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## The Impact of The Adoption of Cloud Computing on Improving the Efficiency of Accounting Information Systems During The COVID-19 Pandemic (A Field Study on The Service Companies Listed on The Palestine Stock Exchange)

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## Cover Page Footnote

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# The Impact of The Adoption of Cloud Computing on Improving the Efficiency of Accounting Information Systems During The COVID-19 Pandemic

(A Field Study on The Service Companies Listed on The Palestine Stock  
Exchange)

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## Abstract

*This study mainly aimed to know the effect of using cloud computing on improving the efficiency of the performance of accounting information systems in the service companies listed on the Palestine Stock Exchange during the COVID-19 pandemic.*

*To achieve the objective of the study, the researchers adopted the descriptive analytical method, and the questionnaire tool to collect data from its sources, analyze it through the SPSS program, and extract the results.*

*The results of the study showed that cloud computing had an impact on improving the efficiency of accounting information systems, their safety and reliability in addition to achieving the desired benefits to keep pace with modernity in accounting information systems in the service companies listed on the Palestine Exchange. That was evident through giving users the opportunity to access information and financial data easily and quickly via the Internet at any time and from anywhere. It also helped the accountants, executives, stakeholders and the work teams to carry out their work, provide services and make decisions from their own homes during the period of the spread of the Corona pandemic, and thus maintained continuity of business. Furthermore, it was evident that cloud computing was able to achieve data security and maintain financial and accounting performance, since everything was stored over the Internet, and therefore it could not be hacked or lost if the company was exposed to cases of thefts or disasters, as only authorized persons can access it through a specific fingerprint. Moreover, through cloud computing, cost, effort and time in processing financial data were reduced through automatic feeding and updates.*

*The study also recommended the necessity of working on more use of cloud computing to enable permanent access to the Internet, which provides integrated electronic accounting services with minimal effort, and reduce the expected risks associated with the applications of accounting information systems.*

**Keywords:** *Cloud computing, accounting information systems, Covid-19 pandemic, service companies, Palestine Stock Exchange.*

## **Introduction**

The concept of cloud computing has made a major shift in ideas and applications related to IT services, especially with regard to the infrastructure solutions that companies rely on to facilitate their operations. Many service companies found their way in this new system, where this technology represents the new solution for data management and storage. Various types of information depend on the transfer of processing and computer storage space to what is called the cloud, a server accessed via internet. Thus, transforming IT software from products to services aims to protect and manage data effectively, easily and more efficiently. Now, as the Covid-19 pandemic continues to spread globally, attention is turning to technological solutions with a strong focus on the substantial role of cloud computing.

The use of cloud computing helps to achieve the quality requirements for accounting information and raise the efficiency of its performance through accounting systems. The capabilities of cloud computing and its flexibility make all accounting information processing requirements accessible through the web and within a basic system. This allows users of this information to connect to the network from anywhere and at any time to obtain the services they need through the cloud computing model. Accountants in service companies listed on the Palestine Exchange can rely on cloud computing to process accounting operations, prepare accounts, payment, and others at anytime, anywhere via any smart device connected to the Internet. The same applies to the executive managers of these companies, as they are able to present the financial statements, and take administrative decisions in a timely manner, especially during the Covid-19 pandemic. Undoubtedly, the Covid-19 pandemic will change the way service companies listed on the Palestine Exchange work, and emphasize the importance of benefiting of technology. It is clear that the adoption of cloud computing by companies is constantly increasing, and this enhances business continuity, affects the efficiency of the performance of accounting information systems, and ensures the usage of time, effort and energy properly and wisely.

Cloud computing has several characteristics, the most important of which are the ease of access and use, security, safety and reliability of accounting information, and backup. We confirm that by relying on cloud computing, it has become possible to communicate by default, which, in turn, simulates the reality between the employees of the companies and their departments on one hand, and with the customers on the other hand to take advantage of all the technological solutions available to them during disasters and crises, especially the current crisis of the Covid-19 pandemic.

## **Statement of the problem**

Due to the heavy reliance of the service companies listed on the Palestine Stock Exchange on the use of accounting applications and the ensuing failure of these applications, it is necessary to pay attention to the use of cloud computing to ensure the efficiency of the performance of accounting information systems because of their importance and impact on the orientation of many companies to adopt these systems, which aim to measure the operational efficiency of accounting information systems and increase confidence in these systems.

The problem of the study is to know the impact of adopting cloud computing on improving the efficiency of accounting information systems, perceive the benefits of using cloud computing applications, and consequently decide the impact of these benefits on the decisions- making in service companies listed on the Palestine Stock Exchange. The problem of the study can be formulated through the following research questions:

1. What is the impact of the use of cloud computing on increasing the efficiency of accounting information systems applied during Covid-19 pandemic for the service companies listed on the Palestine Stock Exchange?
2. What is the impact of the use of cloud computing on improving the safety and reliability of accounting information systems during Covid-19 pandemic of the service companies listed on the Palestine Stock Exchange?
3. What impact does the use of cloud applications have on achieving the benefits of servicing systems accounting information in Small and Medium Enterprises (SMEs)?
4. What is the impact of the transition to cloud computing on the service companies listed on the Palestine Stock Exchange?

## **Hypotheses of the study**

Based on the research questions, we can formulate the following hypotheses:

- 1. The first hypothesis:** There is an effect of the use of cloud computing on increasing the efficiency of accounting information systems applied during Covid-19 pandemic for the service companies listed on the Palestine Stock Exchange.
- 2. Second hypothesis:** There is an impact of the use of cloud computing on improving the safety and reliability of accounting information systems during the Covid-19 pandemic of the service companies listed on the Palestine Stock Exchange.

**3. Third hypothesis:** There is an impact of the use of cloud applications on achieving the desired benefits of servicing accounting information systems in SME.

**4. The fourth hypothesis:** There is an impact of the transition to cloud computing on the service companies listed on the Palestine Stock Exchange.

### **Objectives of the study**

The study aims to achieve a set of objectives, the most important of which are:

1. Measuring the impact of using cloud computing on improving the efficiency of accounting information systems applied during Covid-19 pandemic to service companies listed on the Palestine Exchange.

2. Measuring the impact of the use of cloud computing on improving the safety and reliability of accounting information systems during Covid-19 pandemic for service companies listed on the Palestine Stock Exchange.

3. Demonstrating the impact of the use of cloud computing applications on achieving the desired benefits of servicing accounting information systems in the SME.

4. Showing the impact of the transition to cloud computing on the service companies listed on the Palestine Stock Exchange.

