                 |
| Iraqi Investment Bank       | 13/7/1993             | 250,000,000,000                 |
| Trans Iraq Investment Bank  | 19/1/2006             | 264,000,000,000                 |
| Middle East Investment Bank | 28/9/1993             | 250,000,000,000                 |

|                         |            |                 |
|-------------------------|------------|-----------------|
| Khaleej Commercial Bank | 20/10/1999 | 300,000,000,000 |
| National Bank of Iraq   | 1/2/1995   | 250,000,000,000 |

*Source: Prepared by the two researchers based on the Iraq Stock Exchange Bulletin for the year 2020 .*

## Second : Literature Review

### 1. Study: Karima, 2021, "The Impact of Using Cloud Computing on the Quality of Accounting Information and Its Reflection on the Development of International Financial Reporting Standards"

The study aimed to know the effect of using cloud computing technology on the quality of accounting information and its reflection on international financial reporting standards and the possibility of developing them. Internet service is a better way than the traditional information system. study recommended the need to update the necessary legislation and issuances to organize the work between economic units that use cloud computing technology and the providers of this service. In addition, economic units should hold training courses for staff who dealing with cloud computing technology whether in economic units or provide cloud computing technology services in order to facilitate its application in those units and avoid its risks.

### 2. Study : Akintunde, 2020 , "Effect of Cloud Accounting on the Financial Reporting Quality of SMEs in Nigeria"

The study aimed to demonstrate the effect of cloud accounting on the accounting processes by which financial reports are prepared for small and medium economic units. It seeks to help accountants to make better and faster economic decisions. This in turn leads to improving the method of implementation related to public funds. The study concluded that there is a need for small and medium economic units to adopt cloud computing technology in order to increase the quality of their financial reports because this technology has a positive impact on the characteristics of the financial reports of small and medium units, and . Finally, it recommends that the owners of small and medium economic units in Nigeria provide support regarding the adoption and management of accounts by means of cloud computing technology by providing the necessary resources and qualified personnel for approval.

### 3. Ul-Huq's study, 2020, "Role of cloud computing in global accounting information systems"

The study aimed to demonstrate the impact of cloud computing technology on global accounting information systems and the need for economic units to change the training circle that they depend on constantly based on changes in the labor market. This market requires keeping pace with global changes in technology and innovations that may affect the implementation of business. The most important conclusion in this study is the possibility of benefiting from technological progress and the emergence of cloud computing technology in improving business, facing rapid changes in the global environment, reducing risks and benefiting from the advantages offered by this technology, including cost reduction, multi-use of assets, and rapid access to information .The study recommended the need to use cloud computing technology to improve the frameworks of accounting information systems by using cloud innovations.

## SECOND PART: THE THEORETICAL FRAMEWORK OF CLOUD COMPUTING TECHNOLOGY

### First: The Concept of Cloud Computing Technology and its Types

Many economic units in the current business environment face. the problem of collecting and processing large amounts of financial data. This problem generates the need for more efficient systems with the ability to support data collection and processing activities in order to obtain useful and timely information Recently, cloud computing technology has been employed in the accounting field and the term cloud accounting has emerged .The word "cloud" is usually used in science to describe a large collection of masses that are visible from a distance, such as a cloud. The term cloud also describes any group of things whose details are not examined in a particular context. (Mell & Grance , 2011 :2) The term cloud computing is frequently used in technical circles, but its meaning for the majority is largely ambiguous because it is not widely used in our Arab world. It depends on transferring processing and storage space from the computer to the so-called cloud, which is a server device that is accessed through the internet, and thus IT programs are transformed from products to services. (Dimitriu & Matei, 2014: 666) .

Cloud computing technology was defined as "accessing and storing data and applications via the Internet, instead of the original computer hard drive" (Ahmed, 2019: 1).

