

The Reality of Change Strategies and the Level of Coordination and Transparency in the Readiness of Charitable Institutions in Gaza Strip to Adopt and Implement Cloud Computing

Mahmoud T. Al Najjar¹, Mazen J. Al Shobaki², Suliman A. El Talla³

^{1,2}Faculty of Administrative and Financial Sciences, Israa University – Gaza, Palestine.

³College of Intermediate Studies – Al-Azhar University – Gaza, Palestin

¹malekzain750@gmail.com, ²mazen.alshobaki@gmail.com, ³Eltallasuliman@gmail.com

Abstract : *The study aimed to identify the reality of change strategies and the level of coordination for the readiness of charitable institutions in Gaza Strip to adopt and apply cloud computing. The stratified random sample, where the study sample consisted of (294) employees, and in order to collect data, (300) questionnaires were distributed to the heads of boards of directors in addition to the executive directors as well as heads of departments, and (241) questionnaires were retrieved, or 82%. The study concluded that the change strategies axis scored (68.13%), while the coordination and transparency axis reached (82.02%), and in the same context, it was concluded that donors are looking forward to implementing cloud institutions at a rate of (85.63%). The study made a number of recommendations, the most important of which is the need to work on developing remedial plans to get rid of the obstacles that hinder the use of cloud computing. The study recommended the importance of institutions adopting clear and diverse strategies for institutional and organizational change. With regard to the application of cloud computing technology.*

Keywords: Strategies For Change, Coordination, Transparency, Charitable Organizations, Cloud Computing, Gaza Strip, Palestine.

Introduction

In light of technological progress, 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). As cloud computing is one of the technologies that has attracted the attention of those concerned with the information field, from analysts, researchers, media, and managers, because of the multiple opportunities that this technology gives to improve the work of institutions, in addition to improving efficiency, reducing the administrative burden, rationalizing infrastructure expenses, and improving Technical Support (Saleem, 2011). From this point of view, it has become imperative for decision-makers and those interested in managing organizations to continuously search to keep pace with the changes that contribute positively to the process of development in various fields, to study the challenges they face in various fields in order to confront and overcome them without colliding with them, and for that the decision-makers and those interested It is their responsibility to adopt strategies that contribute to changing the work system within the institutions, which will contribute to increasing the level of coordination and enhancing transparency in work among the beneficiaries and partners in the work.

The charitable work sector in Palestine is one of the most important active sectors in the Palestinian civil society, as it plays a vital and effective role in society because of its profound and important impact on our reality. Palestinian civilian.

As part of the process of keeping pace with the technological revolution with its wide facilities for work, and in light of a developed world governed by a wide network of management information systems, researchers believe that the idea of

applying cloud computing to relief service providers will contribute to enhancing the process of communication and communication between various government agencies, charities and donors In order to maximize the return impact on society, reduce the margin of wasted time, and the margin of duplication in providing services, which contribute to achieving high levels of satisfaction among citizens and donors that provide aid to associations, especially in light of the difficult economic conditions that Gaza Strip is going through. In general, computerization benefit The cloud in the work of service providers from institutions and donors will positively reflect on their performance in providing their services to citizens in a way that enhances the principle of fairness of procedures, which in turn works to achieve a balance in the social and economic system by improving the level of income for marginalized groups and achieving general social satisfaction according to a set of national standards Specific performance indicators, which in turn will enhance the fairness of procedures and transactions.

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. 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).
- **Procedural Definition Of Cloud Computing:** 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 established by a group of individuals by agreement among themselves in order to reach legitimate goals of community service and their goal is not material profit (Al-Aloul, 2011).
- **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

Organizations face many changes and external and internal influences affecting the provision of their services, and in order for organizations to achieve their goals, it has become necessary to search for concepts and administrative methods that keep pace with technological development in order to maintain the continuity of providing services and achieving the desired goals. And because the charitable sector plays an important and key role in the path of the Palestinian people, with the relief services it provides in light of the brutal siege facing our people, especially in light of the great challenges they face in light of the rapid changes that the world is experiencing, and given that Gaza Strip lives in economic conditions. Difficult, especially in light of the brutal Zionist siege and the decline in the provision of relief services by foreign donor countries as well as the Palestinian National Authority, which imposed a difficult reality on all levels.