### **Significance of the study**

#### **1. Scientific importance**

Due to the tendency of most companies in different sectors towards the use of cloud computing, which could have a role in improving the efficiency of the performance of accounting information systems, it is essential to study these systems and evaluate the feasibility of their application in all respects, especially the quality of their outputs. This study also focuses on the necessity of using cloud computing, which has a significant impact on improving the security and reliability of accounting information systems during the Covid-19 pandemic of service companies listed in Palestine, and enabling these companies to benefit from the results of this study. The study is also regarded as the starting point for further studies in relation to the subject of the study since it is one of the first studies applied to service companies listed on the Palestine Stock Exchange.

#### **2. Practical importance**

The use of cloud computing provides a good framework for improving the efficiency of accounting information systems and the effectiveness of the applications to meet the needs of beneficiaries of such information during Covid-19 pandemic.

The results are expected to provide a scientific reference for system developers in creating accounting applications appropriate to the needs of service companies, which is the ultimate goal.

### **Limitations of the study**

The results of this study are determined by the following limits:

- 1. Time limitation:** This study was conducted in the period of 2020-2021.
- 2. Sample limitation:** This study was conducted on general managers, financial managers and administrative directors.
- 3. Location limitation:** This study was conducted on the service companies listed on the Palestine Stock Exchange.

### **Literature Review**

- **The study of Neicu (2020)** identified a perception of Employees of Romanian Small and Medium Enterprises (SMEs) regarding the use of cloud computing services in their activities. The study aimed to test how the use of cloud computing affects Romanian SMEs in terms of the benefits, disadvantages, risks expected, the communication process, the overall experience of using cloud computing services, and the quality and impact of these services on their employees. The study concluded that the expected benefits and disadvantages of using cloud computing, the communication process, the user experience with cloud computing, and the overall experience of using cloud computing services positively affected the perceived quality of cloud computing in SMEs. The study's results showed that the perceived quality of cloud computing services positively affected the satisfaction with cloud computing services among SME employees. The study recommended that cloud service providers take different measures to raise awareness of the advantages of these services and focus on easy-to-use applications when designing cloud computing technologies for SMEs, and provide clear instructions to guide SMEs on how to operate their services.

- **The study of Wahyuni (2018)** indicated the identification of the intentions of SMEs regarding the use of cloud computing under the limited resources of these companies. Cloud computing is one way to help small and medium-sized companies reduce cost, have more reliability, security and privacy, alongside their impact on the adoption of accounting applications. The results of the study indicated that the use of accounting applications with cloud computing technology offers many advantages for small and medium-sized companies.

However, cost reduction was not the most important factor for SMEs to adopt accounting applications with cloud computing technology. The study recommended increasing the number of the sample and including more variables in order to get more authenticated results.

- **The study of Inggarsono, et al, (2018)** reviewed the previous literature of accounting in relation to technological progress, especially cloud-based accounting applications. It discussed how technology is used in the accounting processes of Small and Medium-sized Enterprises, and reviewed cloud computing, its advantages, disadvantages, and its importance in keeping SMEs up-to-date in the modern business world. Finally, the study reviewed the literature that was available on cloud accounting. The results of the study revealed that 60% or more of the articles were purely descriptive without a specific systematic assessment. While a few others focused on the possibilities, benefits and barriers of the adoption in SMEs. With regard to the methodology of that study, the detailed qualitative case study was used with mixed research. The study recommended that future research should take into account the compatibility of solutions, cloud computing with SMEs business system, the impact of using cloud computing as a solution to organizational culture, employee skills and business practice.

- **The study of Dordevic (2018)** pointed to the specific advantages of the application of cloud technology in accounting , its risks and opportunities. In addition to the benefits that cloud computing accounting brings to companies that apply this technology as well as financial information users, the study aimed to encourage and motivate companies in the Republic of Serbia to use cloud computing services and introduce this technology into their accounting information systems as an innovative way of processing and storing data. The adoption of these technology solutions is one of the basic ways to ensure the efficiency of the accounting information system, so today the focus is on cloud, online accounting, and Web accounting, or virtual accounting system. The results of the study showed that Serbian companies were not aware of the benefits of using cloud computing, as these services were used by only 9.3% of Serbian companies because of security risks and account penetration. The study also concluded that the insufficient knowledge of the Serbian companies of cloud computing as an important factor reduced their use of cloud services. The study recommended that training and awareness campaigns on the importance of using cloud computing in the Serbian business world should be organized.



- **The study of Abu Tarboush (2017)** examined cloud accounting as a new business model, its impact on the accounting process, and the use of cloud accounting software by companies wishing to make the transition. The results of the study showed that there were undeniable facts that cloud accounting was the concept of "here to stay" and that it represented the key gateway to the transition from traditional accounting to the technologically advanced one. However, most companies feared that their information might be compromised. Therefore, they moved away from adopting cloud accounting. Thus, the study recommended that software providers work out strategies to address this shortcoming if they wanted to compete strongly.

- **The study of Vasiljevaa, et al ( 2016)** attempted to assess the current status of the use of cloud computing in small and medium-sized companies, and verify how cloud computing improved the performance of companies' business in various industries. The study aimed to identify the main factors that stimulated and influenced the adoption of cloud computing in small and medium-sized companies in Latvia, and understand the challenges and the impact of using cloud computing on business performance. The results of the study found that the majority of small and medium-sized companies in Latvia were familiar with the concept of cloud computing, even the deployment of their services, storage, backup, web-based email services, and online software was among the best deployed cloud computing services. The study recommended that small and medium-sized companies should comprehensively analyze the data that could be passed to cloud computing, and deploy cloud computing services; small and medium-sized businesses also have to align business needs and provide cloud computing services to get the most out of them.

- **The study of Weng, et al, (2015)** showed the methods and advantages of applying cloud computing in accounting information for Small and Medium Enterprises in China provided by cloud computing. The results of the study indicated that the cloud computing model helped improve the security and reliability of accounting information. That is, the safety and reliability of accounting information were found very important for SMEs to make decisions. In the past, most accounting information for SMEs was stored in the traditional hardware system, which could not overcome any problem completely, due to the low capacity or financial problems. However, under the cloud computing model, accounting data for SMEs is sent to the cloud at anytime, anywhere. The distributed storage approach to cloud computing could make accounting data backup in multiple areas. This data could be managed by a professional team, and protected by professional security management. Therefore, the cloud computing model improved the security and reliability of SMEs accounting data.

- **The study of Agundez, et al, (2014)** addressed the level of awareness and adoption of cloud computing among SMEs in Malaysia using accounting practitioners in both auditing and accounting areas, and examined whether and how they were familiar with this emerging technology, and why they were not used yet. The results of the study indicated that two thirds of the respondents were not familiar with cloud computing; the level of use was limited to many applications, such as Google engine and Drop box. Cost and time were cited as reasons for adopting cloud computing, while the lack of expected benefits and security were cited as the main drivers of indecision. Although 30% of the respondents claim to be familiar with cloud computing, only 7% said they were very familiar with it. The study recommended that given the benefits that cloud computing can offer to companies, this development prompted more participation from the government and cloud service providers to enhance this technology for small and medium-sized companies.

