

# Supporting Senior Management and the Readiness of the Organizational Structure in Palestinian Charitable Institutions to Adopt and Implement Cloud Computing

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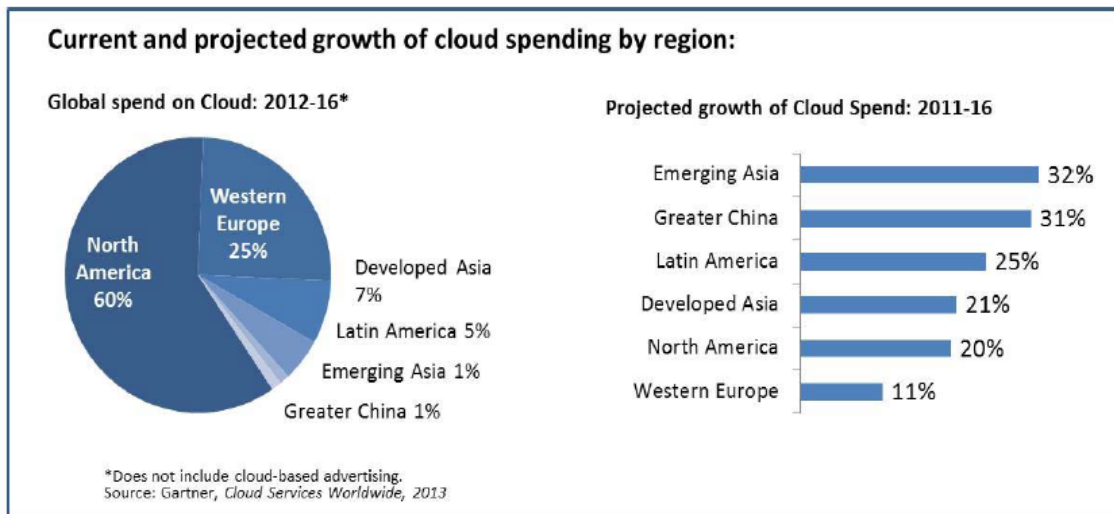
**Abstract:** The study aimed to identify the level of senior management support and the readiness of the organizational structure in Palestinian charitable institutions to adopt and apply cloud computing. The study relied on the analytical descriptive approach in describing and analyzing the problem, and the study population consisted of (1245) employees working in charitable institutions. The results of this study showed that the general estimate of the Senior Management support axis was (68.13%), and the organizational structure axis reached (83.9%). The study presented a number of recommendations, the most important of which is the need to work to strengthen the principle of decentralization in the organizational structure of charitable institutions in Gaza Strip, as well as the need to develop remedial plans to eliminate the obstacles that hinder the use of cloud computing.

**Keywords:** Senior Management, Organizational Structure, Cloud Computing, Charitable Institutions, Palestine.

## Introduction

In light of this technological progress and the development of administrative sciences, a new concept has emerged, which cloud is computing, which in turn harnesses information technology to develop administrative and institutional work in order to achieve achievement and increase transparency (Gokmen, 2010).

Cloud computing is a modern technology that relies on storing and processing data within a virtual cloud instead of computers. It is considered a data center that is accessed via the Internet regardless of place and time, and this technology contributes to eliminating maintenance and modernization problems as it turns from products to services (Syed, 2013), or as (Radwan, 2016) said, it is a technology that allows users to transfer and process their files and data in a cloud (technological resources over the Internet), where processing operations take place within this cloud, with access to that data at any time and any place whenever the Internet is available.



**Figure 1:** Growth rate in the use of cloud computing  
**Source:** (Gartner, 2013)

The civil institutions sector in Gaza Strip is considered a vital sector to a large extent by virtue of social responsibility, and given the continuous siege that Gaza Strip has been suffering from for more than 10 years, in addition to the wars and economic crises it suffers from. The number of charitable institutions operating in Gaza Strip is (415) Institution According to the statistics of the Ministry of the Interior in Gaza for the year 2022, and according to a study (Bahour, 2016), the utilization of advanced technologies in the institutions of Gaza Strip does not reach the desired level, and among these technologies is cloud computing.

The researchers believe that cloud computing helps charitable organizations to provide electronic services at low costs, and helps in the growth and expansion of the institutions' work, obtaining good statistics and data analytics, and allowing access to data through various electronic devices, and this needs the support of the senior management of these institutions while providing a structure Modern organizational commensurate with this development.

### Research Terminology

There are many terms that were used in the study, the most important of which are:

- **Cloud Computing:** A technology that relies on storing and processing data within a virtual cloud instead of computers and is considered a data center that is accessed via the Internet regardless of place and time, and this technology contributes to eliminating maintenance and modernization problems as it turns from products to services (Syed, 2013).
- **Procedural Definition Of Cloud Computing:** The researchers define it procedurally as “a technology that allows users to transfer and process their files and data in a cloud (technological resources over the Internet), where processing operations take place within this cloud, with access to that data at anytime and anywhere whenever the Internet is available.”
- **Charitable Institutions:** They are an independent legal entity that a group of individuals establish by agreement among themselves in order to reach legitimate goals of community service, and their goal is not material profit (Al-Aloul, 2011).
- **The Procedural Definition of Charitable Institutions:** The researchers define them procedurally as “a group with the nature of an optional recipe consisting of several people aiming to provide charitable services to the community, without regard to profit.”

### Problem Statement

Today, the digital cloud has become a new model for benefiting from information technology services, in coordination and cooperation between companies, governments and institutions in the context of exchanging data and information and enhancing the role of technology and the Internet in its administrative, supervisory and regulatory process, and this is consistent with Saleem (2011) study, which shows that cloud computing has become One of the concepts that most attracted the attention of those in the information field because of the opportunities it offers for institutions to advance the electronic services they provide.

Cloud computing is considered an advanced idea in line with the requirements of the times and helps to establish an infrastructure at reduced costs. It also provides a wide scope for companies and organizations as it provides many benefits to the data owner and users, and works to secure data and services, flexibility and cost efficiency for the user (Khuwaildat, 2016). Despite this (Bahour, 2016) confirms that the bureaucracy still controls the work of institutions in Gaza Strip, including charitable institutions, so this study comes to shed light on the level of support of the senior management and the readiness of the organizational structure in Palestinian charitable institutions to adopt and apply cloud computing.

### Research Questions

From the foregoing, the research question that the study will answer is concluded as follows:

**What is the level of senior management support and the readiness of the organizational structure in the Palestinian charitable institutions to adopt and implement cloud computing?**

There are a number of sub-research questions that the study will answer, as follows:

**Q1-:** To what extent does the senior management support the application of cloud computing technology in charitable organizations?

**Q2-:** How ready is the organizational structure within charities to adopt cloud computing technology?

### Research Objectives

This study aims to achieve the following objectives:

1. Recognize the extent to which Senior Management supports the application of cloud computing.
2. Studying the organizational structure within charitable institutions and identifying the extent of its flexibility to adopt cloud computing technology.
3. Presenting findings and recommendations to various parties.

### Research Importance

The aspects of the study's importance can be identified from the expected contribution and addition, as follows:

#### Scientific (Theoretical) Importance:

1. The importance of this scientific study is evident in the fact that cloud computing is one of the most important modern technologies that is expected to revolutionize the performance of institutions in terms of quality and improve the service provided by these institutions to the beneficiaries, for its role in providing distinct programs and applications, very large storage spaces, and data monitoring and preservation in a secure and less costly manner. .
2. Enriching scientific research on this subject, as this research is considered the first according to the researchers' point of view that links the application of cloud computing and the achievement of social justice in Palestine in particular and the Arab world in general through the application of cloud computing in charitable institutions.