It was also defined as a technology that relies on transferring processing, data, and storage space of the computer to the so-called cloud, which is a server device that is accessed through the Internet, that is, it converts information technology programs from products to services, and it is also distinguished by solving problems, maintaining and developing programs for companies. Thus, the efforts of the user agencies are concentrated on using these services only (Tulsian, 2012: 128). Each economic unit has its own requirements regarding what services it seeks to access through the cloud, and the extent of control that it wants to access. To accommodate these requirements, the cloud environment can be divided into different types, according to the following:

### **1. Public cloud computing**

In this type of computing, all systems and resources that provide the service are located at the external service provider, who is responsible for organizing and managing the systems used to provide the service. As for the customer, his responsibility is determined in choosing the program or application that is installed on the end user's system. The public can use public cloud computing and access services via the internet and make them available by the service provider, who takes over and manages its own infrastructure. the adoption of public cloud provides many benefits in itself , such as saving cost and reducing the effort spent on setting up and maintaining devices and rapid deployment (Dordevic et.al, 28:2020).

### **2. Private cloud computing**

The systems and resources in private cloud computing that provide the service are located within the economic unit that uses this type of cloud , This unit is responsible for organizing and managing the used systems to provide the service,. In addition, the economic unit also is responsible for any software or application that is installed on the system (Krishnan, 2017:20).

### **3. Community or shared cloud computing**

It is a technology that is similar to public cloud computing, but it is shared by a group of parties who often have common goals and tasks, as the economic units that participate in community cloud computing do not want to use the public cloud that is available to everyone. At the same time, they want to provide privacy, which is guaranteed by the private cloud. From this standpoint, each economic unit does not want to afford the costs of designing a private cloud, but they want to share the responsibility (Zbakh et al, 2019: 22).

### **4. Hybrid cloud computing**

Hybrid cloud computing consists of two or more cloud patterns. The clouds themselves are not mixed with each other, but each cloud is separate and linked in some way with the other cloud. The hybrid cloud adds more complexity to the environment, but it also allows more flexibility in achieving the goals of the economic unit (Zbakh et al. al, 2019: 22).

## **Second: Cloud Computing Services**

There are many services provided by cloud computing technology based on its levels, which can be classified into three levels, namely (Hussein & Ahmed, 2017: 4):

### **1. Infrastructure as a Service (IaaS)**

In this type of services, the economic unit is provided with the infrastructure it needs to run its business, which includes networks and computer resources from servers and private stores, as well as experts.

### **2. Platform as a Service (Paas)**

In this type of service, its applications can be deployed using the infrastructure of cloud computing technology through the programs and tools provided by the service provider, which is the service model through which the user manages the process of deploying private applications, but not within the infrastructure.

### **3. Software as a Service (Saas)**

It is a model that allows users to access applications remotely through a web browser, and the user can publish and run their programs and applications. However, it cannot manage and control the infrastructure except for the limited control of some selected network components, such as the firewall. Examples of this model are the email service.

**Third: How to use cloud computing technologies and their challenges**

Cloud computing technology works for the beneficiary to obtain a service that enables him to store all his files outside the scope of his personal device, that is, he stores his files and data on cloud computing technology servers in the form of files and can be accessed from anywhere and at any time if there is an Internet connection. The user does not need programs, applications and devices with high capabilities, Likewise, the user does not need to upgrade the software, but all the user needs is a highly efficient internet network (Zhang et al, 2019: 15). Figure (1) shows the mechanism of user communication via cloud computing technology:

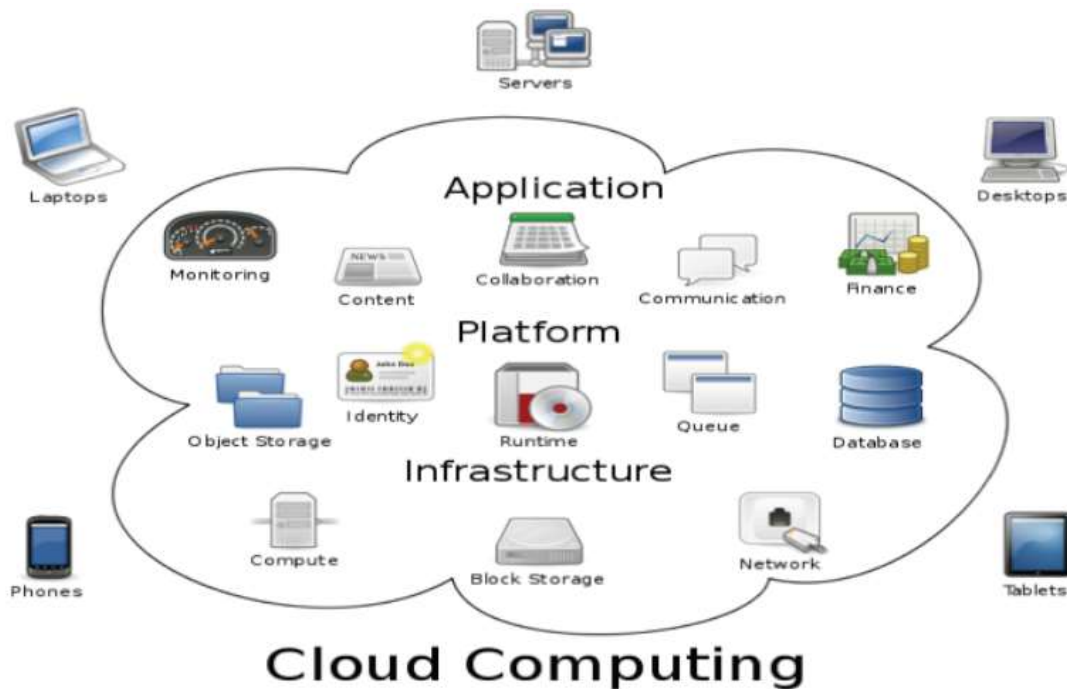


Figure (1) How users communicate via cloud computing technology

Source: J. Voas and J. Zhang, "Cloud Computing: New Wine or Just a New Bottle?" IEEE ITP ro, March/April 2009, p. 15.

**Fourth: The importance of using cloud computing technology in the accounting field**

The world is currently witnessing, in the words of Khanom, scientific and technical progress at all levels, especially in the field of modern information technology and the use of the Internet. The information technology revolution has brought about a transformation in the world of accounting, as there is a significant impact of the development and current use of information and communication technology in accounting information, because many of the economic units have adopted the use of cloud computing technology in the fields of accounting and auditing (Khanom, 2017: 31). In this context, Nechita & Pacurari indicate that cloud accounting is a different model . It shows the ability of the economic unit to display its current financial situation. In addition, it prepares the appropriate information necessary for any economic decision, especially the very important and difficult decisions such as the competition experienced by economic units today. Therefore, those units can disappear at the same speed that they can develop, adapt and grow, also . In further, with the great technological development, the nature of traditional accounting will not be sufficient. The need arose for cloud accounting, which works mainly on cloud computing technology, so professional organizations such as the American Institute of Certified Public Accountants (AICPA) increase the level of interest in employing cloud computing technology in the accounting field by providing a set of cloud assurance services and guidelines with increasing support for the applications that accountants and their clients need to do business (Nechita & Pacurari, 2013: 196).

Users' permanent and immediate access to information through the cloud is one of the most important factors that distinguish the economic units that use cloud computing technology, in addition to reducing costs (Maravi & Modi 2017:89).

In the same context, Mohammadi & Mohammadi stress that cloud computing technology is one of the most important factors that help economic units keep pace with scientific and technological development and employ it in organizing accounting work by relying on the Internet according to specialized systems that provide all accounting programs for the economic unit. Therefore, computing technology has a significant impact on the business strategies of economic units, the way in which these units conduct their business, the identification of hardware, software, communications infrastructure, risk management as well as cost management (Mohammadi & Mohammadi, 2014:109).