**Analysis and evaluation of previous studies:**

The previous studies can be evaluated as follows:

- Although researchers are interested in cloud computing, especially in recent years, accounting studies in this area are still insufficient.
- Most of these studies focused on studying the reality of cloud computing and showing its characteristics, benefits and advantages, usages in small and medium-sized companies, and verifying how they improve business performance in these companies.
- Most of the studies were carried out in different international and Arab environments, and therefore none of these studies investigated the Palestinian environment and the extent to which the use of cloud computing was adopted and its impact on improving the efficiency of the performance of accounting information systems applied under the Coved-19 pandemic of service companies listed on the Palestine Stock Exchange.
- None of the previous studies examined the impact of the use of cloud computing on improving the integrity and reliability of accounting information, raising the efficiency of these systems, and achieving the benefits of adopting their application within the service companies listed on the Palestine Stock Exchange.
- In the point of view of the researchers, cloud computing will have a great impact in the near future in the field of accounting in all its different aspects. It is a modern technology that depends on technology and provides many services and electronic applications in the areas of auditing, accounting, businesses, educational institutions and others.

It is one of the most important ways that can be relied upon by the service companies listed on the Palestine Stock Exchange under the Coved-19 pandemic in order to reduce costs, ease the use, reliability, security and privacy.

### **Theoretical framework of the study**

#### **First: The concept of cloud computing:**

Salem (2016) believed that cloud computing was a number of servers connected together and managed via the Internet to provide their services to the public efficiently, effectively, saving time and effort. According to Wahyuni (2018), it was the best to help small and medium-sized companies in reducing costs and ease the use. Cloud accounting had been developed as apps on mobile phone servers. They facilitated the storage and transmission of information. It represented the gateway from traditional to modern accounting, technically advanced accounting. Cloud accounting was based on three basic pillars: the programs, the statute, and the infrastructure (Abu Tarboush, 2017). Radovic (2018) believed that the purpose of cloud computing was to improve the technology of accounting information systems, not to dispense with the human element, but there was caution and fear of using this new technology under the pretext of information and data security. Because the service provider controlled the confidential information of users and was responsible for the application maintenance and management, many accountants claimed that the desired benefits of this transformation outweighed the risk of information security. Nasri (2019) defined cloud computing as a technology that transfers the processed information and storage space of the user's computer to a server device known as the cloud, and accordingly IT programs are transforming from products to services. According to Neicu (2020) the purpose of cloud computing was to provide better service at the lowest cost without the need for employees with high technological qualifications. To provide the service, an agreement between the provider / seller with the consumer was needed. The cloud computing model provided various computer resources so that the idea did not require an Internet service in the development of the company and for large capital expenditures of devices, applications and human resources (Inggarsono, et al, 2018). Here, the researchers see that the use of digital technology such as the remote network system, the Internet and mobile phone technology to facilitate the decision-making process was okay, but the traditional accounting registration and according to the traditional programs in the era of technology renaissance and in light of the Corona pandemic is considered ineffective and therefore we must move to cloud computing to help managers of companies and enable them to make timely decisions as well as assist the

executive authorities and users of financial data to carry out and expand their work continuously and without additional financial burdens. That enhances the efficiency of the performance of the company's accounting information systems and helps it to expand its business and guarantees reliability, safety, and non-interruption of work in light of any emergency circumstances.

**Second: The most important benefits that come to service companies due to the adoption of cloud computing:**

Through reviewing the literature of the study, the researchers noticed that there was a consensus on many advantages that cloud computing provided to business companies, among which were limited to what was confirmed by the study of (Dordevic, 2018) and the study of (Vasiljevaa, 2016) as follows:

- Reducing fixed costs: it is the most important feature related to reducing or eliminating capital expenditures for devices, servers, applications, software, servers, etc., in addition to reducing operating expenses for information technology personnel and maintenance.
- Low initial costs: the costs associated with developing IT systems.
- Permanent update and expansion without trouble: Cloud computing technologies are advanced and need constant and continuous updating, which means that the company does not need to add highly efficient hardware and software when the number of users increases, as cloud computing guarantees speed in joining and dealing with modern technologies on the service provider's website.
- Faster adoption of new technology: Applications are available immediately on the Internet, and service providers are contracted without the hassle and time to purchase and install hardware and software, which provides a strategic advantage and ease of implementation.
- Efficiency in performance, information technology and high accessibility: Because clients are hosted on virtual machines, cloud accounting ensures that the servers are not disrupted and thus work is not interrupted.
- Providing new applications that work with the maximum capabilities of information technology: The users are enabled to reach the highest efficiency of software through renewable applications and in the least amount of time.
- Providing more flexibility at work: It allows access to information and applications through websites and services for anyone authorized by the company, and provides flexibility in the work of employees through remote work, as it allows the employee to access files from the workplace or outside it and at any time he deems appropriate and from any device.

- Increased security: There are security regulations for cloud computing that address viruses before they arrive and ensure that company data is protected from viruses, theft and hacking.
- Preserving the environment: The transition to cloud computing will benefit the company by providing the energy needed to operate the server systems and the site being used in it, which preserves the integrity of the environment by reducing the energy used and the site space.
- Sustainability and the future: One of the most important features of cloud computing is to support the continuity and sustainability of companies, by preserving information and making it easily accessible when needed.

Wahyuni (2018) emphasized that the use of cloud computing technology by small and medium-sized companies was not limited to reducing costs only, but rather supported accounting applications with many advantages such as ease of use, reliability, participation, cooperation, as well as security and privacy

### **Third: The role of cloud computing in raising the efficiency of accounting information systems:**

The role of cloud computing in raising the efficiency of accounting information systems for service companies is represented in the following (Weng, et al, 2015):

1. Adopting cloud computing requires a strong accounting information system, and this is what drives its construction with flexibility and scalability, which enhances its efficiency.
2. Cloud computing guarantees the possibility of expanding companies' accounting information and adapting it to the needs of the competitive environment.
3. The cost of investing in accounting information systems decreases if companies adopt cloud computing alongside the operating expenses for maintenance and capital investments in programs and servers, because the cost of network infrastructure, software and hardware platforms are the responsibility of service providers related to cloud computing.
4. Adopting cloud computing ensures the continuous operation and maintenance of accounting information systems in the company, which enhances its capabilities, energy and efficiency.
5. Cloud computing provides companies with updated applications as soon as possible without the need to waste the cost of purchasing them, which enhances the efficiency of their accounting systems.