#### Practical (Applied) Importance:

1. It may work to enhance the future planning of the institutions.

2. It may support the process of monitoring the services and projects of institutions.
3. It helps in organizing and arranging work within the institutions

### Previous Studies

- Study of (Tarhini et al., 2017), which aimed to examine the effects of expected ease of use, potential benefit, self-efficacy, job opportunity, support for senior management, competitive pressure, and organizational support on the planned behavior of employees when computing. 205 employees working in three, four and five star hotels. The results of the study indicated that there are main effects of four independent variables: (job opportunity, senior management support, competitive pressure, organizational support) on employee behavior, while there are four variables, namely: (ease of Use, expected benefit, self-efficacy, confidence) have an effect only on planned behavior.
- Study of (Bahour, 2016) which aimed to identify the availability of factors affecting the adoption and application of cloud computing in government institutions from the point of view of senior management. Providing the technological environment, confidentiality and data.” To achieve the objectives of the study, the questionnaire was used as a tool for data collection. The researcher conducted a comprehensive survey of the research community of 170 employees from the senior management in government ministries in Gaza Strip, and 120 questionnaires were retrieved at a rate of 70.5%, and 3 questionnaires were excluded from the analysis The results for the inaccuracy of the results, and the researcher used the descriptive analytical method in the study. One of the most important results of the study was that the comparative advantage represents the most important factors affecting the adoption and application of cloud computing, and the study emphasized that change strategies have a role in the transition towards the application of cloud computing, and the results showed that the role of senior management in government ministries is not sufficient to implement cloud computing The results showed that the physical requirements for building the government cloud are available to an acceptable degree in the Palestinian ministries, and security concerns and data confidentiality are among the most important factors affecting the application of cloud computing.
- Study of (Radwan, 2016), which aimed to identify cloud computing and its relationship to developing the job performance of managers working in Palestinian universities in Gaza Strip. (Chairman, Vice President, Dean, Deputy Dean, and Administrative Directors) in three universities in Gaza Strip (Islamic University, Al-Aqsa University, Al-Azhar University) and the number of retrieved questionnaires was imitated ((143), with a recovery rate of (90%). The results of the study showed The presence of a high degree of approval by the respondents on the field of cloud computing with a relative weight of 73.2%, as well as the presence of a high degree of approval by the respondents on the field of job performance with a relative weight of 81.1%, and the study showed a statistically significant relationship at the level ( $\alpha \leq 0.05$  between Cloud computing and job performance for managers working in Palestinian universities in Gaza Strip governorates.
- Study of (Gwendolyn, 2015 & Caroline), which aimed to identify cloud computing services used by non-governmental organizations and to identify the reasons that may be related (management, workforce or companies), which affect the adoption or non-acceptance of this technology, and the researchers used the inductive and deductive approach To verify the validity of the results during the study in order to create a perception of institutions about the use of computing, the researchers used the questionnaire as a tool for the study by applying it to the Gweru organization, which contains 55 non-governmental organizations. The study sample was formed from workers in these institutions, and the study found a number of The most important results are that the most used computing services are social networking by (97%), Google by (94%) and Al-Jameel by (86%), and the study found a number of concerns represented in the lack of a budget that supports technology initiatives, and the study was satisfied with finding solutions To eliminate concerns and did not make any recommendations.
- Study of (Gabi, 2015) which aimed to assess the feasibility of adopting cloud computing in the Palestinian public sector in addition to identifying all the potential opportunities and challenges facing the arrangement for the application of cloud computing. Using the comprehensive survey, the sample size was 152 employees, and the researcher conducted eleven semi-regular interviews with some experts in the public sector. The results showed that the Palestinian public sector is not ready to adopt cloud computing in its operations due to the lack of senior management support, the lack of realization of the benefits and objectives of adopting cloud computing, and all the lack of human resources experience in computing technology, and the studies identified the most important challenges facing the Palestinian public sector to adopt the application of computing.
- Study of (Shaaf, 2014), which aimed to present a proposal that helps in the application of e-government management and benefit from technological development, and to extract the importance of the role played by the government cloud and its desired benefits through its Palestinian application, and to shed light on the most important obstacles that the Palestinian government may face during the application. The researcher during his study of the mixed approach through the use of questionnaire, interview, and focus groups as tools for collecting data from the study community, which consisted of 93 employees in bright positions related to computer and information technology in the ministries of the Palestinian government in Gaza Strip. The results showed a set of economic, technical, administrative and development benefits of the government cloud, and the results showed the availability of the necessary requirements to start building the government cloud to a good degree, and some obstacles to be overcome before starting the implementation were extracted.
- Study of (Qureiqi, 2014) which aimed to build a training program to employ cloud computing applications in developing electronic skills for teachers of technology and to study the effectiveness of this program. The constructivist approach in his

study by building a new program, as well as using the experimental method, where he used the test tool to measure the cognitive aspect and the evaluation card to evaluate the teachers' work, and they were applied before and after the study sample. The results showed the effectiveness of cloud computing applications in developing the electronic learning and cognitive skills of technology teachers.

- Study of (Phaphoom et. al., 2014)) which aimed to know the factors and challenges facing organizations in adopting cloud computing services in their work, so that the researcher used the descriptive analytical approach by conducting a comprehensive survey of about 352 employees from various administrative levels in several organizations. The results showed that there are 3 main factors that hinder the process of applying cloud computing, which are data privacy, data security and the organization's vulnerability to change. Public administration in the administrative fields and work to educate managers and owners of companies about the importance of cloud computing and its importance in saving time and effort in the completion of work.
- Study of (Oliveira et. al., 2014) which aimed to study the factors affecting the adoption of cloud computing in the service and manufacturing sectors in Portugal. . The results showed that the support of senior management, technological readiness and comparative advantage are among the most important factors that affect the adoption of cloud computing by enterprises, while reducing costs indirectly affect the adoption of cloud computing. The study recommended conducting extensive research studies on the importance of applying computing in the industrial field and the service sector in Portugal, while raising the level of economic production in the country.
- Study of (Stieninger, 2014) which aimed to identify the factors affecting organizations' adoption of cloud computing, through the descriptive analytical approach, and a questionnaire was designed to collect data and the questionnaire was distributed to 551 organizations. The study focused on the factors that affect the adoption of computing, which is "comparative advantage", safety and confidentiality. The study indicated that comparative advantage is the most important factor affecting organizations' adoption of cloud computing, and data security and privacy are among the most important obstacles facing organizations in adopting computing.
- Study of (Budņiks and Didenko, 2014), which aimed to study the factors affecting the decision of enterprise managers and small-sized companies to adopt the application of cloud computing technology, and the study examined a number of factors, the most important of which are security, data confidentiality and comparative advantage. The researchers used the descriptive analytical approach, through the design of a questionnaire that was designed and distributed to 150 middle management employees in institutions. The study concluded that there is a positive trend towards institutions adopting cloud computing technology in their work due to several factors, the most important of which are data confidentiality and the comparative advantage that it achieves.
- Study of (Trivedi, 2013), which aimed to analyze the situations of governments and large companies that rely on cloud computing in their work, whether they are adopting this technology or thinking to move to implement it, by answering the study to a number of in-depth questions about the conditions of those companies in order to identify any emerging patterns and explore programs Operating cloud computing and formulating a model for adopting cloud computing in the work of these institutions. The study concluded a number of results, the most important of which is that public and private sector organizations look forward to working and spreading cloud computing in their work because of its importance in facilitating work. Some organizations have made great strides in using computing.

#### **Commenting On Previous Studies:**

It is clear from the review of previous studies that these studies were numerous and varied according to the different goals that they sought to achieve, as well as the different environments that were applied to them, the variables they studied, the curricula used and the tools that were used.

#### **Theoretical Framework**

##### **First- Cloud Computing**

Recently, in light of the tremendous technological development in the world, and the pursuit of applying the computerized electronic system in all walks of life, many owners of institutions and companies have resorted to adopting the idea of cloud computing and starting to implement it to facilitate the conduct of administrative work in the institution.

