

The Use of Cloud Computing Technology and its Impact on The Accounting Information System

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Abstract

The research aims to reveal the extent of the effect of the use of cloud computing technology on the work of the accounting information system by reviewing a sample of academics and professionals. The researcher achieved a set of conclusions, the most significant of which is that relying on cloud computing technology in the accounting field helps to speed up and organize accounting work and thus increase the efficacy of accounting information systems

I. The Introduction

Cloud computing is one of the most important factors that helped economic units in the areas of scientific and technological development and its exploitation in organizing accounting work based on the Internet according to dedicated systems that provide all accounting procedures for the economic unit . available to them and to create infrastructures with large capabilities that provide computing services from the cloud service provider at low costs.

Also, companies tend to provide their systems so as to give the better performance to their users, but the high costs of high-performance information system, and the improving of difficulty, expanding and developing these systems over time have made cloud computing an ideal solution because of the advantages it provides, including (flexibility, cost reduction, and speed). and permanent availability).

II. Problem Statement

In the context of reading the developments in the work of the accounting profession in the third millennium, cloud computing technology is one of those developments that help in reshaping the accounting profession as a result of developments and rapid changes and the increase in complexity in the commercial work environment surrounding the accounting occupation, in addition to the increase in global competition, and therefore the accountant must deal With these developments in the professional business environment, the most important of which is the digitization of business and the repercussions of big data and the capabilities and superior capabilities resulting from the use of the Internet and the increasing importance of exploration in accounting data, and in this field the accounting profession has benefited from contemporary concepts such as cloud computing technology in developing its business model and innovating the new Of which.

Accordingly, the research problem can be limited to a set of questions, as follows:

1. Is there a relationship between cloud computing technology and the efficiency of the accounting system?
2. Is there a correlation between cloud computing technology and the effectiveness of the accounting system?
3. Is there a relationship between cloud computing technology and the ingredients of an accounting system?

Significance of the Study

The importance of this research focuses on the following: -

1. The limitations of the research that dealt with it and the novelty of the topic, in addition to the need to develop it with continuous scientific research. There are many studies and research that recommend the need to continue scientific research in identifying areas in which cloud computing technologies can be used in accounting system.
2. Determine the group of positive effects resulting from the Usage of cloud computing technology in several areas of accounting.

Goal of the Paper

The research objectives include the following:-

1. Focusing on the concept of cloud computing , as well as identifying areas of benefit from it and studying its implications for the accounting information system.
2. Detecting the effect of cloud computing on the work of the accounting system in the case of using online accounting apps, or what is known as the term cloud accounting.
3. A review of the opinions of a sample of academics and professionals (in that they represent the practical aspect of the accounting and auditing profession) on how to exploit cloud computing applications, and their impact on accounting information systems.

Paper Hypothesis

The research was based on a set of main hypotheses:

1. The first main hypothesis: - states (there is no correlation between cloud computing technology and the accounting information system) and the following sub-hypotheses are branched from it:
 - There is no correlation between The cloud and the efficiency variable of the accounting system.
 - There is no correlation between cloud technology and the effectiveness variable of the accounting system.
 - There is no correlation between cloud technology and the variable components of the accounting system.
2. The second main hypothesis: - It states (there is no influence relationship between computing technology and the accounting system) and the following sub-hypotheses are derived from it:
 - There is no impact relationship between computing technology and the efficiency variable of the accounting system.
 - There is no impact relationship between computing technology and the effectiveness variable of the accounting system.
 - There is no influence relationship between computing technology and the variable components of the accounting system.

THEORETICAL PART

First: Definition of cloud computing and cloud accounting

Cloud computing is defined as “a set of services, applications, and resources, which are available through the Internet, and are managed by a third party called (the service provider) where the beneficiary uses these services when needed.” He added that instead of using your computer to store Software and processing on it, cloud computing provides all these resources on the cloud as soon as they are accessed, and the personal computer becomes just a tool for accessing the cloud and nothing more, and so on for economic units, instead of placing and loading the workers’ devices with many programs and applications for doing their work, which You need hardware, software, applications, maintenance, and other resources. Cloud computing works to provide all computing resources as a service, when they are needed by simply accessing the cloud. (Al-Alimi, 2018: 11)

As for the term accounting computing, it has defined as “the process of preparing accounts through the use of an accounting program hosted by a third party on the Internet.” Cloud accounting is defined as “the ability to see business account balances, outstanding invoices, general cash position, i.e. the ability to make accounting available online 24 hours a day, 7 days a week.” And that is by enabling access to all programs and data from any device that secures an Internet connection (Shenawa and Al-Shammari, 2019: 3).