6. Christaukas and Miseviciene (2012) believed that through cloud computing, companies can easily add new programs, and access more resources quickly if they want to expand their business, and this is reflected in the efficiency of their accounting systems.

**Fourth: The role of cloud computing in improving the security and reliability of accounting information systems:**

Gupta (2013) emphasized that reliability, security and privacy were among the most important benefits provided by cloud computing, and highlighted their role and importance for companies in the following (Weng, et al, 2015):

1. Companies that followed traditional systems suffered when their devices malfunction, and were exposed to the danger and stoppage of accounting work, dispersion and falling into problems that were difficult to solve, but by following cloud computing, the company's data was sent over the network to its own cloud and in turn the service provider prepared backup copies, and they were saved in multiple protected areas that were easy to restore and not to be lost.
2. According to Christaukas and Miseviciene( 2012), the system based on the web had better internal control compared to the programs based on the Internet within the company, and that the cloud service providers provided a high degree of security.
3. According to the above, Neicu (2020) believed that cloud service providers should guide users and increase their awareness of this service and introduce them to the advantages, provide clear and understandable instructions on how to operate their servers, and focus on designing easy-to-use interfaces when designing cloud computing technology.

**Fifth: The desired benefits of cloud computing applications to serve accounting information systems:**

Wahyuni (2018) believed that the most important benefits of applying cloud computing that serve accounting information systems are:

1. Late: It is a term that means migrating something from one place to another, and this means that the application installation is migrated from the user's devices to the cloud computing through contracting with the service providers.
2. Scalability: Companies contract with cloud computing service providers on an accounting application that meets its current work at the lowest costs, but can expand automatically with the expansion of the company's business, meaning that it has a positive relationship with the

size of the company and its expansion in its work, and for this it can be used at the highest level.

*Despite the multiplicity of benefits and advantages that surround it, it is not without some flaws:*

1. Security, privacy and confidentiality of the financial data: It is not missing in the first place but rather is present and within the features. However, there is fear from the owners of companies, especially in banking financial operations, which need absolute confidentiality and security by the service provider.

2. Disruption of the Internet and the inability to access the program at crucial moments: This can be surely overcome, and that is why it is not considered a source of danger.

Based on the above-mentioned, it is clear to the researchers that adopting the use of cloud computing is much better than relying on traditional accounting programs, because it enables users to provide accounting information at the right time, anywhere and from any device, whether it is a computer or a mobile phone, and allows data and applications to be processed within centers. Broader data, then allow individual and corporate users to get it over the Internet. As for service companies, it enables them to deal with accounting information, make accounts, payments and other accounting treatments from their homes without going to the workplace, especially during the Corona pandemic. Accordingly, executives can submit completed financial reports and information to the management in a timely manner to enable them to make strategic decisions for the company. As a result of the Corona pandemic, spending increased on developing and adopting cloud computing, which simulates artificial intelligence and is compatible with the digital transformation.

### **The practical framework of the study (field study)**

**This aspect deals with the following actions:**

#### **First: Study method**

The descriptive analytical approach was used as the appropriate method for the study of social and human phenomena, and the collection of data is based on secondary and primary sources as follows:

1. Secondary sources: They consisted of books, research, scientific theses, periodicals and the Internet.

2. Primary sources: They consisted of a questionnaire specifically prepared for this purpose to obtain the required information. The Statistical Programs SPSS was used to analyze the questionnaire and test the study hypotheses.



**Second: The study population**

The study population consisted of service companies listed on the Palestine Stock Exchange. A random sample of these companies (Palestinian Telecommunications Group, banks) was selected; the questionnaire was distributed to the sample of the study consisting of general managers, financial managers, and administrative managers working in these companies. The 46 individual questionnaires were received; after which 4 questionnaires were excluded for incomplete answers, making the number that could be analyzed (42) questionnaires with a response rate of (91%).

**Third: Study tool**

The questionnaire was divided into two parts as follows:

- ❖ Section 1: Consisted of demographic data for the study sample, and consisted of four items.
- ❖ Section 2: It was divided into three axes as follows:
  - The first axis: There is an effect on the use of cloud computing on raising the efficiency of accounting information systems applied to the service companies listed on the Palestine Stock Exchange, and consisted of seven items.
  - The second axis: There is an effect on the use of cloud computing on improving the safety and reliability of accounting information systems for service companies listed on the Palestine Stock Exchange, and consisted of seven items.
  - The third axis: There is an effect on the use of cloud computing on achieving the desired benefits of servicing accounting information systems during the Corona pandemic for service companies listed on the Palestine Stock Exchange, and consisted of seven items.
  - The fourth axis: There is an impact of the transition to cloud computing on the service companies listed on the Palestine Stock Exchange, and consisted of six items.

The answers to the items were measured as per the Five-Point Likert Scale, as described in the following table:

**Table 1: The Five-Point Likert Scale**

Classification	Much higher	Higher	Moderate	Low	Very low
The degree of approval	5	4	3	2	1



#### Fourth: The validity of the questionnaire

The validity of the questionnaire means that the questionnaire includes all the elements that must be included in the analysis on the one hand, and the clarity of its items and vocabulary on the other hand, so that it is understandable to everyone who uses it.

The researchers confirmed the authenticity of the questionnaire in two ways:

1- Virtual validity: The questionnaire was presented to a group of specialists in the fields of accounting and statistics. Consequently, the researchers responded to the opinions of the specialists by making the necessary deletions and modifications and came up with the final version of the questionnaire.

2. Structural validity: The structural validity of the questionnaire items was calculated on the study sample of (42) individuals, by calculating the correlation coefficient between the total score of each axis and the total score of the questionnaire. Table 2 shows all correlation coefficients in all items of the questionnaire as the probability value is less than 0.05.

**Table 2: Correlation coefficient between the total score of each axis and the total score of the questionnaire**

M.	Axis	Correlation coefficient	Probability value
1	There is an impact on the use of cloud computing on increasing the efficiency of accounting information systems applied in service companies listed on the Palestine Stock Exchange.	0.980	0.000
2	The impact of the use of cloud computing on improving the safety and reliability of accounting information systems for service companies listed on the Palestine Stock Exchange.	0.970	0.000
3	There is an impact on the use of cloud computing on achieving the desired benefits of servicing accounting information systems in light of the spread of the Corona pandemic for service companies listed on the Palestine Stock Exchange.	0.984	.0000
4	There is an impact on the service companies listed on the Palestine Stock Exchange.	0.927	.0000

#### Sixth: Questionnaire reliability

Questionnaire reliability means ensuring that the answer will be almost the same if repeatedly applied to the same persons at another time; Alpha Cronbach was used to measure the questionnaire reliability. Table 3 shows Alpha Cronbach coefficients for each axis of the questionnaire.