Cloud computing has created many new opportunities for organizations around the world, and today, cloud services are available at affordable prices and accessible to businesses at all levels. There are also huge economic advantages to this widespread acceptance of cloud computing, and many companies have now embraced cloud computing. Over the years, the advent of technology has helped boost the growth of cloud computing, but this growth was not as expected at the beginning of the cloud computing era (Raza, 2015). Cloud computing is based on the main idea of making use of shared resources, whose cost is measured by how much they are used over the Internet. The need for cloud computing arises as a result of the increase in large-scale, high-performance systems and the high cost of a large number of needed resources. This technology provides better resource delivery services as needed. While reducing the effort (Radwan, 2016), and according to (Gupta, 2013), cloud computing also depends on the cloud, which is a huge interconnected network of servers or individual computers that work in parallel that combines computing resources, which leads to generating energy Supercomputing, and it relies on virtualization technology that helps to make the most of these resources and

increase their flexibility. The ownership of it is the responsibility of a third party called the cloud provider, who in turn bears the cost of servers, hardware and software.

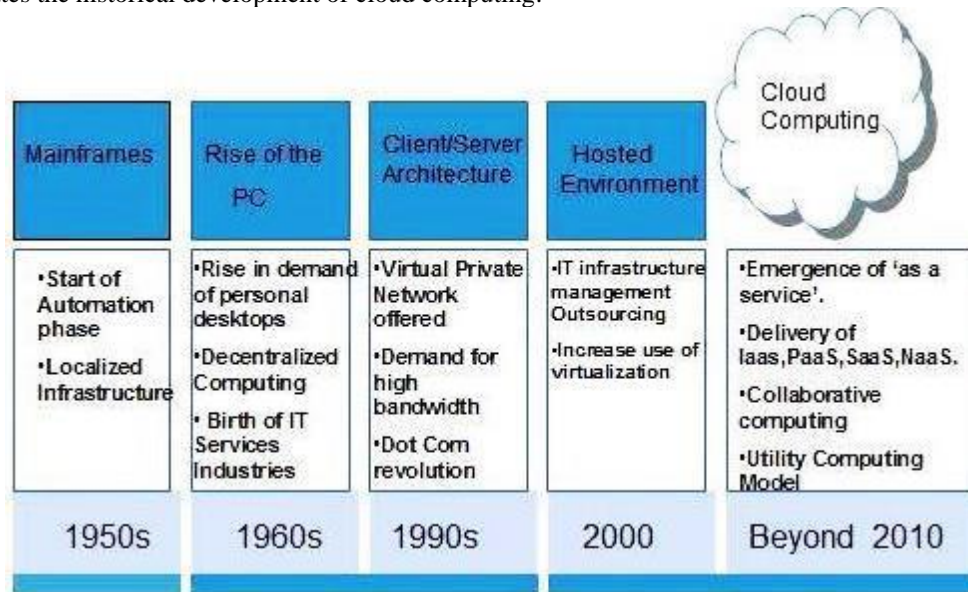
An overview of cloud computing to simplify it by recognizing its concept, origin, development, and requirements used by charitable organizations, as well as the most important characteristics, advantages, environmental system, components, and obstacles facing their application, in addition to addressing the dimensions that the researcher studied to determine the readiness of institutions to adopt cloud computing technology.

**Cloud Computing Concept**

The rapid development in network technology has led to the tendency of many institutions to make their applications available for use through the Internet in what is known as cloud computing, which has become a buzzword in the world of industry, although it is not a completely new concept, but it has become sweeping presence in the present digital age and that is due to the spread of the Internet and telephone devices on a large scale with the improvement of bandwidth, as this technology provided its users with better advantages such as saving expenses and providing services to the largest segment of beneficiaries (Al-Alimi, 2014).

The first appearance of the term cloud computing dates back to 1997 in a lecture by the scientist Shelapa from the University of Texas, in which he suggested the importance of having a pattern of cloud computing determined by economic logic instead of technical logic alone, but it was recently used as a marketing method after this term attracted the marketing and academic fields, and in 1999 Marc Andreessen tried to commercialize cloud computing with infrastructure as a service model, and in 2000 Microsoft expanded the concept of software as a service by developing web services, and in 2001 IBM explained and illustrated advanced automated techniques used in managing complex IT systems such as: self-monitoring and healing Self-configuration and self-improvement (Lin A, 2012), and in 2005 Amazon used cloud computing in its infrastructure, which led to the provision of new features characterized by speed and ease. The result was the development of the concept of cloud computing. In 2007, Google and IBM took the initiative Partnership with a number of universities around the world, with the aim of entering into a major research project to develop cloud computing technology (Salah, et al., 2010).

The graph illustrates the historical development of cloud computing:



**Figure 2:** The historical development of cloud computing

Source: (Point, 2014)

Alassaf (2016) defines cloud computing as a term given to all forms of distributed and interconnected computing through a network that provides services of interest to users.

According to (Radwan, 2016), the cloud allows users to access the service at any time and any place and pay for what is used only, and it is a way to connect computerized resources, distributed systems and web services, as it's a unique opportunity for companies, as it aligns with information technology requirements and infrastructure.

According to (Lin, 2012) There is a growing realization that there will come a day when cloud computing will be the main tool that will be relied upon in managing enterprises and small and medium-sized companies, as the cloud market worldwide is expected to reach 8.1 billion by the end of 2013.

According to (Alshamaila, 2013), various researchers indicated that cloud computing is a new model and emerging technology, while others see that it is not a new concept as it uses traditional computer technology, and there are dozens of definitions of cloud computing and during each definition we can get a different idea About the nature of cloud computing, where (Foster et al, 2008) defined cloud computing as large-scale distributed computing with economies of scale that includes an abstract set of computing

power management, virtualization, storage units, dynamic volume and services that are delivered on demand to external customers via the Internet. It is a type of computing in which information technology is linked to capabilities and is highly scalable, which is provided as a service over the Internet to several external customers (Ommeren et al, 2009). A variety of user interface devices (Chee and Franklin, 2010).

It is a distributed, parallel computing system consisting of a set of interconnected virtual machines, which are automatically provided as one or more unified computing resources based on negotiated SLAs between the service provider and the beneficiaries (Buyya et al, 2011).

Cloud computing can be defined from a service point of view as a type of computerized application service such as e-mail, office software, and enterprise resource planning, which uses widespread resources that can be shared among the employees of the enterprise, and therefore the user can connect to a number of servers at the same time, so that these allow Servers exchange information among themselves (Bahour, 2016).

The researchers adopt the definition of cloud computing as a procedural definition as: A sophisticated technology that allows users to transfer and process their files and data in the cloud (technological resources over the Internet) so that this data is stored and processed within the cloud, with access to that data at any time and place whenever the Internet is available.

#### Cloud Computing Goals:

Cloud computing is a modern technology that seeks to achieve the following goals (Eid, 2013), (Alshamaila, 2013) and (Laudon & Laudon, 2017):

- Providing high storage space for high quality information.
- Providing easy access to information with the ability to retrieve it at any time and from anywhere on the Internet.
- Sharing information between beneficiaries and the ease of its circulation and transmission over the Internet, regardless of the size of that information.
- Obtaining most of the operational and application software for free in most cases, which saves the beneficiary the cost, time and maintenance.
- Elimination of the need to make backup copies of information stored on personal computers and storage devices.
- Processing beneficiaries' information remotely, related to creating, deleting, modifying files or determining levels of access to them, in addition to organizing their preservation and storage.

**Cloud Computing Elements:** Laudon & Laudon (2017) and (Hsu, 2014) see that cloud computing contains a number of elements, the most important of which are:

- A personal computer connected to the Internet, preferably with a high speed.
- An operating system that allows access to the Internet.
- An internet browser that can use cloud computing.
- Cloud computing service provider.

The following figure illustrates by representing a hypothetical cloud service infrastructure.