Cloud accounting is defined as “computer processing of accounting data using a combination of published computing services, apps, information access, and data storage without the user having to know the physical location, and configuration of the systems that provide these services. This is also referred to as “electronic accounting” and “accounting.” Online and real-time accounting. (Livera,2017:2).

It is also defined as "providing software applications as services over the Internet that allows users to store data and use applications through different devices located in several locations." Cloud accounting is defined as hosting accounting software from remote servers, and data is sent and stored securely in the "cloud", where it is processed and returned to the user. In simplified words is online accounting ie on the Internet. (Sharma,2018:12).

Second: cloud computing models

Cloud computing models are many, but they can be identified in four models(Marand, 2013: 7) and (Shenawa, 2019: 9).

- Public cloud, meaning that the cloud provides an infrastructure that benefits from it. A large number of companies or government organizations. -
- Private cloud A cloud infrastructure is available for one company to benefit from.

- Community Cloud The cloud provides an infrastructure for a specific purpose of a particular community with common interests.
- A Hybrid Cloud is a cloud that can provide a composite infrastructure of two or more of the above mentioned clouds.

Third: Advantages of cloud computing in the accounting field

The advantages of cloud computing are many and can be categorized into two groups

- performance level
 1. The user can deal with his files and applications that include all accounting data and information through the cloud without the need to provide that through his own device.
 2. The possibility of providing accounting information through financial reports very quickly, which ensures that sound decisions are taken in a timely manner.
 3. The possibility of self-control by considering them as independent systems that are managed transparently, and thus the accounting information is transmitted impartially and independently
 4. The high level of performance, which is due to the failure to download accounting data programs and files on personal computers, and the user is not exposed to delays in receiving the service as a result of operating personal computers.
 5. Increasing computing capabilities, as well as unlimited storage capacity, and it can also be increased This capacity at any time, so the cloud can contain the largest amount of data and infinite accounting information.
 6. The ability to access data and accounting information files from anywhere and upload them to the personal accounts of its users, which helps to conduct financial analyzes
 7. Energy Efficiency Cloud computing technology is more energy efficient, as we can notice that the cloud solution provides less energy consumption, because the equipment used is less, and the energy allocated to servers is reduced by 70-90%, by using fewer servers (Windekilde, 2017: 32).
- cost level
 1. Saving a lot of cost needed to publish programs, as all the user needs is a computer connected to an internet line.
 2. There is no need to purchase powerful and expensive equipment to use cloud computing, all processing, application operation, adjustments, and account setup are all done within the cloud.
 3. IT infrastructure costs are reduced.
 4. Significant decrease in maintenance costs, regardless of the number of devices and software available in the company.
 5. Reducing the expenses of updating programs, no matter how large the volume of stored accounting data or the volume of accounting information contained in financial reports, as all programs occur automatically

The researchers believe that the work of accounting system using computing will lead to the following positive effects:-

- Keeping abreast of developments in the information technology environment and trying to benefit from them in a way that contributes to achieving the efficiency of accounting information systems.
- Benefiting from the services provided by Internet companies in the areas of cloud storage and cloud computing can contribute to achieving the qualitative characteristics of accounting information.
- Developing the technical capabilities of accountants and facilitating them to carry out unconventional operations related to systems analysis and design, as well as financial analysis using advanced technical programs.
- Reducing the costs of owning, maintaining and updating infrastructure, which contributes to reducing the costs of information production.
- Practicing accounting work at any time and any place without being restricted to being in a specific place (it is the place of work or a specific time (it is the specific work time).
- Communicate with people and companies that are related to the company's accounting work by sharing data and files directly.

Fourth: The effect of computing on the effectiveness of the accounting system

With regard to the effectiveness of accounting information systems, it is required to strive towards achieving the positive relationship between the outputs of accounting systems and the goals it seeks to achieve, and the approval of this by the beneficiaries in making sound decisions in light of them. In order to determine the effectiveness of accounting systems in light of the use of cloud computing, it is necessary to research how cloud computing contributes to achieving the qualitative characteristics of accounting information that must be

available in financial reports and that leads to the determination of its quality. Cloud computing technology is characterized as one of the technological innovations with several advantages, the most important of which are (ease of use, availability of information, convenience, reliability, quality of presentation, comparability and measurement) and all of these advantages lead to an increase in the quality of financial statements and thus increase the effectiveness of the accounting information system.

Cloud computing technology increases the company's ability to provide data and improve its competitiveness in the market through advanced technologies, as many, if not most, organizations were unable to access this ability in the past, in addition to that, cloud computing technology increases the quality of lists Financial statements in accordance with IFRS standards, as these standards affirmed regarding judging the quality of financial statements by the importance of having a set of main characteristics (suitability, honest representation) that work to increase confidence in financial reports, and these characteristics are: - (Champion, 17, 2019).