Cloud accounting data is sent to the cloud, where is processed and returned to the user. After that all application functions are performed off-site, and not on the users' desktop, which frees the economic unit from having to install and maintain software on individual desktop computers (Hatherly, 2013: 38). Economic units have begun to apply cloud computing technology to increase speed and accuracy and reduce costs of relying on traditional accounting, as instant financial reports are another advantage of applying this technology. Accounting programs may be developed by the economic unit, or purchased from the market, or it may be outsourced in order to develop customized software that meets the requirements of the economic unit (Sadighi, 2014: 3).

Some studies confirmed that economic factors are one of the reasons for the adoption of cloud accounting, due to the less use of equipment and machinery. This in turn leads to a reduction in capital investments, reduction in operational costs, and a reduction in various costs related to the internal management of information technology with the transfer of some costs, including installation costs and software to the service provider rather than the economic unit (Ozdemir & Elitas, 2015: 7). Other studies indicated that organizational factors are also motivating factors for the use of cloud accounting. This is because it leads to develop new products that enhance the competitive position of the economic unit and improve the performance of operations by focusing on creativity, innovation and value-added business, which positively affects the image of the economic unit among customers. In addition, cloud accounting leads to the integration of the accounting functions of the economic unit. Through the existence of a central system for data analysis and to ensure the quality of the accounting information contained in the financial reports, the contents of which are basically compatible with the requirements of International Financial Reporting Standards IFRSs and accounting guidelines of general acceptance (Dimitriu & Matei, 2014: 668). On the other hand, other studies show that technological factors also are one of the motivating factors for the use of cloud accounting in economic units in terms of the availability of computing resources anywhere and at any time. It allows accountants to carry out their job tasks while they are far from the economic unit. Cloud accounting also provides the availability of reliability and safety through electronic backup of accounting data in different geographical locations around the world. In further, it allows to safe access to data from another server in the event of failures in the main server. Finally, cloud accounting provides automatic updating of accounting software available on the cloud (Siclován, 2012: 112).

Finally, other studies indicated that reducing investment risks in information technology infrastructure is the motive for using cloud computing in economic units, by converting capital investments into operating expenses and transferring the risk to another entity, which is the service provider, which is one of the common ways to manage risks. Cloud computing reduces operational risks through outsourcing (Xinding Ma, 2015: 45).

**The importance of using cloud computing technology in the field of accounting can be summarized as follows:**

### **1. Reducing the costs of preparing accounting operations**

In this context, Dimitriu & Mateia point out that cost is one of the areas in which cloud accounting is superior to traditional accounting. Using a cloud-based system do not make a lump sum purchase of a program, or purchase and prepare a server to host it, which reduces costs. IT professionals fees avoid installation fees altogether. As accounting rules and tax regulations change, the accountant will not have to purchase and install updates. Instead, the monthly or annual subscription cost includes the update cost, and it is completed by the provider as needed (Dimitriu & Matei, 2014: 667).

### **2. Easy access to and use of all accounting information**

Access to detailed business financial information using traditional accounting has been limited and not available, except when the accountant can access the office to review paper records or even a desktop computer that holds the information. In contrast, cloud computing technology outweighs the traditional method in this regard. As long as the person has a connection with the internet, his accounting records are as close as a mobile device (Ou & Zhang, 2021:4).

**3. Update accounting information in real time**

One of the common problems in traditional accounting systems is updating accounting information when a single number needs to be changed. This means manually changing the record in each location where that number has changed, including ledgers and other documents. With cloud accounting, when new data is entered, it enters all the sites where it should appear, and this saves time and money that would arise if any site was lost (Zdemir & Elitas, 2015:50-51).