Figure 3: Cloud Computing Elements

Source: (Laudon & Laudon, 2017)

#### Cloud Computing Features:

According to (Masrom & Rahimli, 2015), cloud computing is characterized by a number of characteristics, the most important of which are the following:

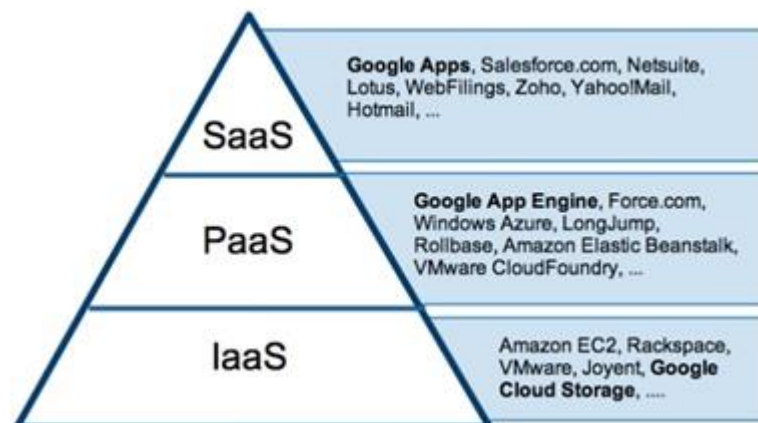
- **User Centralization:** It means that the user, as soon as he is connected to the cloud, becomes the owner of the documents and data he stores inside the cloud, and he can share it with others over the Internet.
- **Centralization of Tasks:** where the cloud works and focuses on meeting the needs of the user and how to satisfy the needs of users through its various applications such as word processing, spreadsheets and e-mail.
- **Infrastructure Centralization:** Using the cloud helps free you from the burden of creating and managing complex operations through what the cloud provides from huge servers that help in performing complex tasks using high-spec computers.
- **Centralization Of Software, Applications, And Documents:** It is possible to run, store and edit data in computing servers through any computer connected to the Internet, as this feature allows the ability to use it permanently, and the service provider gives access and modification rights to files to clients, which enhances cooperation between members of the same group regardless of Presence.
- **Computing Power:** It is produced through the interconnection of thousands of computers and servers together.
- **Access:** Storing data in the cloud allows users to retrieve more information from a different number of repositories.
- **Intelligence:** required to extract and analyze the huge data stored on the various clouds.
- **Programming:** It is the most important requirement to enable dealing with many necessary tasks in the cloud, such as protecting information security.
- **Continuity of Service:** through easy access to data at any time and from any place where the Internet is available.

The researchers believe that one of the most important characteristics of cloud computing is the ability to access data and information by its users at any time as long as the Internet is available, as well as data sharing, as all institutions using technology can work on any file in the cloud and share it collectively.

**Cloud Computing Applications as Services:**

Hsu (2014) sees that cloud computing employs service-driven business models and that it can display services that are grouped into the following categories:

- Software as a Service: "SaaS"
- Platform as a Service: "PaaS"
- Infrastructure as a Service (IAAS)



**Figure 4:** Computing as Services Applications

**Source:** (Gartner, 2009)

**First: Software As A Service:** It is that you use a specific application stored on the cloud, for example, a word program located in a data center and you connect to it via the Internet and write in it, modify and add data and then get the output from it, and all of this while you are on the cloud and your device is only the communication tool, and the user here cannot control Operating system in the cloud and does not control hardware or networking. YouTube can be considered in this category, as the on-site video browser is the cloud-based application with which you can access existing videos, but you cannot change anything on the site.

**Second: The Platform as a Service:** Using the cloud as a platform to put several applications on it and you can work on all of them. You can also put a complete operating system and there is integration between the applications. For example, you design something in Photoshop and then it is inserted into another application, then it moves and adds effects, so we get Video clip with audio. Like Google apps, which is a platform that allows you to add apps as desired.

**Third: Infrastructure As A Service:** Hardware resources (such as storage) and computing power are provided as services to clients, and the cloud is treated as an infrastructure limited to a certain processing capacity, memory size, storage space and a certain number of users, and you are free to use it in the way that suits you. For example, you can install several operating systems, install several applications on each system, and allow a certain number of users to enter each operating system to use its applications without allowing them to be confused. (Lamba & Gurdev, 2016)

**Cloud Computing Classifications:** According to (Laudon & Laudon, 2017), cloud computing can be classified into four types:

1. **Public Cloud Computing:** It is one of the most common types of clouds in use and is relatively cheap to use, and is described from a traditional perspective where the resources are provided according to the basis of self-service over the network, through web applications and services such as Google and Amazon, through a third-party service provider Which collects bills and expenses based on service computing (Shaaf, 2014).
2. **Private Cloud Computing:** It is a type of cloud in which the infrastructure is operated within the organization and managed by the organization itself so that the organization that adopts this type of computing controls the management of data and operations without restrictions or from a third party regardless of its location, and it has several motives For use in organizations, the most important of them are: Maximizing the use of the internal resources of the organization. Private computing is an option for many companies because of their increased control over the infrastructure. It is characterized by data privacy and therefore reduces security concerns, and requires a lower cost of data transmission (Dillon, 2010).
3. **Community Cloud Computing:** In this type of cloud, a number of organizations share the same infrastructure by creating a shared cloud for those organizations, and the cloud infrastructure can be hosted from one of the participating organizations or through a third party “vendor” (Dillon, 2010).
4. **Hybrid Cloud Computing:** It is a mixture between two types of computing such as public and private or community computing, in this type users usually use public cloud computing services to perform information processing and non-critical business operations, while keeping information and computing business operations under control. Using the private cloud, where the host infrastructure is a mixture between the cloud host and servers dedicated to management, and this is the most part, in which some nodes run on real physical hardware, and others run on cloud server models (Shaaf, 2014).

#### **Factors Affecting The Readiness Of Charities To Adopt Cloud Computing:**

The researchers studied and reviewed a number of previous literature related to cloud computing, and they noticed that a number of previous researchers touched on some of the factors that contribute to the adoption of modern technologies by institutions, and the most prominent of these factors will be addressed, which are as follows:

1. **Senior Management Support:** Senior management is the basic building block for organizations, because of its leading role in developing organizations by adopting advanced technologies and working to support them. Low and Chen, 2011 sees that the more technological development increases and becomes more complex, the higher It can provide the necessary vision to create a suitable environment for development, and many researchers have pointed out that there is a positive relationship between the support of senior management and the adoption of advanced technology, and according to (Alshamaila and Papagiannidis, 2013), the support of senior management is an essential link between workers and the adoption of organizations for innovation and technological development. (Bryde, 2008) defines senior management as a group of people working in the highest authority within the organization and they are characterized by being highly qualified in management and leadership, because of their importance, and a sensitive impact, especially in making crucial decisions for institutions, and providing the necessary support of all kinds to all workers in the institution. And both (Mvelase et. al., 2013) confirmed that the application of cloud computing in organizations helps senior management in reducing labor costs, in addition to increasing the scalability in providing services with high quality, efficiency and short time. The researchers adopt the definition of (Bai & Sarkis, 2013) as a procedural definition of his study, “the main coordinator and supporter of all internal organization activities among all working departments in the institution, whose role is to support work teams contributing to the provision of services, as well as working to resolve conflicts and problems facing workers in the institution.
2. **Organizational Structure:** The rapid change in technology imposes huge burdens on organizational forms within organizations, as development contributes to breaking away from bureaucracy at work, and away from traditional structures in organizations that impede keeping pace with development, and therefore organizations are working to develop their organizational structures and depart from the traditional form In order to respond to the pace of development within and outside organizations (Kerzner, 2013). And (Ubani, 2012) defines the structure of the organization as the way in which the institution and authority are managed, and the work procedures are clarified through it, as well as governing the rules of work among members, and researchers know it procedurally: the framework approved by the senior management to follow up the activities of the institution, the organization of individuals and the division of burdens among employees, taking into account the necessity of its suitability to the nature of individuals as well as the objectives of the institution in order to raise the efficiency of work and achieve those goals. According to (Abu-Alhusne, 2017), the organizational structure of institutions must be characterized by a number of characteristics in order to facilitate business management in organizations in a highly efficient and effective manner, and these characteristics are:
  - Flexibility: It is the ability to change with changing situations, and adapting to it as required by the surrounding circumstances.
  - Simplicity.
  - The flow of senior management as needed to take appropriate decisions.