1. **Suitability:** It means that the information is characterized by appropriateness, as it has the ability to make differences in investment and administrative decisions, as a result of its ability or predictive value. In addition to its ability to feedback, which aims to develop and improve the quality of the accounting system's outputs and its ability to adapt to the environment and changing conditions, and cloud computing helps to enhance the relevance characteristic by supporting the confirmatory and predictive value of financial and non-financial information through its analysis of huge information in a timely manner (Mohammed, 2016: 65).
2. **Honest representation:** The characteristic of honest representation in accordance with international financial reporting standards is one of the important characteristics that reflect the quality of accounting information, as well as a set of characteristics that support and enhance the quality of accounting information issued by international standards, which are: verifiability, appropriate timing, comparability, and finally, portability. to understand.

The researchers believe that the use of cloud computing can contribute to achieving the qualitative characteristics of accounting information through:-

1. Providing the appropriate information to take various decisions with the appropriate amount of stored information as well as the information that was used and benefited from in similar decisions.
2. Providing information in a timely manner as soon as it is retrieved from the databases stored in it and provided that there is an internet connection from anywhere, as well as the possibility of taking advantage of cloud computing technology in providing information by providing it immediately when the real-time reporting feature is taken advantage of .
3. The possibility of comparing the information that is provided to the decision maker by making use of the databases and the information stored in them for different periods of time
4. The property of objectivity is achieved through easy access to information and all related documents and evidence, as well as errors and falsification and avoidance of bias.

Fifth: Cloud computing and financial reporting

Multiple financial transactions involving a period are data processing that summarizes a company's operations, financial position, or cash flows, so accounting reports are usually the provision of relevant information covering the quarterly and annual periods that support subsequent financial decisions. Similarly, accounting information is usually presented to other stakeholders, such as potential investors, creditors, suppliers, and customers. The real report in accounting provides complete and immediate information about the major dimensions of the accounting unit, allowing management to determine the direction and best actions to take advantage of each moment.

With instant access to real-time financial reports, the management team has the numbers, insights, and key data needed to make sound and informed decisions, and to gain more insight from private financial data. Cloud-based solutions help manage business and customer relationships. Business relationships are important, and the ability to search and find account information within a single moment certainly helps maintain those relationships. The user accesses financial data through the cloud in real time, meaning that updates happen in real time. From here, all The information provided is the most current, and all users have access to the same numbers, this eliminates the need for redundant reporting, and also reduces the risk of error.

Financial reporting has characteristics that make it uniquely rigorous, and one of the characteristics that requires special effort is its global implications Communication across vast distances across different cultures, between languages and in different time zones presents a unique set of challenges for the corporate finance function. Often, whenever a remote reporting unit is out of the center of the cluster, it is more likely that this process, technology, or personnel will compromise the efficiency of the close process. However, the cloud has operational optimization capabilities to change all that.

Unlimited scalability, immediacy, and cloud access mean that every reporting entity can freely participate in the process. This provides all participants with a complete, real-time picture of the reporting status, through a high level of clarity and collaboration - starting with data capture Even filing, all in a secure environment, this in turn, can form the basis for continuous improvement in the process to make more effective decisions and work more quickly, improve and shorten the financial closing process through improved access to data and embedded collaboration, and balance the financial needs of the company between the head Money and operating budgets. (Abdullah and Jassim, 2017: 557).

In addition, cloud computing allows enterprises to reduce implementation costs and cloud computing also has the advantage of allowing small and medium-sized companies to access accounting information systems, which was previously only affordable for large companies. As well as the many advantages of cloud computing such as flexibility, scalability, and low upfront maintenance costs, the most important feature that is more interesting from a real-time reporting perspective, there is access anytime and anywhere, and there is an internet connection Different types of stakeholder reports (Trego & Belfo & Estébanez, 2019: 119).

III. RESULT

First: - A description of the study dimensions and its diagnosis

This topic deals with the description and diagnosis of the main dimensions of the research, represented by the cloud computing dimension and the accounting information systems dimension and its variables represented (the efficiency of accounting information systems, the effectiveness of accounting information systems, and the components of accounting information systems that contributed to building the research scheme and its hypotheses, and to achieve this, descriptive statistical analyzes were used.

1. Cloud Computing

Table (1) presents the frequency distributions, percentages, means and standard deviations of the cloud computing dimension through the answers of the respondents (academics and professionals specialized in the accounting profession). Table (1) indicates that an average of (41.871%) of the answers were, with a degree of (strongly agree, agree), and in contrast the other answers were in disagreement with a rate of (3.961%), and these answers support the arithmetic mean value, which reached (4.109%). The standard deviation is (0.737%), and the factor that contributed to the positivity of this variable is (X19), which states (You make backup copies in a regular automatic way, which protects them from loss), and it was one of the most important factors that contributed to enriching this variable by the percentage of agreement before The respondents with a mean value of (4.404%) and a standard deviation of (0.683%).