In view of the role and importance of cloud computing, the researchers, in cooperation with the Association of Charitable Institutions in the northern Gaza Strip, held a workshop with 20 charitable organizations, including 5 institutions that apply computing technology. Cloud computing and its impact on business development were discussed, and the workshop participants agreed that cloud computing is a strategic technology. To solve many of the problems facing institutions such as duplication in providing services to beneficiaries, in addition to considering that cloud computing comes as a viable alternative to the prevailing paper-based system and some weak databases. The participants emphasized that the application of computing contributes to alleviating the problem of poor coordination and integration between different institutions. The audience that cloud computing is an effective tool to achieve good levels of oversight at the level of government and donors, in addition to setting clear standards for dealing with beneficiaries away from moods and contribute to enhancing transparency, and finally, it improves the overall institutional performance in terms of saving time and effort.

Based on the foregoing, the researchers found the problem of the study and its importance, so the study will focus on exploring the level of change strategies and the level of coordination and transparency of the readiness of charitable institutions to implement the application of cloud computing in their work, and studying the obstacles facing institutions to

implement it, as well as shed light on what is required for institutions to reach the adoption of an application Cloud computing technology.

Research Questions

From the foregoing, the research questions that will be answered by the study were concluded, and they are as follows:

Q1-: What are the strategies for change that help charities adopt the application of cloud computing?

Q2-: What is the extent of coordination between charities in the application of cloud computing?

Research Objectives

This study aims to achieve the following objectives:

1. Knowing the level of change strategies for applying cloud computing.
2. Recognize the level of coordination and transparency of the cloud computing application.
3. Identify the desired benefits of cloud computing application.
4. 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:

First- Scientific (Theoretical) Importance:

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. . As well as enriching scientific research on this topic.

Second- The practical importance of charitable institutions:

1. It may enhance the organization's future planning, and help support decision-making.
2. May support the process of coordination and transparency in the services and projects of institutions.
3. It helps in organizing and arranging work within the institutions.

Third- The Practical Importance for Donors:

1. Strengthening the principle of financial and administrative control over finance.
2. Support coordination and transparency between donors and institutions.

Fourth- The Practical Importance for the Beneficiaries:

1. Achieving social justice at the societal level in benefiting from services.
2. Achieving high levels of satisfaction among service beneficiaries.
3. Serving the largest number of segments of society.

Research Variables Definitions

1. **The Independent Variable:** Cloud Computing.

2. **Dependent Variable:** strategies for change, coordination and transparency.

Research Limits and Scope

The scope of the study shall be as follows:

1. **Objective Limits:** The study focused on The Reality of Change Strategies and the Level of Coordination and Transparency in the Readiness of Charitable Institutions in Gaza Strip to Adopt and Implement Cloud Computing
2. **Human Limits:** The study was conducted on workers in charitable institutions in Gaza Strip.
3. **Institutional Limits:** The study was conducted on charitable organizations operating in Gaza Strip.
4. **Spatial Boundaries:** The study was conducted in the State of Palestine.
5. **Time Limits:** The study was conducted in the year 2022.

Previous Studies

- Study of (Al Najjar et al., 2022), which 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.
- 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& Caroline, 2015), 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.
- A study of (Al-Fadl, 2015), which aimed to try to find out the possibility of accepting and applying cloud computing technology in the work of the Iraqi banking environment, as well as determining the benefits that will result from the application of cloud computing in the work of Iraqi banks, and the study community consisted of (32 individuals specialized in The results showed that the operating systems and applications, in addition to the physical devices, play a fundamental and important role in supporting banking databases, and facilitating many of the daily work, while providing high flexibility for human resources information in dealing. With databases inside banks, the study also concluded that the use of