#### **Second - Charitable Institutions**

Charitable institutions are considered among the civilizational phenomena in any country, because they show the extent of sophistication that members of society have reached in order to establish such institutions to meet with various activities that urge solidarity between members of society in various areas of life, and given the economic conditions that our Palestinian people in general and our people are going through. In Gaza Strip in particular, charitable institutions are considered one of the pillars of civil

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society, and one of the important pillars upon which our Palestinian society is based in light of the recurring crises of wars, repeated occupation, stifling siege and unemployment. In light of these difficult circumstances, it was necessary to establish charitable institutions in the Palestinian territories. In order to provide services and assistance to the Palestinian community, these institutions have developed day by day (Imam, 2007), however, these institutions faced many challenges, both at the internal and external levels, and the greatest impact on the work of these institutions emerged after the 2005 elections, which led to the orientation of countries The grant to provide aid to donors as an alternative to the elected government, and the work of the institutions increased after the events of 2007 and the intensification of the siege, as the number of charitable institutions multiplied. A female worker in Gaza Strip whose budgets exceeded the budget of the Palestinian government in Gaza Strip and now provides relief services to a large number of community members (Al-Aloul, 2011).

Given the importance of the role that falls on these institutions under difficult circumstances, it was necessary to study the readiness of charitable institutions to apply modern technologies represented in cloud computing in order to reach a better level of justice in the distribution of these institutions to their services, as well as work to raise efficiency and quality, both quantitatively and qualitatively through These institutions adopt modern technologies such as cloud computing in their work.

#### Types of Charitable Organizations:

Charitable institutions in Palestine in general and Gaza Strip in particular can be classified according to the nature of work and the role they contribute to within Palestinian society into three groups, namely (Al-Sakani, 2012):

1. Institutions that carry out charitable and social welfare activities with the aim of helping needy groups and include most NGOs.
2. Development institutions that aim to participate in the development process and achieve it, and work to provide the individual with the necessary training to qualify him to participate in the production process.
3. Institutions that contribute to preparing people to play a positive role in decision-making in national and international institutions, and include political activity within the state.

The number of civil and charitable institutions operating in Gaza Strip registered with the Ministry of Interior in Gaza, according to the 2022 statistic, working in various fields reached 846 institutions. During his study, the researchers will address only social charitable institutions, which numbered 415 institutions distributed according to the following table on the governorates of Gaza Strip.

**Table 1:** Social charitable institutions geographically distributed over the governorates of Gaza Strip

#	The Governorate	The Number
1.	Gaza Governorate	167
2.	North Gaza Governorate	94
3.	Central Governorate	45
4.	Khan Yunis Province	66
5.	Rafah Governorate	43
<b>Total</b>		<b>415</b>

**Source:** General Administration of Association Affairs in the Ministry of Interior - Gaza - 2022

#### Methodology and Procedures:

**First - Study Methodology:** This study adopts the descriptive analytical approach in order to describe and clarify the phenomenon to be studied in order to achieve the objectives of the study, through which it attempts to describe the phenomenon under study, analyze its data, and the relationship between its components and the opinions presented about it and the processes it includes, and according to (Al-Assaf, 2000) The descriptive-analytical approach did not stop at collecting information to describe the phenomenon, but rather to clarify the relationship and its amount, and to deduce the reasons behind a particular behavior from previous data.

#### The Researchers Used Two Main Data Sources:

1. **Primary Sources:** In order to address the analytical aspects of the subject of the study, the researchers tended to collect primary data by designing a questionnaire as a main tool designed specifically for this purpose, in addition to the interview as a support tool in data collection.
2. **Secondary Sources:** The researchers used some foreign and Arabic books and references related to the subject of the study in order to address the theoretical framework of the study.

**Secondly- The Study Population and Sample:** the study population is considered to be all the vocabulary of the phenomenon that the researchers will carry out the study on (Abu-Alhusne, 2017). In the Ministry of Interior and the Ministry of Social Affairs.

In order to collect data about the study, the simple random sampling method was used, taking into account a number of criteria that the researchers challenged to choose the study sample, including:

1. That the institution be accredited and licensed by the competent authorities for a period of time and has been providing its services to citizens for 7 years.
2. The number of employees in the institution is 10 employees at least.
3. The organization has a strategic action plan.
4. Taking into account the geographical distribution of institutions at the level of Gaza Strip.
5. Taking into account the proportional representation of some international organizations so that the study includes everyone.

The researchers calculated the study sample from the total employees in 83 charitable institutions operating in Gaza Strip, which were selected according to the previous criteria. By applying the following equation, it results that the study sample is not less than 294 employees, and the researchers sought to ensure a balance in selecting the sample from various institutions, distributed according to the governorates as follows:

**Table 2:** Distribution of the study sample according to the governorates of Gaza Strip

The Governorate	Total Number Of Establishments	The Ratio	The Sample
Gaza Governorate	167	0.4	33
North Gaza Governorate	94	0.2	19
Central Governorate	45	0.1	9
Khan Yunis Province	66	0.2	13
Rafah Governorate	43	0.1	9
<b>Total</b>	<b>415</b>	<b>1.0</b>	<b>83</b>

**Third- Study Tool:** We consider the questionnaire the most widely used and widespread means among researchers, and the questionnaire is defined as “a tool that includes a number of dimensions, axes, and paragraphs used to obtain opinions or data by a group of respondents according to certain controls, and the respondents respond by themselves to it and it is written in writing.” (Al-Agha, 2004), and in order to conduct the applied study, the researchers prepared a questionnaire in order to measure the readiness of charitable institutions in Gaza Strip to adopt and apply cloud computing.

**Table 3:** Study axes distributed according to citation sources

#	Axis	Number Of Paragraphs	Source
1.	Enterprise Structure	8	(Nahm & Vonderembse & Koufteros 2003)
2.	Senior management support	8	(Oliveira 2014) , (Mansour, 2013)

The questionnaire consisted of 4 main sections:


**The First Section:** contains personal and organizational data.

**The Second Section:** consists of two paragraphs to know the technical methods used in the work of institutions.

**The Third Section:** It is a measure of the readiness of institutions to adopt cloud computing. The section included 16 paragraphs spread over two axes according to the previous table.

The researchers used the scale from 1-10 for the questionnaire items in order to obtain better accuracy in evaluating the respondents' opinions, so that the closer the score was to 10, this indicated the high approval of what was stated, and vice versa, and the following table illustrates this:

**Table 4:** The scale scores used in the questionnaire

Response	Strongly Disagree									Strongly Agree
Class	1	2	3	4	5	6	7	8	9	10

The following table shows the classification that was used as a criterion for classifying the study's axes, and the results that were reached:

**Table 5:** The criteria for classifying the research axes

#	Category	Relative Weight
1.	Excellent	%100 - %91
2.	Very Well	%90 - %81
3.	Good	%80 - %71
4.	Acceptable	%70 - %61
5.	Weak	%60 أقل من

**The Validity And Reliability Of The Questionnaire:** The validity and reliability of the questionnaire are intended to verify the validity and reliability of the study tool (the questionnaire), as follows:

**First: The Validity of the Questionnaire:** honesty means that the questionnaire includes all the elements that must be included in the analysis on the one hand, and the clarity of its paragraphs and vocabulary on the other hand, so that it is understandable to everyone who uses it. The study is valid if it determines the validity of its scores. In order to verify the validity of the study tool, the researchers conducted the following validity tests:

**First: Apparent Honesty:** the researchers presented the study tool in its initial form to a group of arbitrators, who, in turn, provided advice and guidance, and modified and deleted what was necessary on the paragraphs of the questionnaire.