Table (1) Description and diagnosis of cloud accounting variables

	Variables	response scale										Arithmetic mean	standard deviation
		Strongly disagree		I do not agree		neutral		Agreed		Strongly agree			
	Cloud Computing	NS	%	NS	%	NS	%	NS	%	NS	%		
1	The use of cloud computing technology in the accounting field is important to keep pace with contemporary technical developments	-	-	2	%1	11	5.4	106	51.7	86	42	4.346	0.627
2	There is a role for senior management in using cloud computing technology in the accounting field	-	-	10	4.9	25	12.2	122	59.5	48	23.4	4.014	0.744
3	Cloud computing reduces operational costs	-	-	7	3.4	30	14.6	105	51.2	63	30.7	4.092	0.764
4	Cloud computing does not take much time	-	-	4	2.0	12	5.9	106	51.7	83	40.5	4.307	0.670
5	Cloud computing helps employees communicate and collaborate collectively	-	-	5	2.4	32	15.6	116	56.6	52	25.4	4.048	0.712
6	Cloud computing technology contributes to access to the latest versions of software	-	-	4	2.0	27	13.2	106	51.7	68	33.2	4.161	0.719
7	Cloud computing technology helps reduce red tape in the organization	2	1.0	3	1.5	16	7.8	101	49.3	83	40.5	4.268	0.748
8	Cloud computing contributes to increasing the efficiency of the performance of enterprises	-	-	6	2.9	19	9.3	110	53.7	70	34.1	4.190	0.719

9	Facilitate access to the financial operations courses in the institution through the platforms	-	-	4	2.0	25	12.2	124	60.5	52	25.4	4.092	0.668	
10	The ability to compare the estimated and actual numbers accurately through cloud programs and applications	2	1.0	1	0.5	21	10.2	111	54.1	70	34.1	4.200	0.716	
11	Cloud computing technology helps to compare financial information with financial information for previous periods or financial information for similar industries	2	1.0	5	2.4	20	9.8	104	50.7	74	36.1	4.185	0.782	
12	Cloud computing technology helps reduce reporting errors	-	-	15	7.3	41	20.0	106	51.7	43	21.0	3.863	0.828	
13	Cloud computing technology allows the ability to modify the resulting reports to suit the needs of the beneficiaries	1	0.5	7	3.4	52	25.4	117	57.1	28	13.7	3.800	0.730	
14	Cloud computing technology enables any addition or modification to the electronic accounting systems according to the customer's need	1	0.5	7	3.4	37	18.0	115	56.1	45	22.0	3.609	1.026	
15	The possibility of collecting information related to the financial statements without the need for field visits.	3	1.5	35	17.1	40	19.5	88	42.9	39	19.0	4.073	0.671	
16	Summarizing the results of the audit for review with the company's management through the communication networks located on the cloud computing platforms	-	-	6	2.9	21	10.2	130	63.4	48	23.4	4.073	0.671	
17	Discussing reports through virtual meetings in the cloud with the company's management	2	1.0	13	6.3	43	21.0	115	56.1	32	15.6	3.790	0.816	
18	Training courses increase the effectiveness of dealing with cloud computing technologies	1	0.5	1	0.5	9	4.4	105	51.2	89	43.4	4.365	0.640	
19	It makes regular backups, which protects them from loss	-	-	6	2.9	5	2.4	94	45.9	100	48.8	4.4.4	0.683	
20	Cloud computing offers virtually unlimited storage capacity compared to the known storage capacity of desktop hard drives.	1	0.5	4	2.0	20	9.8	96	46.8	84	41.0	4.258	0.751	
21	Reducing the large building space for the size of institutions by reducing the size and number of offices because it allows access anywhere without the administration's commitment to a specific place.	-	-	10	4.9	24	11.7	96	46.8	75	36.6	4.151	0.811	
General Average		0.357		3.604		12.314		52.795		30.947		4.109		0.737
The overall rate of the variable		3.961				12.314		41.871				4.109		0.737

Source: Prepared by researchers based on the statistical program SPSS

2. Description of the accounting information systems dimension and its variables

Table (2) presents the frequency distributions, percentages, arithmetic means, and standard deviations of the accounting information systems dimension and its variables through the answers of the respondents (academics and professionals specialized in the accounting profession).

A. The focus of accounting information systems

Table (2) indicates through what appeared from the results of the overall overall average of the accounting information systems axis (80.091%) of the answers were, to a degree (strongly agree, agree), and in return the other answers were in disagreement at a rate (4.347%), and these answers support the value of The arithmetic mean (4.015%) and the standard deviation (0.765%).