**4. Saving time for accounting operations**

Cloud accounting serves the work teams in the entire economic units because the data is available to all authorized users at all times and it is easily scalable. In addition, adding new users is as simple as setting up an authorized profile and password. Better yet, it makes collaboration easier. There is no need to congregate in one office and take turns reviewing important documents. All authorized users who have access can access to the Internet, view accounting data at one time, and carry out the work assigned to them from wherever they may be (Mohammedi & Mohammadi, 2014: 112).

**5. Automatic backup and restoration of accounting data**

There is another area in which cloud accounting is superior to traditional accounting. When it comes to automatic data backup and restoration, cloud computing technology enables economic units to automatically schedule the process of backing up accounting data on a daily, weekly or monthly basis according to the nature of their work without the need to copy accounting information updated manually and saved in a place outside the site. This leads to not forgetting to do so, and reduces the chance of human errors, and this helps economic units to secure information in the event of an intrusion, fire, or any other accident that may endanger sensitive and important accounting information. A cloud-based service provider can assist in data recovery, get the business back up and running quickly to reduce the impact of information loss and the problems it causes to the economic unit (Maravi & Modi, 2017:89).

**6. Instant fixes for accounting problems**

In traditional accounting systems, if there are any problems or errors in the accounting software, users have to wait until the errors are corrected and new statements are prepared. In cloud accounting, fixing software problems immediately is among the most important benefits that cloud computing technology gives to the economic units in Addressing accounting problems (Dimitriu & Matei, 2015:69).

**7. Improve cost efficiency in the workplace**

There is always area for improvement no matter how professional or efficient the business is, whether you are looking for ways to stay in the best contact with customers, or you are trying to maintain business security and confidentiality. Cloud accounting helps also to reduce the disadvantages that come with owning an economic unit of infrastructure. In traditional accounting systems, such as paying for many devices and work tools in full. While in cloud computing technology, the user can enjoy the "pay-as-you-go" feature, and he can also set up a monthly plan, which is a great way to compensate if a user has a limited budget (Dimitriu & Matei, 2015:69).

**THIRD PART: THE IMPORTANCE OF CLOUD COMPUTING TECHNOLOGY IN FACING THE CHALLENGES OF APPLYING IFRSS**

After the republican regime took control of the ruling system in Iraq, the movement towards interest and control of the economy began. A work system was formed for accounting control in the various industrial and productive sectors in Iraq, which is one of the first Arab countries to rely on the unified accounting system. This system was applied in 1971 in the general facility for spinning and weaving. Then it was applied in productive projects in 1972. In the year 1973, it was applied in the Ministry of Industry. In the year 1977, it was applied in the Ministry of Agriculture and Agrarian Reform. Finally, it became obligatory to apply by the various formations of the state in order to prepare an organized plan for preparing lists Finance in various governmental, private and mixed sectors (Hamwandy, 2021: 313). The unified accounting system evaluates fixed assets at historical cost. This is contrary to the principles of evaluation according to the International Financial Reporting Standards IFRSs, which depend on the fair value in addition to the historical cost. Finance is used to avoid flexibility in application and reduce the error rate in processing, and the supporters of this system, including (Shortridge & 2004: 34) believe that it is the easiest for accountants, but that after the expansion of international trade and the desire to enter the global markets and with the competition of economic units in the world and the scarcity of resources and the emergence of multinational companies and the need to prepare financial statements of an international nature have naturally created the need to adopt international financial reporting standards IFRSs at the global and regional levels (Amidu, 2019: 2). In contrast, opponents believe that international financial reporting standards IFRSs are unsuitable for all environments and countries. Therefore, standards may do not meet the needs of stakeholders in some countries due to the difference in accounting standards and practices from

one country to another as a result of legal, economic, cultural and other factors (Pricope, 2016: 28). On the other hand, Countries with emerging economies may face external pressure to move to IFRSs. As many of them were obligated by international bodies to apply these standards and make the process of convergence or adoption with IFRSs the main assessment of economic units to provide any kind of assistance (AL Mansour, 2019: 31).