**Second: The Validity of the Scale:**

**Internal Consistency Validity of the Questionnaire's Paragraphs:** Internal consistency honesty means the extent to which each paragraph of the questionnaire is consistent with the axis to which this paragraph belongs. The final score and its addition to it, by calculating the correlation coefficients between each paragraph and the total score for its axis as follows:

**Table 6:** The validity of the internal consistency for all study axes:

#	Statement	Number Of Paragraphs	Correlation Coefficient	Significance
1.	<b>The First Axis - The Structure Of The Organization</b>	8	0.605	0.001
2.	<b>The Second Axis - Support For Senior Management</b>	8	0.469	0.014

The previous table shows the correlation coefficients between each axis of the study, which shows that the indicated correlation coefficients are a function at the level of significance (0.05), as the probabilistic value of each axis is less than (0.05).

**The Internal Consistency of the First Axis: The Structure of the Organization:**

**Table 7:** The internal consistency of the first axis: the structure of the organization

#	Statement	Correlation Coefficient	Significance
1.	The organizational structure of the institution is characterized by decentralization of work.	0.575	0.002
2.	The organizational structure of the organization helps to delegate work.	0.448	0.019
3.	The structure of the organization is characterized by the presence of a small number of "3 levels" of administrative levels between the operational divisions and the CEO.	0.468	0.014
4.	The organizational structure is characterized by the flexibility necessary for the application of cloud computing.	0.635	0.000
5.	Organizational communication between employees is done quite easily.	0.567	0.002
6.	The organization opens multiple channels of communication between managers and employees of the organization to carry out work.	0.642	0.000
7.	The organizational structure covers all the functions and activities of the organization.	0.505	0.007
8.	The organization has written laws and procedures that lead to efforts to improve the quality of work.	0.685	0.000

The previous table shows the correlation coefficients between all the paragraphs of the first axis, the structure of the organization and the overall average for the first axis, which shows that the indicated correlation coefficients are significant at the level of significance (0.05), as the probabilistic value of each paragraph is less than (0.05).

**The Internal Consistency of the Second Axis: The Support of Senior Management**

**Table 8:** The internal consistency of the second axis: the support of senior management

#	Statement	Correlation Coefficient	Significance
1.	Senior Management is constantly informed of the technical developments of cloud computing and its importance.	0.763	0.001
2.	Senior management is concerned with providing workers with the training and skills necessary for any new technology to keep pace with development	0.624	0.001
3.	There is support from senior management in the field of information technology to adopt everything that is new, such as cloud computing technology.	0.697	0.001
4.	There is a future plan for the senior management to adopt cloud computing and use it in IT operations	0.858	0.001
5.	Senior management sets remedial plans to eliminate the obstacles that hinder the use of any new technology such as cloud computing technology.	0.711	0.001
6.	Senior management provides the support and requirements necessary for the adoption of cloud computing technology.	0.803	0.001
7.	Senior management seeks to maintain comparative advantage by adopting modern technologies and using them within their operations	0.719	0.001
8.	Senior management bears the economic and regulatory risks of cloud computing adoption.	0.682	0.001

The previous table shows the correlation coefficients between each paragraphs of the second axis of senior management support and the overall rate of the second axis, which shows that the indicated correlation coefficients are significant at the level of significance (0.05), as the probabilistic value of each paragraph is less than (0.05).

**Stability Of The Questionnaire Paragraphs:** The stability of the questionnaire is not intended to give this questionnaire the same result if the questionnaire was redistributed more than once under the same conditions and conditions, or in other words, it means stability in the results of the questionnaire and not changing them significantly if it was redistributed to individuals several times during periods of time In order to verify the stability of the study's resolution, the reliability steps were performed on the same exploratory sample in two ways: the half-segmentation and Cronbach's Alpha coefficient.

**The Split-Half Method:** The Pearson correlation coefficient was found between the rate of odd-ranked questions and the rate of even-ranked questions for each dimension. The correlation coefficients were corrected using the Spearman-Brown correlation coefficient for correction, as it was confirmed, as in the previous table, that there is a relatively large stability coefficient for the items of the questionnaire, which Researchers are assured of using the questionnaire with all reassurance.

**Table 9:** Shows the stability coefficient (the split-half method) and Cronbach's Alpha coefficient

#	Statement	Number Of Paragraphs	Cronbach's Alpha Coefficient	Spearman Brown
1.	The First Axis - The Structure Of The Organization	8	0.714	0.819
2.	The Second Axis - Support For Senior Management	8	0.777	0.826
<b>Total</b>		50	0.741	0.823

Cronbach's Alpha coefficient was used to measure the stability of the resolution as a second method for measuring the stability.

The researchers conclude from the results of the validity and reliability tests that the study tool (the questionnaire) is honest in measuring what it was designed to measure, and it is very stable, which qualifies it to be an appropriate and effective measurement tool for this study and can be applied with confidence, and thus the questionnaire is in its final form.

#### Descriptive Analysis of the Study Variables:

##### Statistical description of the sample according to the primary data:

**Table 10:** Distribution of the study sample by age group

Personal Data		The Number	Percentage %
Age group	under 30 years old	61	25.3
	From 30 to less than 35 years old	104	43.2
	From 35 to less than 39 years old	44	18.3
	39 years and over	32	13.3
<b>Total</b>		241	100.0
Gender	Male	198	82.2
	Female	43	17.8
<b>Total</b>		241	100.0
Scientific Qualification	Diploma Degree	29	12.0
	Bachelor Degree	155	64.3
	Postgraduate Degree	57	23.7
<b>Total</b>		241	100.0
Years Of Service	5 years or less	61	25.3
	From 5 to less than 10 years old	109	45.2
	From 10 to less than 15 years old	63	26.1
	15years and over	8	3.3
<b>Total</b>		241	100.0
Job Title	Foundation Manager	83	34.4
	Board member	17	7.1
	Project Manager	67	27.8
	Head of the Department	74	30.7
<b>Total</b>		241	100.0
The Governorate	North	58	24.1
	Gaza	90	37.3
	Central	27	11.2
	Khan Younes	39	16.2
	Rafah	27	11.2
<b>Total</b>		241	100.0
Data Storage Locations	PC	108	44.8
	Server	133	55.2
<b>Total</b>		241	100.0

<b>Data Exchange With Funders Through</b>	Gmail	58	24.1
	yahoo	7	2.9
	Hotmail	176	73.0
<b>Total</b>		241	100.00

It is evident from the previous table that the age group of respondents from 30 to less than 35 years constituted 43.2%, and those aged from 35 to less than 39 constituted 18.3%, while those over the age of 39 constituted 13.3%. The previous table shows that 82.2% of the respondents were males, while 17.8% were females. The researcher attributes this result to the fact that institutions in the third world countries depend on males more than females, and this is supported by our reality in which we live. The previous table also shows that the percentage of respondents with bachelor's degrees is 64.0%, while postgraduate studies are 23.7%. The researcher attributes this to the fact that a bachelor's degree is the minimum requirement for a job.

It also appears from the previous table that the percentage of respondents whose experience is between 5 and less than 10 years is 45.2%, while 26.1% whose experience is between 10 and less than 15 years. It is evident from the previous table that the percentage of respondents who work in the title of director of an institution constituted 34.3%, while a member of the board of directors formed 7.1, and a project manager constituted 27.8, while the head of the department was 30.7%. The previous table shows that the percentage of respondents from Gaza governorate is 37.3%, followed by the North governorate by 24.1%, while the southern governorates (Khan Younis and Rafah) are 27.4%, and the results from the previous table showed that 55.2% of respondents reported that data is stored on private servers, while 44.8% store data on the personal computer. The previous table shows that Gmail accounted for 24.1%, while Yahoo accounted for 2.9%, while Hotmail was the most used method for exchanging data, with a percentage of 73.0%.

#### Answering the Study Questions:

The one-sample t-test was used to analyze the questionnaire items, and the item is considered positive in the sense that the sample members agree on its content if the calculated t-value is greater than the tabular t-value equal to 1.97 (or the probabilistic value is less than 0.05 and the relative weight is greater than 60 %), the paragraph is considered negative in the sense that the sample members do not agree with its content if the calculated t value is smaller than the tabular t value which is equal to 1.97 (or the probability value is less than 0.05 and the relative weight is less than 60%), and the sample opinions in the paragraph are neutral if Its p value was greater than (0.05).