**Table 3: Alpha Cronbach coefficients for measuring questionnaire reliability**

M	Axis	Number of items	Alpha Cronbach	Validity
1	There is an impact on the use of cloud computing on increasing the efficiency of accounting information systems applied in service companies listed on the Palestine Stock Exchange.	7	0.911	0.954
2	The impact of the use of cloud computing on improving the safety and reliability of accounting information systems for service companies listed on the Palestine Stock Exchange.	7	0.939	0.969
3	There is an impact on the use of cloud computing on achieving the desired benefits of servicing accounting information systems in light of the spread of the Corona pandemic for service companies listed on the Palestine Stock Exchange.	7	0.930	0.964
4	There is an impact on the service companies listed on the Palestine Stock Exchange.	6	0.922	0.960
<b>Total grade for all</b>		<b>27</b>	<b>0.975</b>	<b>0.987</b>

The results shown in Table 3 show that alpha Cronbach coefficients were between 0.911 and 0.939, while the structural validity transactions were between 0.954 and 0.969, which are high, and indicate that the questionnaire is reliable and valid.

### Seventh: Analysis and testing of data

#### 1. Characteristics of the study sample:

The following table shows the characteristics of the study sample:

**Table 4: Functional and personal characteristics of the study sample**

Item	Frequency	Percentage %	
<b>Scientific qualification</b>	Bachelor	28	66.7
	Master	11	26.2
	Doctor	3	7.1
<b>Job title</b>	General Manager	11	26.2
	Financial Director	16	38.1
	Managing Director	15	35.7
<b>Scientific specialization</b>	Accounting	22	52.4
	Business management	11	26.2
	Financial and banking management	9	21.4
<b>Years of experience</b>	Other	0	0
	5- 10 years	17	40.5
	11 - 15 years	13	30.9
	More than 15 years	12	28.6
	<b>Total</b>	<b>42</b>	<b>100.0</b>

**Table 4 shows:**

- 66.7% of the study sample were bachelor holders, and 26.2% of the study sample were master degree's holders, while 7.1 percent carry a PhD degree. So, the sample of the study that answered the questionnaire were qualified and held different scientific qualifications.
- 26.2% of the study sample members were General Manager, 38.1% were Financial Director, and 35.7% of the study sample were Managing Director. Regarding the Managing Director, they were fully knowledgeable in the field of cloud computing.
- 52.4% of the sample members were specialized in Accounting, and 26.2% of the study sample were specialized in business department. 21.4% of the study sample were specialized in financial and banking management, while none of the study sample were from other disciplines, and were familiar with the financial and administrative affairs.
- 5.40% of the sample members had experience between 5-10 years, and 30.9% were between 11-15 years, while 28.6 percent had more than 15 years, which reflected the great experience of the sample in the financial and administrative aspects.

**Eighth: Testing the hypotheses of the study**

*- Hypothesis No. 1: There is an effect on the use of cloud computing on raising the efficiency of accounting information systems applied to service companies listed on the Palestine Stock Exchange.*

To test the first hypothesis, the researchers used a T-test for one sample for all the first axis items and the total score of its items, and Table 5 displays the results.

Table 5: T- test results for one sample for all first axis items and the total grade of its items

M	First axis items	Mean	Standard deviation	Relative weight	Value (T)	Value (Sig.)	Rank
1.	Cloud computing maintains multiple backups of data and accounting information that are stored in multiple areas and retrieved anytime, anywhere under the Corona pandemic.	4.00	0.97	80.00	5.76	0.00	3
2.	The adoption of cloud computing helps improve the application of information technology in order to improve the efficiency of accounting information systems in the context of the Corona pandemic.	3.90	0.91	78.06	5.54	0.00	4
3.	Adopting the use of cloud computing helps accountants process data, accounting information and other work that can be prepared and executed anywhere under the Corona pandemic.	4.13	0.99	82.58	6.34	0.00	1
4.	Adopting the use of cloud computing helps the CEO view real-time financial statements and make the right decision in light of the Corona pandemic.	4.03	0.91	80.65	6.30	0.00	2
5.	Adopting the use of cloud computing significantly reduces the cost of building the company's accounting information systems under the corona pandemic.	3.84	1.00	76.77	4.65	0.00	5
6.	Adopting the use of cloud computing helps to develop accounting information in the company, helping to achieve the quality requirements of accounting information and increase the efficiency of its performance under the corona pandemic.	3.84	0.90	76.77	5.20	0.00	5
7.	Adopting the use of cloud computing increases internal understanding of accounting information, helping to enhance the company's competitiveness, especially in light of the corona pandemic.	3.74	1.09	74.84	3.77	0.00	7
	<b>There is an impact on the use of cloud computing on increasing the efficiency of accounting information systems applied to service companies listed on the Palestine Stock Exchange.</b>	<b>3.93</b>	<b>0.78</b>	<b>78.53</b>	<b>6.58</b>	<b>0.00</b>	<b>-</b>

\* Correlation statistically significant at  $\alpha \leq 0.05$

It is clear from Table 5 that item (3) ,adopting the use of cloud computing helps accountants process data, accounting information and other work that can be prepared and executed anywhere under the corona pandemic, had the highest mean of (4.13) and a relative weight of 82.5,while item (7), adopting the use of cloud computing increases internal understanding of accounting information, which helps to enhance the competitiveness of the company, especially in light of the spread of the Corona pandemic, had obtained the lowest computing average of (3.74) and a relative weight of (74.48%).

In general, the mean of the first hypothesis of all the items was equal to (3.93) and the relative weight was equal to (78.53). It is greater than the neutral relative weight of 60%, indicating that "there is an effect on the use of cloud computing to raise the efficiency of accounting information systems applied to service companies listed on the Palestine Stock Exchange" at the level of significance (0.05).

Based on the above results, the first hypothesis was accepted that "there is an effect on the use of cloud computing to increase the efficiency of accounting information systems applied to the service companies listed on the Palestine Stock Exchange".

***- Hypothesis No. 2: There is an impact on the use of cloud computing on improving the safety and reliability of accounting information systems for service companies listed on the Palestine Stock Exchange.***

To test the second hypothesis, the researchers used the T- test for the same sample for all the items of the second axis and the total score of its items. Table 6 displays the results.