• **Efficiency of accounting information systems**

Table (2) indicates that an average of (80.463%) of the answers was (strongly agreed, agreed), and the other answers were in disagreement at a rate of (4.227%), and these answers are supported by the arithmetic mean value of (4.026%) and standard deviation (0.758%), and the factor that contributed to positive fortification. This variable is (Y9), which states (cloud accounting ensures that users have access to authorized and relevant information only). The percentage of agreement on this factor in the research sample was (49.3%), and this rate supports the arithmetic mean value of (4.336%) and the standard deviation value of (0.670%), as well as (Y8), which states (cloud computing technology helps eliminate duplicate entries to prevent errors and increase data accuracy), the percentage of agreement strongly for this factor was (55.6%) and supports This average is the arithmetic mean value of (4.204%), and the standard deviation value of (0.705%), and the factor that was more negative in supporting this variable is (Y5), which states (cloud computing reduces the number of foreign sales representatives), where it came with a value of An arithmetic mean (30724%), a standard deviation (3.726%), and a standard deviation (0.853%).

• **Effectiveness of accounting information systems**

Table (2) indicates that an average of (82.799%) of the answers were, with a degree of (strongly agree, agree), and in contrast, the other answers were in disagreement at a rate of (3.262%), and these answers are supported by the arithmetic mean value, which reached (4.064%), As for the factor that contributed to the positivity of this variable, it is (Y12), which states (that storing accounting data in the cloud avoids risks that may lead to loss). The percentage of agreement on this factor by the research sample was (52.2%), and this supports this The average value of the arithmetic mean of (4.292%) and the value of the standard deviation of (0.680%), as well as (Y18), which states (the use of cloud computing applications supports the accuracy of accounting information), the percentage of agreement on this factor by the research sample was what Its amount is (51.7%), and this rate supports the arithmetic mean value of (51.7%) and the standard deviation value of (0.796%).

• **Elements of accounting information systems**

Table (2) indicates that an average of (73.65%) of the answers were, with a degree of (strongly agree, agree), and the other answers were in disagreement at a rate of (6.85%), and these answers are supported by the arithmetic mean value that reached (3.886%) and deviation The standard factor (0.835%), and the factor that contributed to the positive enrichment of this variable is (23Y), which states (cloud computing works to simplify business operations). The percentage of agreement on this factor by the research sample was (60.0%), and supports This average has an arithmetic mean value of 4.034% and a standard deviation of 0.716%, as well as (22Y), which states (cloud computing works on the ability to achieve immediate feedback). The percentage of agreement strongly for this factor was (53.7). %, and this average supports the arithmetic mean value (4.073%), and the standard deviation value (747%).

Through the foregoing, it is clear that the majority of the respondents support the use of cloud computing because of its impact on the work of accounting systems by facilitating accounting work and the valuable benefits that cloud computing technology adds to accounting information systems and accounting work in general.

Table (2) Describe and diagnose accounting information systems variables

	Variables	Response scale										Arithmetic mean	standard deviation
		Strongly disagree		I do not agree		neutral		Agreed		Strongly agree			
		NS	%	NS	%	NS	%	NS	%	NS	%		
	The efficiency of the accounting information system	NS	%	NS	%	NS	%	NS	%	NS	%		
1	Cloud computing technology helps analyze big data faster	0	0	4	2.0	33	16.1	124	60.5	44	21.5	4.014	0.675
2	Cloud computing links the efficiency of accounting information with the economic value of the information .	2	1.0	15	7.3	42	20.5	104	50.7	42	20.5	3.824	0.873
3	Cloud computing technology helps to conduct accounting transactions instantly and without errors	1	0.5	5	2.4	20	9.8	118	57.6	61	29.8	4.136	0.721
4	Cloud computing services allow users of financial data to obtain all financial reports submitted by the applicable	1	0.5	17	8.3	54	26.3	97	47.3	36	17.6	3.731	0.863