The researchers believe that the difficulties facing the process of applying international financial reporting standards (IFRSs) in the Iraqi environment are related to the suitability of the economic environment, legal systems, the quality of education in general, accounting education in particular, and the effectiveness of professional bodies. In addition, other difficulties are the problems of the language in which the standards are issued, the lack of specialists and technicians responsible of the implementation of those standards, the high costs of the application. In further, severity of these difficulties in the Iraqi environment is a result of the difference between local laws and regulations with international because of its business environment. Furthermore, the International Accounting Standards Board set accounting standards and did not issue the unified mechanism for application and left the matter to countries to develop appropriate mechanisms for them. This leads to reduce the degree of compatibility between countries, in addition to that the process of applying international financial reporting standards needs to train both accountants and auditors so that the application process is done in the right way. This training requires huge resources that may not be available in the Iraqi environment.

Economic environment has become very variable than ever before. This speed of change resulted in a significant increase in the demand for the development of accounting services via the Internet. The use of cloud computing technology in the field of accounting helps to provide accounting services in a more efficient, flexible, fast way, and less expensive. In addition, the application of the principles are adopted by cloud computing technology along with the accounting activities carried out by the economic units led to the trend towards cloud accounting. The former includes the same functions of the accounting information system installed on the computer of the economic unit, but it actually works on the servers of the computing service provider and provides accounting services through cloud computing technology services (Marks, 2013:72). Therefore, most of the economic units now use the power of the internet and its reach to provide useful information to users of the financial statements. Most of them have websites, and a large percentage of the websites of these units contain links to access accounting information and other disclosures. In this context, economic units can reduce the costs of printing and publishing paper reports (Kieso et al, 2014: 1280), as the cloud accounting model today, as an innovative model, provides the best solutions to enable those units to compete through accuracy, flexibility and speed of obtaining useful information (Prichici & Ionescu, 2015: 491). The use of advanced models of cloud computing technology, record-keeping services, analysis, compliance, verification, implementation of control, improvement of monitoring processes, examination of reporting, preparation of financial reports, and data management have become basic functions involving accounting solutions based on cloud computing technology. The former can be used to improve efficiency, reduce costs, improve the internal operations of the economic unit, and enhance flexibility options for accountants (Seely, 2017: 2). Since cloud accounting is defined as a package of accounting services provided via the Internet compared to traditional accounting information systems. This makes it have an absolute advantage in reducing input costs and maintenance costs and enhancing data reliability and ease of use in economic units (Abdul Wahid, 2018: 6). The researchers' point of view, could lead to facilitating the application of "international financial reporting standards" and facing the challenges of the application process.

Report 15 issued by the American Financial Accounting Standards Board (FASB) in 2018 and updated in 2020, was also concerned with providing best practices for economic units applying cloud computing technology in the field of cost reduction and other advantages of cloud computing technology, as the focus of the council was on two types of cost. They are the purchase of the service itself and the purchase of assets related to cloud computing technology. It should be noted that the report did not focus on the accounting application of cloud computing technology in general. However, it indicated that the application of cloud computing technology in the field of accounting can contribute significantly to improving financial reports because it unifies programs Preparing financial statements and accounting reports between economic units. This is reflected in facilitating the application of international financial reporting standards in economic units (Goldstein, 2020: 275).

Through the foregoing, cloud computing technology facilitates the process of applying International Financial Reporting Standards (IFRSs) in economic units and facing the challenges of applying those standards, because of the information it provides that has several characteristics such as (data availability, ease of use, reliability, suitability, presentation quality, portability for measurement, comparison and appropriate timing). Thus, the economic units have an accounting base that contains all the information necessary to implement international financial reporting standards.