**Q1-:** To what extent does the senior management support the application of cloud computing technology in charitable organizations?

The one-sample t-test was used, and the results are shown in the previous table, which shows the opinions of the study sample members in the paragraphs of the second axis, support for senior management.

**Table 11:** Analysis of the paragraphs of the second axis: Senior management support

#	Statement	SMA	Relative Weight	Standard Deviation	T. Value	Rank
1.	Senior Management is constantly informed of the technical developments of cloud computing and its importance.	6.99	69.90	1.55	9.921*	3
2.	Senior management is concerned with providing workers with the training and skills necessary for any new technology to keep pace with development	7.70	77.00	1.31	20.135*	1
3.	There is support from senior management in the field of information technology to adopt everything that is new, such as cloud computing technology.	7.70	77.00	1.38	19.108*	2
4.	There is a future plan for the senior management to adopt cloud computing and use it in IT operations	6.38	63.80	1.62	3.616*	6
5.	Senior management sets remedial plans to eliminate the obstacles that hinder the use of any new technology such as cloud computing technology.	6.00	60.00	1.56	3.612*	8
6.	Senior management provides the support and requirements necessary for the adoption of cloud computing technology.	6.61	66.10	1.47	6.462*	5
7.	Senior management seeks to maintain comparative advantage by adopting modern technologies and using them within their operations	6.86	68.60	1.31	10.212*	4
8.	Senior management bears the economic and regulatory risks of cloud computing adoption.	6.27	62.70	1.48	2.793*	7
<b>All Paragraphs</b>		6.81	68.13	10.83	89.025	

\*All values are significant at the level of significance .050

The results showed through the previous table that the relative weight of the second axis, "Support of Senior Management" (68.13%), which is the largest assumed value, number (6), which is greater than 60.0%, and the probability value was (0.000) which is less than (0.05), which means that the respondents' responses on this axis, it was positive, and the researchers attribute the high relative weight of this axis to the introduction of a new youth cadre that believes in progress and technological development, which is indispensable in administrative and service work. The results of this study agree with the study (Mansour, 2013) and the study of (Tarhini et al. The study differed with the study (Bahour, 2016), which indicated that the role of senior management is not sufficient for the application of cloud computing, and the researchers attribute this difference to the difference of the study community.

Paragraph (2) "The senior management is concerned with providing workers with the training and skills necessary for any new technology to keep pace with development" came first in the order of the paragraphs of this axis, as the relative weight reached (77.0%), which is greater than the number (6), which is greater than (60.0) %, and the probability value is (0.000), which is less than (0.05), which indicates that the opinions in this paragraph were positive according to the respondents, while the weakest paragraphs were Paragraph (5), which is "the senior management sets remedial plans to eliminate the obstacles that hinder the use of Any new technology such as "cloud computing technology" with a relative weight of 60.0%, which is equal to 60.0%, and the probabilistic value of the paragraph was (0.000) which is less than (0.05), which indicates that the opinions of the respondents on this paragraph were positive.

**Q2-:** How ready is the organizational structure within charities to adopt cloud computing technology?

The one-sample t-test was used, and the results are shown in the table that shows the opinions of the study sample members in the paragraphs of the second axis, the structure of the institution.

**Table 12:** Analysis of the paragraphs of the first axis: the structure of the institution

#	Statement	SMA	Relative Weight	Standard Deviation	T. Value	Rank
1.	The organizational structure of the institution is characterized by decentralization of work.	7.45	74.50	1.384	16.290*	8
2.	The organizational structure of the organization helps to delegate work.	8.42	84.20	1.014	37.043*	4
3.	The structure of the organization is characterized by the presence of a small number of "3 levels" of administrative levels between the operational divisions and the CEO.	8.83	88.30	1.195	36.711*	2
4.	The organizational structure is characterized by the flexibility necessary for the application of cloud computing.	7.97	79.70	1.016	30.053*	7
5.	Organizational communication between employees is done quite easily.	8.78	87.80	0.868	49.802*	3
6.	The organization opens multiple channels of communication between managers and employees of the organization to carry out work.	8.38	83.80	0.915	40.415*	5
7.	The organizational structure covers all the functions and activities of the organization.	9.27	92.70	0.804	63.081*	1
8.	The organization has written laws and procedures that lead to efforts to improve the quality of work.	8.03	80.30	0.919	34.267*	6
<b>All Paragraphs</b>		8.39	83.91	5.680	212.910	

\*All values are significant at the level of significance .050

The results show from the previous table that the relative weight of the first axis "the organization structure" (83.9%), which is greater than the default value number (6), which is greater than (60.0%), and the probabilistic value was (0.000) which is less than (0.05) and this This means that the respondents' responses on this axis were positive, and the researchers explain the reason for the high relative weight of the axis of the institution's structure to the existence of administrative systems, which are often required by the Ministry of Interior and donors to obtain support.

Paragraph (7) "the organizational structure covers all the tasks and activities of the institution" ranked first in the order of the paragraphs of this axis, where the relative weight reached (92.7%), which is greater than the number (6), which is greater than (60.0%), and the probabilistic value is equal to (0.000), which is less than (0.05), which indicates that the opinions in this paragraph were positive according to the respondents.

While the weakest paragraphs were paragraph (1), which is "The organizational structure of the institution is characterized by decentralization of work," where the relative weight reached (74.5%), which is greater than the number (6), that is, greater than 60.0%, and the probabilistic value of the paragraph amounted to (0.000) which is less than (0.05), which indicates that the opinions in this paragraph were positive.

## Conclusion and Recommendations

### Conclusions

The following Results and recommendations were reached:

- The study showed that charities in Gaza Strip are well prepared to adopt and implement cloud computing.
- The results showed that the relative weight of the "organizational structure" axis reached (83.9%), and the relative weight of the paragraph "the organizational structure covers all the tasks and activities of the institution" was (92.7%).
- The results showed that the relative weight of the axis of "Support of Senior Management" amounted to (68.13%), and the relative weight of a paragraph that the senior management is concerned with providing workers with training and skills necessary for any new technology to keep pace with development" was (77.0%).

### Recommendations

In light of the findings, there are a set of recommendations, as follows:

- The necessity of working to strengthen the principle of decentralization in the organizational structure of charitable institutions in Gaza Strip.
- Work on developing remedial plans to eliminate the obstacles that hinder the use of any new technology, such as cloud computing technology.