- cloud computing will not threaten the privacy and security of banking databases.
- A study (Salman& Bhungara, 2015) which aimed to show the possibility of using cloud computing in NGOs in India to effectively manage health needs, in addition to showing the level of adoption of cloud computing in India and Pakistan among NGOs, and analyzing the concerns that these institutions face in using computing, and the study used the descriptive approach through a case study of some NGOs and designing a questionnaire to collect information from the managers of the organizations, and two interviews were conducted with the managers of two institutions in India and Pakistan. The study indicated a number of results, the most important of which is that data privacy is one of the most important obstacles facing the application of cloud computing in NGOs in India and Pakistan.
 - 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 (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.
 - A study of (Al-Alimi, 2014), which aims to identify the concept of cloud computing, its advantages and disadvantages, and benefit from its various applications in providing information services, and the extent to which educational libraries in the United Arab Emirates invest in such technologies. By relying on interviews for a number of library workers in the United Kingdom, and reports. The results of the study showed that cloud computing saves from 30-60% of technological expenditures in libraries and plays a key role in providing information service at all levels and aspects. Use of open source software.
 - 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 (Budniks 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.
 - The study of (Mansour, 2013), which aimed to clarify the risks of adopting the application of cloud computing in educational institutions, and the researcher applied his study to the Islamic University of Gaza as a model for the study. And the skills of information technology employees, safety effectiveness, and cost reduction) on the impact of educational institutions to adopt the application of computing, and to achieve the goal of the

study, the researcher used the questionnaire as a tool for data collection. The results showed a number of results, the most important of which is the idea of adopting cloud computing technology in the work of the Islamic University, which is acceptable due to the awareness of the sample members the size of the benefits that will accrue to the university from adopting this technology, and that the Islamic University is able to support and integrate university services with cloud computing. And the adoption of cloud computing works to reduce costs. And the university does not provide training programs for its employees to study such modern technologies as cloud computing.

- Study of (Gupta et. al., 2013) which aimed to study the factors affecting the adoption of cloud computing in small companies, as well as to determine the benefits that would accrue to those institutions if computing technology was adopted in their work. The study used the descriptive analytical approach, where a questionnaire was designed as a tool for the study. It was distributed to 211 institutions. The study showed that the ease of use of computing applications, suitability of services to companies' needs, data security, and cost reduction are among the most important factors that contributed to the adoption of computing technology by medium companies.
- 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 have varied 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. About previous studies:

The Points of Agreement and Differences between the Current Study and Previous Studies:

The researchers concluded the points of agreement and differences between this study and the previous group of studies, which are as follows:

First- Aspects of the Agreement:

Regarding the variables of the study: The current study is similar to a number of previous studies in its handling of the cloud computing variable by studying the factors affecting the

application of cloud computing, such as the study of (Bahour, 2016), (Stieninger, 2014) and (Budņiks and Didenko, 2014), (Oliveira et al., 2014).

Regarding the study method and study tool: The study agreed with most of the previous studies in their use of the descriptive analytical approach, as well as with previous studies in using the questionnaire as a tool for collecting information.

Concerning the study population and sample: This study differed with the studies in terms of the study population, and partly agreed with some that were taken from non-governmental institutions as a study community, such as the study (Gwendolyn, 2015 & Caroline) and (Bhumgara & Salman, 2015).

Second- Differences: The study differed with previous studies in terms of the study environment and the study community, as none of the previous studies addressed the application of cloud computing to the environment of charitable institutions, and this is one of the most important features that distinguishes the study from previous studies. Through interviews with specialists.

Benefits from Previous Studies:

- Enriching the theoretical framework in the study.
- Building a questionnaire study tool.
- Ensure that the current study is not repeated.
- Providing the necessary references for the study, especially foreign references.

What Distinguishes The Study:

- The study was applied to the environment of NGOS institutions in Gaza Strip, and to the knowledge of the researcher, this is the first study that studies the application of cloud computing in the work of NGOS institutions in Gaza Strip.
- The study variables were enriched through interviews and the workshop, where a number of variables that were not addressed in previous studies were extracted, such as coordination, transparency, organizational structure, and donor requirements.
- Using a number of tools for the data, where the researcher relied on more than one means in collecting primary data, most notably interviews, a questionnaire, and a workshop.

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.

The invention of the personal computer in the eighties of the last century led to a new stage in human history known as the information age, which quickly developed with the entry of the Internet into the arena of daily life at the end of the second millennium to the point that it could no longer be dispensed

with (Saad Eddin, 2012). The rapid development of network technology and the development of Internet infrastructure and the emergence of various versions of the Web such as Web 2.0 and Web 3.0 There has been a great development in the services provided over networks, its features appeared in the availability of large large storage spaces and tremendous speeds of the Internet, which paved the way for some institutions to make their applications available through the World Wide Web in the so-called computing The cloud provided its users with some advantages, the most important of which is saving expenses, as well as the ability to access information (personal files, programs, and everything a person needs) uploaded via the cloud from any place or device that can access the Internet. This allowed institutions to provide their services to the largest possible number of beneficiaries (Zaki, 2012).