**Table 6: T- test results for one sample of all the items of the second axis and the total degree of its items**

M	Items of the second axis	Mean	Standard deviation	Relative weight	Value (T)	Value (Sig.)	Rank
1.	Adopting the use of cloud computing helps improve the security and reliability of the company's accounting information as the Corona pandemic is spreading.	3.97	1.02	79.35	5.30	0.00	4
2.	Adopting the use of cloud computing is important, making accounting data and information multiple backups and keeping them in multiple areas under the Corona pandemic.	4.16	0.97	83.23	6.67	0.00	1
3.	Adopting the use of cloud computing helps manage data by a professional team, and is protected by specialized professional security management centers under the corona pandemic.	4.03	1.05	80.65	5.48	0.00	3
4.	Adopting the use of cloud computing reduces the expected risks associated with the application of accounting information systems in the context of the corona pandemic.	3.68	1.08	73.55	3.50	0.00	7
5.	The adoption of cloud computing facilitates communication, increasing overall quality and satisfaction with the use of accounting services and applications provided by cloud computing, especially in the light of the corona pandemic.	4.13	0.96	82.58	6.57	0.00	2
6.	The use of cloud computing can be adopted by providing financial service users with appropriate, reliable and financial decision-making information in the context of the Corona pandemic.	3.87	0.96	77.42	5.07	0.00	6
7.	The adoption of the use of cloud computing as an IT innovation enhances the qualitative characteristics of accounting information, especially in the light of the corona pandemic.	3.94	1.00	78.71	5.22	0.00	5
	<b>The impact of the use of cloud computing on improving the safety and reliability of accounting information systems for service companies listed on the Palestine Stock Exchange.</b>	<b>3.97</b>	<b>0.86</b>	<b>79.35</b>	<b>6.28</b>	<b>0.00</b>	<b>-</b>

\* Correlation statistically significant at  $\alpha \leq 0.05$

It is clear from table (6) that item(2),the adoption of the use of cloud computing important to make the data and accounting information to have multiple backups and save them in multiple areas under the spread of the Corona pandemic, had obtained the highest mean of (4.16) and relative weight of (83.23%), while item (4), the adoption of cloud computing reduces the expected risks associated with the application of accounting information systems under the corona pandemic, had the lowest mean of (3.68) and relative weight of (73.55%).

In general, the mean of all the second hypothesis items was equal to (3.79) and the relative weight was equal to (79.35) which was greater than the neutral relative weight of 60%. That indicated there was an effect on the use of cloud computing to improve the safety and reliability of accounting information systems of service companies listed on the Palestine Stock Exchange at the level of significance (0.05).

Based on the above results, the second hypothesis was accepted that "there is an impact on the use of cloud computing to improve the safety and reliability of accounting information systems for service companies listed on the Palestine Stock Exchange".

***- Hypothesis No. 3: There is an impact on the use of cloud computing on achieving the desired benefits of servicing accounting information systems during the spread of the Corona pandemic for service companies listed on the Palestine Stock Exchange.***

To test the third hypothesis, the researchers used a T-test for one sample of all the third axis items and the total score of its items. Table 7 shows the results.

Table 7: T- test results for one sample for all third axis items and the total score of its items

M.	Items of the third axis	Mean	Standard deviation	Relative weight	Value (T)	Value (Sig.)	Rank
1	The use of cloud computing takes corporate electronic services to a higher level in light of the corona pandemic.	4.00	1.10	80.00	5.08	0.00	2
2	The use of cloud computing reduces the administrative burden and rationalizes infrastructure and technological expenditures in light of the corona pandemic.	3.87	0.92	77.42	5.26	0.00	5
3	Adopting the use of cloud computing improves business execution and improves the professionalism of companies under the Corona pandemic.	3.90	0.87	78.06	5.78	0.00	4
4	Adopting the use of cloud computing helps remove the challenges and obstacles that stand in the way of the use of accounting information systems applications in the context of the corona pandemic.	3.87	1.09	77.42	4.46	0.00	5
5	The adoption of cloud computing enhances the empowerment and permanent access of the Internet, which provides integrated electronic accounting services with minimal effort under the Corona pandemic.	3.74	0.96	74.84	4.28	0.00	7
6	The adoption of the use of cloud computing provides the process of sharing accounting information between beneficiaries and the ease with which it is used regardless of the size and forms of that information in the context of the corona pandemic.	4.00	1.06	80.00	5.23	0.00	2
7	The adoption of cloud computing ensures that high-quality accounting data and information can be processed, accessible and easily retrieved at any time in the context of the corona pandemic.	4.06	0.93	81.29	6.38	0.00	1
	<b>There is an impact on the use of cloud computing on achieving the desired benefits of servicing accounting information systems in light of the spread of the Corona pandemic for service companies listed on the Palestine Stock Exchange.</b>	<b>3.92</b>	<b>0.83</b>	<b>78.43</b>	<b>6.16</b>	<b>0.00</b>	<b>-</b>

\*Correlation statistically significant at  $\alpha \leq 0.05$



It is clear from table (7) that item 7, the adoption of cloud computing is possible to logically process high-quality, accessible and easy retrieval information at any time as possible under the corona pandemic, had the highest mean of (4.06) and relative weight of (81.2), while item 5, the adoption of cloud computing from the empowerment and permanent access of the Internet, which provides integrated electronic accounting services with the least effort possible under the spread of the Corona pandemic, had the lowest mean of (3.73) and a relative weight of (74.84%).

In general, the mean of all the third hypothesis items was equal to (3.92) and the relative weight was equal to (78.43), which was greater than the neutral relative weight of 60%. That indicated that there was an effect on the use of cloud computing on achieving the benefits of accounting information systems in light of the spread of a pandemic of service companies listed on the Palestine Stock Exchange at the level of (0.05).

Based on the previous results, the third hypothesis was accepted; there is an impact on the use of cloud computing on achieving the desired benefits of servicing accounting information systems during the spread of the Corona pandemic for service companies listed on the Palestine Stock Exchange.

***Hypothesis No. 4: There is an impact on the service companies listed on the Palestine Stock Exchange.***

To test the fourth hypothesis, the researchers used a T-test for one sample of all the fourth axis items and the total score of its items. Table 8 shows the results.