**FOURTH PART: THE ROLE OF CLOUD COMPUTING TECHNOLOGY IN FACILITATING THE APPLICATION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS**

In this aspect, reliance was made on designing a survey list, as (72) lists were distributed among the research sample represented by six banks listed in the Iraq Stock Exchange (the regular market). The banks were distributed as shown in the following table:

Table (2) Table of distribution of the survey lists to the banks of the research sample

| Name of the bank            | distributed forms | The forms were retrieved and analyzed |
|-----------------------------|-------------------|---------------------------------------|
| Mansour Investment Bank     | 12                | 9                                     |
| Iraqi Investment Bank       | 12                | 10                                    |
| Trans Iraq Investment Bank  | 12                | 9                                     |
| Middle East Investment Bank | 12                | 9                                     |
| Khaleej Commercial Bank     | 12                | 11                                    |
| National Bank of Iraq       | 12                | 10                                    |

Source: prepared by the two researchers

The researchers designed a table for each of the aforementioned three axes. It shows the paragraphs for each axis, the answer with yes or no, and the percentage of the answer with yes, which represents the level of application of the paragraphs of the survey list, which is the result of dividing the number of answers with yes by the total number of retrieved forms that were analyzed for each of the banks. The research sample, as well as extracting the total percentage, which represents the strength of each procedure, from the product of dividing the total yes answers by the number of analyzed questionnaires, which is (58) questionnaires.

As for the results reached by the researchers through examining and studying the level of application of international financial reporting standards and the use of cloud computing technology in the economic unit of the research sample, they were as shown in Table (3) below and as follows:

Table (3) Table of answers to the questions of the survey list

| <b>The role of cloud computing technology in facilitating the application of international financial reporting standards</b>                                                                                                                    |                                    |    |                             |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----|-----------------------------|-----|
| paragraphs                                                                                                                                                                                                                                      | Number of answers to the paragraph |    | Percentage of the paragraph |     |
|                                                                                                                                                                                                                                                 | Yes                                | no | yes                         | no  |
| 1. Cloud computing technology facilitates the exchange of information between banks, which leads to the possibility of benefiting from the expertise of banks that have succeeded in applying international financial reporting standards.      | 48                                 | 10 | 83%                         | 17% |
| 2. Cloud computing technology unifies the approved procedures for implementing international financial reporting standards in banks.                                                                                                            | 45                                 | 13 | 78%                         | 22% |
| 3. The use of cloud computing technology leads to raising the efficiency of accounting cadres by benefiting from the expertise provided by economic units applying international financial reporting standards.                                 | 45                                 | 13 | 78%                         | 22% |
| 4. The use of cloud computing technology gives the bank correct, updated and timely financial information that can help in applying international financial reporting standards.                                                                | 55                                 | 3  | 95%                         | 5%  |
| 5. The objective of applying International Financial Reporting Standards is to provide appropriate and truthful information in representation to all users, and this is what cloud computing technology provides.                               | 49                                 | 9  | 84%                         | 16% |
| 6. Cloud computing technology reduces the problem of discrepancies in the application of international financial reporting standards between banks for easy access to data by the supreme regulatory authorities at any time and from anywhere. | 44                                 | 14 | 76%                         | 24% |

|                                                                                                                                                                                                                                                                                                                                  |    |    |     |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|-----|-----|
| 7. Cloud computing technology facilitates the application of international financial reporting standards because it enables users to translate the elements of financial reports with utmost accuracy and efficiency and into more than one language, in addition to benefiting from electronically published financial reports. | 44 | 14 | 76% | 24% |
| 8. Cloud computing technology assists the bank in applying international financial reporting standards because it discloses information related to financial reports and combines them with complementary disclosures, which leads to integrated information .                                                                   | 41 | 17 | 72% | 28% |

*Source: prepared by the two researchers*

1. Cloud computing technology facilitates the exchange of information between banks, which leads to the possibility of benefiting from the expertise of banks that have succeeded in applying international financial reporting standards.

2. Cloud computing technology unifies the approved procedures for applying international financial reporting standards in banks.