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	system at any time												
5	Cloud computing reduces the number of foreign salespeople	2	1.0	17	8.3	47	22.9	108	52.7	31	15.1	3.726	0.853
6	Elimination of hardware and software maintenance and management expenses because the cloud service provider is responsible for it.	0	0	8	3.9	35	17.1	108	52.7	54	26.3	4.014	0.770
7	Cloud computing technology reduces time and labor costs while increasing productivity	1	0.5	2	1.0	23	11.2	118	57.6	61	29.8	4.151	0.687
8	Cloud computing technology helps eliminate duplicate entries to prevent errors and increase data accuracy	2	1.0	1	0.5	19	9.3	114	55.6	69	33.7	4.204	0.705
9	Cloud computing ensures that users have access to only authorized and relevant information.	1	0.5	1	0.5	14	6.8	101	49.3	88	42.9	4.336	0.670
10	Cloud computing enables managers to access the financial data of their company at any time	0	0	7	3.4	41	20.0	109	53.2	48	23.4	3.965	0.756
11	Cloud computing is more energy efficient	1	0.5	7	3.4	18	8.8	106	51.7	73	35.6	4.185	0.770
	General Average	0.5		3.727		15.345		53.536		26.927		4.026	0.758
	The overall rate of the variable	4.227				80.463							
The effectiveness of the accounting information system													
12	Storing accounting data in the cloud avoids the risk of loss	1	0.5	2	1.0	14	6.8	107	52.2	81	39.5	4.292	0.680
13	The use of cloud accounting helps reduce the costs of maintaining and managing data	0	0	9	4.4	26	12.7	112	54.6	58	28.3	4.068	0.763
14	The use of cloud computing applications confirms the effectiveness in providing accounting information	1	0.5	3	1.5	21	10.2	140	68.3	40	19.5	4.048	0.632
15	Cloud computing works to achieve the property of neutrality in communicating data and information contained in reports and financial statements	1	0.5	9	4.4	39	19.0	120	58.5	36	17.6	3.882	0.757
16	Cloud computing improves the quality of accounting information	1	0.5	4	2.0	29	14.1	109	53.2	62	30.2	4.107	0.746
17	The use of cloud computing applications supports the predictive and confirmatory value of accounting information	0	0	4	2.0	46	22.4	117	57.1	38	18.5	3.922	0.695
18	The use of cloud computing applications supports the accuracy of accounting information	2	1.0	6	2.9	23	11.2	106	51.7	68	33.2	4.131	0.796
19	Cloud computing protects the integrity of their customers' data by minimizing the possibility of data loss	2	1.0	8	3.9	31	15.1	97	47.3	67	32.7	4.068	0.849
General Average		0.5		2.762		13.937		55.362		27.437		4.064	0.739
The overall rate of the variable		3.262				82.799							
The components of accounting information systems													
20	Cloud computing affects the notebook collection and is being taken away because	4	2.0	23	11.2	58	28.3	80	39.0	40	19.5	3.629	0.984

	applications are available on the cloud												
21	Cloud computing affects documents and documents and is dispensed with because it is self-service for customers	3	1.5	15	7.3	42	20.5	103	50.2	42	20.5	3.809	0.895
22	Cloud computing enables immediate feedback	1	0.5	4	2	32	15.6	110	53.7	58	28.3	4.073	0.747
23	Cloud computing simplifies business processes	1	0.5	5	2.4	28	13.7	123	60.0	48	23.4	4.034	0.716
General Average		1.125		5,725		19.525		50.725		22.925		3.886	
The overall rate of the variable		6.85				19.525		73.65				3.886	
overall average		4.347				15.582		80.091				4.015	

Source: Prepared by researchers based on the statistical program SPSS.

Second: Testing the research hypotheses

A. Analysis of the correlations between the variables of the research sample

This axis focuses on testing the first main hypothesis and its sub-hypothesis, which aims to determine the nature and strength of the correlation between the research variables, represented by cloud computing, accounting information systems and its variables, depending on the values of the correlation coefficient and testing the significance of the correlation between these two variables, as follows:-

The main hypothesis: which states (there is no correlation between cloud computing and accounting information systems).

Table (3) shows the value of the correlation relationship between the computing dimension and accounting information systems, as the table below shows that the value of the correlation coefficient between the two dimensions is (* * 0.752), which indicates the existence of a positive significant correlation between computing and information systems, and that the relationship is strong and excellent between Accordingly, academics and practitioners must move towards adopting the use of cloud computing services in accounting work, and based on the foregoing, Reject the hypothesis and accept the alternative, which states that (there is a correlation between cloud computing and accounting information systems).

Table (3): The correlation between cloud computing and accounting information systems as the independent variable

Dependent variable	Independent variable	Cloud Computing
Accounting Information Systems		**0.752

N=205 *(0.05) **(0.01)

Source: The results were prepared by researchers based on the SPSS statistical program

- **The first sub-hypothesis:** (there is no correlation between cloud computing and the variable of the efficiency of accounting system) and for the purpose of verifying the test of the first sub-hypothesis for the purpose of finding the correlation between the two dimensions of the research, Table (4) shows the value of the correlation between the dimension of cloud computing and the efficiency of accounting information systems. The table below shows that the value of the relationship coefficient between the two dimensions is (**0.719), which indicates the existence of a positive significant correlation between cloud computing and the efficiency of accounting information systems, and that the relationship is strong and excellent between the two variables, and accordingly academics and practitioners should move towards maximizing the benefit Of the huge electronic infrastructure provided by cloud computing technologies for their contribution to improving the efficiency of accounting information systems, and based on the foregoing, Reject the hypothesis and accept the alternative, which states that (there is a correlation between cloud computing and the efficiency of accounting information systems).