## References

- [1]Abdalmenem, S. A., et al. (2019). "Relationship between e-Learning Strategies and Educational Performance Efficiency in Universities from Senior Management Point of View." *International Journal of Academic Information Systems Research (IJAISR)* 3(6): 1-7.
  - [2]Abu Naser, S. S. and M. J. Al Shobaki (2017). "Organizational Excellence and the Extent of Its Clarity in the Palestinian Universities from the Perspective of Academic Staff." *International Journal of Information Technology and Electrical Engineering* 6(2): 47-59.
  - [3]Abu Naser, S. S. and M. J. Al Shobaki (2017). "The Impact of Senior Management Support in the Success of the e-DMS." *International Journal of Engineering and Information Systems (IJEAIS)* 1(4): 47-63.
  - [4]Abusharekh, N. H., et al. (2020). "The Impact of Modern Strategic Planning on Smart Infrastructure in Universities." *International Journal of Academic Management Science Research (IJAMSR)* 4(8): 146-157.
  - [5]Al Hila, A. A., et al. (2017). "Organizational Excellence in Palestinian Universities of Gaza Strip." *International Journal of Information Technology and Electrical Engineering* 6(4): 20-30.
  - [6]Al hila, A. A., et al. (2017). "Proposed Model for Learning Organization as an Entry to Organizational Excellence from the Standpoint of Teaching Staff in Palestinian Higher Educational Institutions in Gaza Strip." *International Journal of Education and Learning* 6(1): 39-66.
  - [7]Al Shobaki, M. J. and S. S. Abu-Naser (2016). "The Dimensions of Organizational Excellence in the Palestinian Higher Education Institutions from the Perspective of the Students." *Global Journal of Multidisciplinary Studies* 5(11): 66-100.
  - [8]Al Shobaki, M. J., et al. (2016). "The impact of top management support for strategic planning on crisis management: Case study on UNRWA-Gaza Strip." *International Journal of Academic Research and Development* 1(10): 20-25.
  - [9]Al Shobaki, M. J., et al. (2017). "Learning Organizations and Their Role in Achieving Organizational Excellence in the Palestinian Universities." *International Journal of Digital Publication Technology* 1(2): 40-85.
  - [10]Al Shobaki, M. J., et al. (2018). "Support Extent Provided by Universities Senior Management in Assisting the Transition to e-Management." *International Journal of Academic Management Science Research (IJAMSR)* 2(5): 1-26.
  - [11]Al Shobaki, M. J., et al. (2020). "Digital Repositories and Their Relationship to the Modern Strategic Planning of the Universities' Smart Infrastructure." *International Journal of Academic Information Systems Research (IJAISR)* 4(9): 1-18.
  - [12]Almasri, A., et al. (2018). "The Organizational Structure and its Role in Applying the Information Technology Used In the Palestinian Universities-Comparative Study between Al-Azhar and the Islamic Universities." *International Journal of Academic and Applied Research (IJAAR)* 2(6): 1-22.
  - [13]Bai, C. &. (2013). A grey-based DEMATEL model for evaluating business process management critical success factors. *International Journal of Production Economics*.
  - [14]Bryde, D. (2008). Perceptions of the impact of project sponsorship practices on project success. *International journal of project management*.
  - [15]Budņiks, L. &. (2014). Factors Determining Application of Cloud Computing Services in Latvian.
  - [16]Buyya, R., (2011). *Cloud Computing Principles and Paradigms*. United States: Johan Wiley &SONS, INC., Publication.
  - [17]Dillon, T. (2010). *Cloud Computing: Issues and Challenges*. Perth, Australia: Curtin University of Technology.
  - [18]El Talla, S. A., et al. (2018). "Organizational Structure and its Relation to the Prevailing Pattern of Communication in Palestinian Universities." *International Journal of Engineering and Information Systems (IJEAIS)* 2(5): 22-43.
  - [19]El Talla, S. A., et al. (2018). "The Nature of the Organizational Structure in the Palestinian Governmental Universities-Al-Aqsa University as A Model." *International Journal of Academic Multidisciplinary Research (IJAMR)* 2(5): 15-31.
  - [20]Gokmen, A. (2010). *Developments and Prospects in E-Government Implementation in Turkey (Vols. Vol. 2, No)*. Turkey: *International Journal of E-Business and E-Government Studies*.
  - [21]Gupta, P. S. (2013). The usage and adoption of cloud computing by small and medium businesses. *International Journal of Information Management*.
  - [22]Hsu, P. F.-H. (2014). "Examining cloud computing adoption intention, pricing mechanism, and deployment model". *International Journal of Information Management* 34(4), 474-488.
  - [23]Kassab, M. K. I., et al. (2017). "The Impact of the Availability of Technological Infrastructure on the Success of the Electronic Document Management System of the Palestinian Pension Authority." *International Journal of Engineering and Information Systems (IJEAIS)* 1(5): 93-109.
  - [24]Kerzner, H. R. (2013). *Project management: a systems approach to planning, scheduling, and controlling*: John Wiley & Sons
  - [25]Laudon, C, & Laudon P. (2017). *Management information system managing the Digital form*. (14th Edition). Pearson.
  - [26]Lin, A. &. (2012). Cloud computing as an innovation: Perception, attitude, and adoption. *International Journal of Information Management*.
  - [27]Madi, S. A., et al. (2018). "The Organizational Structure and its Impact on the Pattern of Leadership in Palestinian Universities." *International Journal of Academic Management Science Research (IJAMSR)* 2(6): 1-26.
  - [28]Masrom. M & Rahimli, A. (2015). *Cloud Computing Adoption in the Healthcare Sector: A SWOT Analysis*. Canadian Center of Science and Education. 11(10), 12-18.
-



- [29] Nahm, A. Y. (2003). The impact of organizational structure on time-based manufacturing and plant performance (Vol. 21(3)). Journal of operations management.
- [30] Oliveira, T. T. (2014). Assessing the determinants of cloud computing adoption: An analysis of the manufacturing and services sectors. . Information & Management, 51(5), 497-510.
- [31] Point, T. (2014). "Cloud Computing Tutorial. USA.
- [32] Salah, A. A. (2010). Data Analysis Using Map Reduce programming Model on the Cloud. Qatar: Qatar Uni. Faculty of Eng. The Dep. Of Science and Eng.
- [33] Stieninger, M. N. (2014). Impacts on the organizational adoption of cloud computing: A reconceptualization of influencing factors.
- [34] Tarhini A, Masa R, Al-Badi D, A, Almajali, M & Alrabayaah S. (2017). Factor influencing employee's intention to Use cloud computing.
- [35] Trivedi, H. R. (2013). Cloud Adoption Model for Governments and Large Enterprises. Cambridge: Massachusetts Institute of Technology.
- [36] Ubani, E. (2012). Evaluating the effects of organizational structure on the effective delivery of civil engineering projects. Interdisciplinary Journal of Contemporary Research in Business.

**Arabic References in Roman Scripts:**

- [1] Abu-Alhusne, Abdullah Mansour (2017). The role of organizational and functional factors in the success of NGO project management in Gaza Strip. (Unpublished Master's Thesis) The Islamic University, Gaza.
- [2] Al-Agha, Ehsan. (2004). Introduction to educational research design. i 3. Gaza: Al-Rantissi Press.
- [3] Al-Alimi, Thruth (2014). Ways to benefit from cloud computing applications in providing information services in the United Arab Emirates." Dubai: College of Islamic and Arabic Studies.
- [4] Al-Aloul, Abdul Majid Shehdeh (2011). The availability of requirements for the success of electronic management application in major charitable societies in Gaza Strip and its impact on institutional readiness against corruption. (Unpublished Master's thesis) The Islamic University, Gaza.
- [5] Al-Assaf, Saleh bin Hamad (2000). The researcher's guide to the behavioral sciences. Rabbad: Obeikan Library.
- [6] Al-Sakani, Doaa Adel. (2012). Charitable institutions are governed by their rulings and the controls of those in charge of them and the limits of their powers. (Unpublished Master's Thesis) The Islamic University, Gaza.
- [7] Bahour, Khaled (2016). The availability of factors affecting the adoption and application of cloud computing in government institutions from the point of view of higher management. (Unpublished Master's Thesis) The Islamic University, Gaza.
- [8] Eid, Nabil. (2013). Cloud computing, its meaning and use, its pros and cons. (D.N): (D.M).
- [9] Gabi, Shafer. (2015). Adopting cloud computing in the Palestinian public sector, opportunities and challenges. Nablus - Palestine: An-Najah University.
- [10] Khuwaildat, Saleh (2016). The role of innovative digital computing applications in improving the performance of human resources in the organization. Journal of Ijtihad for Legal and Economic Studies (10) 232-251.
- [11] Mansour, Ahmed. (2013). Fears and challenges of adopting cloud computing in higher education institutions. (Unpublished Master's Thesis) The Islamic University, Gaza.
- [12] Qureiqi, Muhammad Zahid Hamid (2014). The effectiveness of a program for employing cloud computing applications in developing the electronic learning skills of technology teachers. Gaza.
- [13] Radwan, Aziza (2016). The relationship of cloud computing to developing the job performance of managers working in Palestinian universities in Gaza Strip. (Unpublished Master's Thesis) Al-Azhar University, Gaza.
- [14] Shaat, Ahmed (2014). A proposal for the application of the government cloud to develop electronic management in the Palestinian government "Gaza Strip. Gaza: Academy of Politics and Leadership.
- [15] Syed, Rehab Fayeze (2013). Open Source Cloud Computing Systems "A Comparative Analytical Study. Iraq. The Iraqi Journal of Information Technology. (17) 180-201.