3. The use of cloud computing technology leads to raising the efficiency of accounting cadres by benefiting from the expertise provided by banks applying international financial reporting standards.

4. The use of cloud computing technology gives banks correct, updated and timely financial information that can help in applying international financial reporting standards.

5. The objective of applying international financial reporting standards is to provide appropriate and truthful information in representation to all users, and this is what cloud computing technology provides.

6. Cloud computing technology reduces the problem of discrepancies in the application of international financial reporting standards between banks for easy access to data by the supreme regulatory authorities at any time and from anywhere.

7. Cloud computing technology facilitates the application of international financial reporting standards because it enables users to translate the elements of financial reports with utmost accuracy and efficiency and into more than one language, in addition to benefiting from financial reports published electronically.

8. Cloud computing technology helps banks apply international financial reporting standards because it discloses information related to financial reports and merges them with complementary disclosures, which leads to integrated information.

## FIFTH PART: CONCLUSIONS AND RECOMMENDATIONS

**First. Conclusions:** The researchers reached a set of conclusions, the most important of which are:

1. There is a limitation in the field of knowledge and professional expertise and the difficulty of benefiting from international experiences that have succeeded in applying international financial reporting standards due to the difficulty of presenting and analyzing data prepared manually or traditionally, due to the dependence of most banks in the research sample on traditional means in managing their financial affairs, which makes it difficult to raise them on the cloud and presented to experts to benefit from their expertise that facilitates the application of international financial reporting standards.

2. There is a discrepancy in the application of international financial reporting standards among the research sample banks, and the reason is due to the recent process of adopting the application of international financial reporting standards, the lack of knowledge of these standards due to their difficulty and complexities, and the lack of an easy-to-access database for most banks that adopt traditional accounting systems in Prepare and save data.

3. There is a clear weakness or slowdown in the application of international financial reporting standards in the research sample banks, despite the existence of laws that urge their application . In addition to the existence of a special department for monitoring compliance with standards in each of the research sample banks, but this does not mean that there is a comprehensive application of international financial reporting standards in those banks, and the reason is attributed to continuing to issue new standards or amending those that are no longer appropriate,

With the large volume of data and the adoption of traditional methods in preparing, saving and tabulating them, which makes it difficult to access and modify them according to the standards issued or amended.

4. There is a role for cloud computing technology in facilitating the application of international financial reporting standards because of the ease it provides in preparing and saving accounting information and the possibility of accessing it at any time and from any place where the Internet service is available.

5. Cloud computing technology indirectly affects the application of international financial reporting standards through the feedback that the issuers of these standards benefit from to provide the necessary notes and amendments to the standards.

6. The process of applying international financial reporting standards requires incurring a lot of costs, including the costs of training employees, and the costs of seeking expert expertise in the application process, which is one of the obstacles facing the process of applying international financial reporting standards.

**Second. Recommendations:** Based on the conclusions reached, the researchers recommend the following:

1. The need to take advantage of the capabilities and capabilities provided by cloud computing technology in facilitating the application of international financial reporting standards in the research sample banks and reaping the benefits accruing from relying on them in line with improving the quality of accounting information.

2. Benefiting from the experiences of international banks that have succeeded in applying international financial reporting standards, especially the Arab countries, due to their proximity to the local environment through developing human resource skills and moving away from traditional means in preparing, preserving and communicating accounting information.

3. Benefit from modern technology in developing the skills and capabilities of human resources through workshops and courses held by international professional organizations or companies that provide cloud computing services to avoid risks related to the application, and develop means of preparing, preserving and communicating accounting information through cooperation or merging between accounting expertise and technology expertise For the purpose of shifting from the traditional approach to the cloud approach.

4. Paying attention to issuing the necessary legislation and instructions to regulate the contractual and supervisory or security procedures necessary to protect the confidentiality of accounting information from violation, trading or access by unauthorized individuals between companies that provide cloud computing services and companies that use these services to avoid violating any of the terms of the contract.

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