Table (4): The correlation between cloud computing and the efficiency of accounting information systems

Independent variable	Cloud Computing
Dependent variable	
Efficiency of accounting information systems	**0.719
N = 205	*(0.05) **(0.01)

• **The second sub-hypothesis:-** (there is no correlation between cloud computing and the variable of the effectiveness of accounting system) and for the purpose of verifying the test of the second sub-hypothesis for the purpose of finding the correlation between the two dimensions of the research Table (5) shows the value of the correlation between the dimension of cloud computing and the effectiveness of accounting system The table below shows that the value of the correlation coefficient between the two dimensions is (* * 0.671), which indicates that there is a positive significant correlation between cloud computing and the effectiveness of accounting system, and that the relationship is strong and excellent between the two variables, which means that computing increases The effectiveness of accounting system and therefore Reject the hypothesis and accept the alternative, which states that (there is a correlation between cloud computing and the variable of the effectiveness of accounting information systems).

Table (5) The relationship between cloud computing and the effectiveness of accounting system

Independent variable	Cloud Computing
Dependent variable	
The effectiveness of accounting information systems	0.671**
N = 205	*(0.05) **(0.01)

• **The third sub-hypothesis:-** (there is no correlation between computing and the variable of the components of accounting system) and for the purpose of verifying the test of the third sub-hypothesis for the purpose of finding the correlation between the two dimensions of the study. Table (6) shows the value of the correlation between the dimension of cloud computing and the components of accounting information systems The table below shows that the value of the correlation coefficient between the two dimensions is (* * 0.617), which indicates the existence of a positive significant correlation between cloud computing and the components of accounting information systems, and that the relationship is strong and excellent between the two variables, and therefore the hypothesis is rejected, which It states that (there is a correlation between cloud computing and the variable components of accounting information systems).

Table (6): The correlation between cloud computing and variable accounting information components

Independent variable	Cloud Computing
Dependent variable	
The components of accounting information systems	**0.617
N = 205	*(0.05) **(0.01)

Source: The results were prepared by researchers based on the SPSS statistical program

B. Analysis of the impact relationships between the variables of the research sample

The second main hypothesis:- which states that there is no influence relationship between computing and the accounting system.

The results of Table (7) show the moral analysis between each of the computing and the information system, as the calculated (F) value reached (263.518), which is higher than its tabular value, which is at a level of significance (0.01) and two degrees of freedom (1,203). The value of the coefficient of determination was recorded (R2) (0.565), which indicates that the percentage of the explained difference in accounting information systems due to the impact of cloud computing is (56.5%) and the remaining percentage (43.5%) represents the contribution of the variables not included in the research scheme.

It is clear from the value of (β) and its (T) test that the impact of cloud computing on accounting information systems was (0.651) and in terms of the calculated (T) value (16.233) which is greater than its scheduled value of (2.326), which reflects the nature of the respondents' answers about their ability to Interpretation of the effects of cloud computing on accounting information systems. Accordingly, the second

main hypothesis was rejected and the alternative hypothesis was accepted, which states (there is an influence relationship between cloud computing and accounting information systems).

Table (7): The impact relationship between computing and accounting systems

Independent dimensions Approved Dimension	Accounting Information Systems					
	R ²	D.F	F		B	Sig
			calculated	tabular		
Cloud Computing	0.565	1 203	263.518	3.841	0.651 16.233	0.000

The following sub-hypotheses are derived from it:

- The first sub-hypothesis:- (there is no influence relationship between cloud computing and the efficiency of accounting information systems).

For the purpose of revealing the nature of the effect in the first sub-hypothesis. The results of Table (8) indicate the moral analysis between cloud computing and the efficiency of accounting information systems, as the calculated (F) value reached (217.230), which is higher than its tabular value of (3,841) at a significant level of (0.01) and two degrees of freedom (1,203). The value of the coefficient of determination (R²) was (0.517), which indicates that the percentage of the explained difference in the efficiency of accounting system due to the impact of cloud computing is (51.7%), and the remaining percentage (48.3%) represents the contribution of the variables not included in the research scheme.

It is clear from the value of (β) of (0.594) and its (T) test that the impact of cloud computing on accounting information systems was (0.594), and in terms of the calculated (T) value (14,739) which is greater than its scheduled value of (2.326), which reflects the nature of individuals' answers The respondents expressed their ability to explain the effects of cloud computing on the efficiency of accounting information systems. Accordingly, the first sub-hypothesis was rejected and the alternative hypothesis was accepted, which states (there is an impact relationship between cloud computing and the efficiency of accounting information systems).