**Table 8: T- test results for one sample for all fourth axis items and the total score of its items**

M	Items of the third axis	Mean	Standard deviation	Relative weight	Value (T)	Value (Sig.)	Rank
1	Cloud computing helps to make data and information accessible by accountants and staff.	4.19	0.87	83.87	7.62	0.00	1
2	Cloud computing saves effort and time processing financial statements through automatic nutrition and updates.	4.16	0.97	83.23	6.67	0.00	2
3	Cloud computing keeps information and data safe from being lost and stolen and improves disaster recovery.	4.06	1.06	81.29	5.58	0.00	3
4	Cloud computing reduces costs and improves spending in economic units.	4.00	0.97	80.00	5.76	0.00	6
5	Cloud computing delivers information on time and real.	4.03	0.87	80.65	6.57	0.00	4
6	Cloud computing keeps business going.	4.03	1.17	80.65	4.92	0.00	4
<b>There is an impact on the service companies listed on the Palestine Stock Exchange.</b>		<b>4.08</b>	<b>0.84</b>	<b>81.61</b>	<b>7.15</b>	<b>0.00</b>	<b>-</b>

\*Correlation statistically significant  $\alpha \leq 0.05$

It is clear from table (8) that paragraph (1), cloud computing helps to easy access data and information by accountants and staff, had the highest mean of (4.19) and relative weight of (83.87%), while paragraph 4, cloud computing reduces costs and improves spending in economic units, had the lowest mean of (4.00) and relative weight of 80.00.

In general, the mean of all the fourth hypothesis items was equal to (84%) and the relative weight was equal to (81.61), which was greater than the neutral relative weight of 60%. That indicated that there was an effect of the transition to cloud computing on the service companies listed on the Palestine Stock Exchange at the level of significance (0.05).

Based on the previous results, the fourth hypothesis was accepted.

There is an impact on the use of cloud computing on achieving the desired benefits of servicing accounting information systems during the spread of the Corona pandemic for service companies listed on the Palestine Stock Exchange.

### Ninth: Regression analysis of the measurement of the study variables

#### 1. Analysis of the standard regression of the dependent variable to raise the efficiency of accounting information systems:

**Table 9: Analysis of the standard regression of the dependent variable to raise the efficiency of accounting information systems**

Independent variables	Regression coefficients	Standard error	Standard regression coefficients Beta	Value t	Probability value .sig	Indication level at (0.05)
Hard	0.566	0.336		1.682	0.103	
Raising the efficiency of accounting information systems.	0.823	0.081	0.884	10.191	0.000	Slab
ANOVA Contrast Analysis						
F test value	103.864		R-2	0.782	Probability value	0.000

\* The dependent variable raises the efficiency of accounting information systems D at the significant level of 0.05

To determine the impact of cloud computing on the efficiency of accounting information systems, regression analysis was carried out, and the previous table shows that the adjusted selection coefficient = 0.782. That means the change in the efficiency of accounting information systems (dependent variable) was explained by the change in cloud computing (independent variable). The probability value (Sig.) is below the level of significance of  $\alpha \leq 0.05$ . This shows the statistically significant effect of cloud computing among the service companies listed on the Palestine Stock Exchange to raise the efficiency of accounting information systems according to the following regression equation:

$$Y = 0.566 + 0.823X_1 \dots (1)$$

This means that when the adoption of the use of cloud computing increases by one unit, this increases the variable (efficiency of accounting information systems) by 82%. The researchers believe that the result of analysis is logical and that the orientation and interest in using cloud computing keeps pace with the rapid and continuous development of modern technology.

That is the most important to follow the work of service companies listed on the Palestine Stock Exchange in the period of the corona pandemic.

**2. Analysis of the standard regression of the dependent variable to improve the safety and reliability of accounting information systems:**

**Table 10: Analysis of the standard regression of the dependent variable to improve the safety and reliability of accounting information systems**

Independent variables	Regression coefficients	Standard error	Standard regression coefficients Beta	Value t	Probability value Sig.	Indication level at (0.05)
Hard	0.504	0.438		1.149	0.260	
The safety and reliability of accounting information systems	0.849	0.105	0.832	8.061	0.000	Slab
ANOVA Contrast Analysis						
F test value	64.980	R-2		0.691	Probability value	0.000

**\* The dependent variable improves the safety and reliability of Accounting Information Systems t at the significant level of 0.05**

To determine the impact of cloud computing on improving the safety and reliability of accounting information systems, regression analysis was carried out, and the previous table shows the adjusted selection coefficient = 0.691. That means the change in the improvement of the safety and reliability of accounting information systems (dependent variable) was explained by the change in cloud computing (independent variable) is below the level of significance of  $\alpha \leq 0.05$ . This shows the statistically significant effect of cloud computing among the service companies listed on the Palestine Stock Exchange to improve the safety and reliability of accounting information systems according to the following regression equation:

$$Y = 0.504 + 0.849X_1 \dots (2)$$

This means that when the use of cloud computing is increased by one unit, this increases the dependent variable (improving the integrity and reliability of accounting information systems) by 84%. The researchers believe that the result of the analysis is logical. The orientation and interest in adopting cloud computing has helped the service companies listed on the Palestine Stock Exchange to continue in the business while ensuring the confidentiality, security and privacy of the information and data of these companies under the corona pandemic.

### 3. Analysis of the standard regression of the variable dependent the benefits of cloud computing to the accounting information systems service:

**Table 11: Analysis of the standard regression of the dependent variable (the benefits of cloud computing to the accounting information systems service)**

Independent variables	Regression coefficients	Standard error	Standard regression coefficients Beta	Value t	Probability value .sig	Indication level at (0.05)
Hard	0.339	0.356		0.953	0.349	
The Benefits of Cloud Computing	0.878	0.086	0.886	10.264	0.000	Slab
ANOVA Contrast Analysis						
F test value	105.358	R-2		0.784	Probability value	0.000

\* Variable-dependent cloud computing benefits for accounting information systems Service t at 0.05

To see the impact of cloud computing on the benefits of cloud computing for the Accounting Information Systems Service, regression analysis was carried out, and the previous table shows the adjusted selection coefficient = 0.691. That means that the change in the benefits of cloud computing to the Accounting Information Systems (X) service was explained by the change in cloud computing (independent variable) is below the level of significance  $\alpha \leq 0.05$ . This shows a statistically significant impact on the benefits of cloud computing for the accounting information systems service according to the following regression equation:

$$Y = 0.339 + 0.878X_1 \dots (3)$$

This means that when the adoption of cloud computing is increased by one unit, it increases the dependent variable (the benefits of cloud computing for accounting information systems) by 87%. The researchers argue that the analysis result is logical and that the reliance of service companies on cloud computing has enhanced the benefits of cloud computing on accounting information systems. That relates to the low capital, operational cost, speed in accessing and processing information, expanding the user base, exploiting the cloud at any time and from anywhere and any device, ensuring accuracy and keeping the information from theft and loss. This ensures that the company does not stop working under any emergency circumstances and enhances competition and market share under the Corona pandemic.