Table (8): The impact relationship between computing and the efficiency of accounting systems

Independent dimensions Approved Dimension	Efficiency of the accounting system					
	R ²	D.F	F		B	Sig
			calculated	tabular		
Cloud Computing	0.517	1 203	217.230	3.841	0.594 (14.739)	0.000

The second sub-hypothesis:- (there is no influence relationship between cloud computing and the effectiveness of accounting system).

For the purpose of revealing the nature of the effect in the second sub-hypothesis. The results of Table (9) show the moral analysis between cloud computing and the effectiveness of accounting information systems, as the calculated (F) value amounted to (165.897), which is higher than its tabular value of (3,841) at a level of significance (0.01) and two degrees of freedom (1,203), and the value of The coefficient of determination (2R) is (0.450), which indicates that the percentage of the explained difference in the efficiency of accounting information systems due to the impact of computing is (45%), and the remaining percentage (55%) represents the contribution of the variables not included in the research scheme.

It is inferred from the value of (β) and its (T) test that the impact of computing on the effectiveness of accounting information systems was (0.539), and in terms of the calculated (T) value (12,880), which is greater than its scheduled value of (2.326), which reflects the nature of the respondents' answers about their ability In explaining the effects of computing on the effectiveness of accounting system. Accordingly, the second sub-hypothesis was rejected and the alternative hypothesis was accepted, which states (there is an impact relationship between cloud computing and the effectiveness of accounting information systems).

Table (9): The impact relationship between computing and the effectiveness of accounting systems

Independent dimensions Approved Dimension	The effectiveness of the accounting system					
	R ²	D.F	F		B	Sig
			calculated	tabular		
Cloud Computing	0.450	1 203	165.897	3.841	0.539 12.880	0.000

The third sub-hypothesis: - (there is no influence relationship between cloud computing and the components of accounting system).

For the purpose of revealing the nature of the effect contained in the third sub-hypothesis, the results of Table (10) indicate the moral analysis between cloud computing and the components of accounting information systems. (0.01) and two degrees of freedom (1,203). The value of the coefficient of determination (R²) was (0.381), which indicates that the percentage of the explained difference in the components of accounting system due to the impact of cloud computing (38.1%) and the remaining percentage (61.9%) represents the contribution of the variables not included in the research scheme.

It is inferred from the value of (B) and its (T) test that the impact of computing on the components of accounting system was (0.411) and in terms of the calculated (T) value (11.182), which is greater than its scheduled value of (2.326), which reflects the nature of the respondents' answers and their ability to Interpretation of the effects of cloud computing on the components of accounting system. Accordingly, the third sub-hypothesis was rejected and the alternative hypothesis was accepted, which states (there is an impact relationship between cloud computing and the components of accounting information systems).

Table (10): The impact relationship between computing and the components of accounting systems

Independent dimensions Approved Dimension	The components of the accounting system					
	R ²	D.F	F		B	Sig
			calculated	tabular		
Cloud Computing	0.381	1 203	125.032	3.841	0.411 (11.182)	0.000

IV. CONCLUSIONS

1. Relying on cloud computing services in the accounting field helps to speed up and organize accounting work, which in turn increases the effectiveness of accounting information systems.
2. By using cloud computing services, institutions and companies do not purchase any software, but rather own a computer with a web browser, which in turn reduces the costs incurred by economic units, which increases the efficiency of accounting information systems.
3. All financial records are stored online, and therefore there is no loss even if files are deleted from the desktop and hard disk as they are stored in the cloud and not on the computer, thus reducing the chances of data loss because they are stored in the cloud.
4. Cloud computing technology enables users to do their work at any time and anywhere, reducing time, effort and costs. It also leads to supporting the accuracy of accounting information, raising its quality, increasing performance efficiency and increasing effectiveness.

V. RECOMMENDATIONS

1. The need to take advantage of the huge capabilities and capabilities provided by cloud computing to support the accounting profession and reap the benefits derived from relying on it.
2. The necessity of raising awareness and increasing the confidence of users in all accounting institutions and units by using cloud accounting programs because of the accuracy of accounts and the safety of dealing with them.
3. All academic and professional accountants should be trained in technology and develop their technical skills through educational courses and seminars in this field.
4. It is necessary to support institutions by adopting the use of cloud accounting programs because they are safe, low-cost, and characterized by speed and accuracy through the services they provide.
5. The necessity of conducting field studies in this field due to the novelty of the subject and its reflection on the accounting profession.
6. The necessity of containing the study materials, especially the subject of accounting information systems, on special vocabulary using the methods of information and communication technologies in general and cloud computing in particular.

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