## **Conclusion**

This study aimed to identify the impact of the use of cloud computing on improving the efficiency of the performance of accounting information systems in service companies listed on the Palestine Exchange during the Covid-19 pandemic. It is clear that the continuous increase in the adoption of cloud computing by companies in all its sectors affects the efficiency of performance of accounting information systems to ensure the use of time, effort and energy, ease of access and safe use of accounting information. This enhances its safety and reliability, and maintains backup copies of accounting records. This is very important in making accounting data and information managed by a professional team, and keeping it in professional security management facilities. The study confirms that relying on cloud computing has become necessary to take advantage of all available services and technological solutions during disasters and crises, especially the current crisis of the Covid-19 pandemic. The adoption of cloud computing has a clear impact on improving the efficiency of the performance of accounting information systems for service companies listed on the Palestine Exchange and improving their safety and reliability. Furthermore, you will reap many benefits from the impact of using cloud computing applications, such as permanent access through visual space, providing integrated electronic accounting services with the least possible effort and at any time, and reducing the expected risks associated with the application of accounting information systems.

## **Results and recommendations**

### **First: The results**

The researchers came through the analysis and testing of the study hypotheses to the following results: There is a significant impact of the use of cloud computing on raising the efficiency of accounting information systems applied to service companies listed on the Palestine Stock Exchange. This is evident through the ease of using information and financial data and accessing it quickly and from anywhere and at any time during the spread of the Corona pandemic.

There is a significant impact of using cloud computing on improving the safety and reliability of accounting information systems for service companies listed on the Palestine Stock Exchange, by preserving the security and integrity of data in the event that the company is exposed to any theft or unusual event through a certain fingerprint by authorized persons and stakeholders only.

There is a significant impact of the use of cloud computing on achieving the desired benefits for accounting information systems service during the spread of the Corona pandemic for service companies listed on the Palestine Stock Exchange, in terms of providing multiple backup copies, saving and retrieval when necessary.

There is a significant impact of the transition to cloud computing on the service companies listed on the Palestine Exchange, as the following advantages and benefits are achieved. That is cloud computing helped accountants, executives, stakeholders and the work team to carry out their work, provide services and make decisions from their homes during the spread of the Corona pandemic, and thus maintained the permanence and continuity of business. It also saved effort and time in processing financial data through automatic feeding and updates. Cloud computing maintained the security and integrity of information and data from loss and theft and improved disaster recovery. In addition, it reduced costs and improved spending in economic units and provided information on time and in real time.

The use of cloud computing helped improve the application of information technology in order to raise the efficiency of accounting information systems in service companies listed on the Palestine Stock Exchange during the spread of the Corona pandemic.

The use of cloud computing facilitated the communication process in service companies listed on the Palestine Exchange, which increased the overall quality and satisfaction with the use of accounting services and applications provided by cloud computing, especially during the spread of the Corona pandemic.

The use of cloud computing has led to the upgrading of the electronic services provided to service companies listed on the Palestine Stock Exchange to the highest levels. It also provided the process of sharing accounting information among the beneficiaries and facilitating its handling regardless of the size and forms of that information during the spread of the Corona pandemic

### **Second: Recommendations**

Based on the previous results, the researchers recommend the following:

- Building more confidence among Palestinian companies about the importance of using cloud computing in order to achieve the quality requirements of accounting information and increase the efficiency of their performance.
- Palestinian companies should rely on the use of cloud computing to enhance and clarify the concept of cloud computing for employees its application mechanisms and benefits, especially in reducing costs and improving spending.

- Providing in-depth study and awareness to Palestinian company managers to understand and the use of cloud computing and its provision of information that has been tested in terms of appropriateness, reliability and relevance to the financial decision-making process.
- Palestinian companies should organize courses, workshops, seminars and conferences specialized in information technology and cloud computing to learn about the use of their applications in the field of accounting and auditing.
- The need to work on more use of cloud computing to enable permanent access to the Internet, which provides integrated electronic accounting services with the least effort, and reduce the risks expected and associated with the application of accounting information systems.
- Working on the scientific and practical qualification of accountants and auditors on the use of cloud computing to increase the efficiency of the performance of accounting information systems of these companies.

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## تأثير تبني الحوسبة السحابية على تحسين كفاءة نظم المعلومات المحاسبية في ظل

### جائحة كوفيد-19

#### (دراسة ميدانية على الشركات الخدمية المدرجة في بورصة فلسطين)

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#### ملخص

هدفت هذه الدراسة بشكل رئيس، إلى معرفة أثر استخدام الحوسبة السحابية في تحسين كفاءة أداء نظم المعلومات المحاسبية في الشركات الخدمية المدرجة في بورصة فلسطين، في ظل جائحة كوفيد-19، ولتحقيق هدف الدراسة اعتمد الباحثان المنهج الوصفي التحليلي، أداة الاستبانة لجمع البيانات من مصادرها، وتحليلها عبر برنامج SPSS، واستخراج النتائج. وأظهرت نتائج الدراسة أنّ للحوسبة السحابية أثراً في تحسين كفاءة نظم المعلومات المحاسبية، وتحسين السلامة والموثوقية لها، وتحقيق الفوائد المرجوة منها، لمواكبة الحداثة في نظم المعلومات المحاسبية في الشركات الخدمية المدرجة في بورصة فلسطين، وتبين ذلك من خلال:

- إتاحة الفرصة للمستخدمين للوصول إلى المعلومات والبيانات المالية بسهولة وسرعة، عبر شبكة الإنترنت، وفي أيّ وقت، ومن أيّ مكان.
- ساعدت المحاسبين والمديرين التنفيذيين وأصحاب المصالح وفريق العمل، على القيام بأعمالهم، وتقديم الخدمات، واتخاذ القرارات من بيوتهم، في ظل انتشار جائحة كورونا، وبالتالي حافظت على دوام الأعمال واستمراريتها.
- تحقيق أمن البيانات، والحفاظ على الأداء المالي والمحاسبي، وتخزينها عبر شبكة الإنترنت، مع المحافظة على أمنها، وعدم اختراقها، أو فقدانها، حين تتعرض الشركة لحالات سرقة أو كوارث؛ كونه لا يستطيع الوصول إليها إلا الأشخاص المسموح لهم عبر بصمة محددة.
- تقليص التكاليف، وتوفير الجهد والوقت اللازمين لمعالجة البيانات المالية، وذلك من خلال التغذية والتحديثات التلقائية.

وأوصت الدراسة بضرورة تبني المؤسسات الخدمية، استخدام الحوسبة السحابية؛ للتمكين والوصول الدائم عبر الفضاء العيني، وتقديم الخدمات المحاسبية الإلكترونية المتكاملة بأقل جهد ممكن، وبأيّ وقت، وتقليل المخاطر المتوقعة والمصاحبة لتطبيق نظم المعلومات المحاسبية.

الكلمات الدالة: الحوسبة السحابية، نظم المعلومات المحاسبية، جائحة كوفيد-19، الشركات الخدمية، بورصة فلسطين.