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 the generation of computing power. It also relies on virtualization technology that helps to make the most of these resources and increase their flexibility. It is owned by a third party called the cloud provider, who in turn bears the cost of servers, hardware and software.

Concept of Cloud Computing:

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).

According to (Lin A, 2012), the first appearance of the term cloud computing dates back to 1997 AD in a lecture by the scientist Ramnath Shelapa from the University of Texas, in which he suggested the importance of a cloud computing

pattern determined by economic logic rather than 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 market cloud computing with infrastructure as a service model, and in 2000 Microsoft expanded the concept of software as a service through the development of web services, and in 2001 IBM explained and clarified the advanced automated techniques used in Managing complex information technology systems such as: self-monitoring, self-healing, self-configuring, and self-improvement. 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, both of Google and IBM, in a partnership initiative with a number of universities around the world, with the aim of entering into a major research project to develop cloud computing technology e) (Salah, et al., 2010).

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 is a unique opportunity for companies, as it aligns with information technology requirements and infrastructure. (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 on-demand services to external clients 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). Variety of user interfaces 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).

Wang, et al., (2010) defines cloud computing as a set of network services that provide personalized and cheap secure computing platforms on demand, which can be accessed in an easy and saturated way.

From the above definitions and concepts of cloud computing, the researcher noted the following:

- All previous definitions agree that cloud computing is a new model based on payment as much as use to reach flexibility in the use of information via the Internet and technical software in devices
- Computing can be used by companies using such technology to reduce costs and increase performance.
- It is noted that most of the concepts talk about cloud computing as Internet networks that provide service to the customer wherever he is, and at any time.
- It is a set of tools that help in building an infrastructure in the field of technological electronic work that easily acts as systems when needed.
- It is broad and useful in carrying out e-business.

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

- Providing a 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 files, deleting them, making modifications to them, or determining levels of access to them, in addition to organizing their preservation and storage.

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, where this feature allows the possibility of using it permanently, and the service provider gives access and modification of 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)

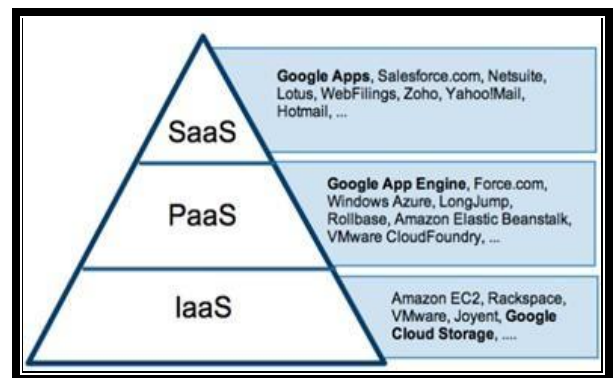


Figure 1: Computing as Services Applications

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- 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, so it moves and adds effects, so we get a video clip with sound. Like Google apps which is a platform that allows you to add apps at will.

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 number of users, and you are free to use it 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 it 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 who collects bills and expenses based on The basis of service computing (Shaah, 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 its use in organizations, the most important of which are: Take advantage of the internal resources of the organization, and 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 clouds, 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, and in this type, users usually use public cloud computing services to

perform information processing and non-critical business operations, while information and computing business operations are kept under control using the private cloud, where the structure is Host infrastructure is a mixture of cloud host and management servers, and this is the most part, in which some nodes run on real physical hardware, and others run on cloud server models (Shaah, 2014).

Factors Affecting The Readiness Of Charities To Adopt Cloud Computing:

The researchers studied and reviewed a number of previous literature on cloud computing, and noticed that a number of previous researchers touched on some models that contribute to the adoption of modern technologies by institutions, and the most prominent of these models will be discussed.

▪ **First- TOT Framework:** According to the vision of (Pouloudi, 2015) that researchers (Tornatzky and Fleischer) have developed a special framework that describes the technological, organizational and environmental factors as influencing the possibility of institutions adopting modern technologies through their influence on the previous factors:

- **Technological Factors:** These include factors inside and outside the organization, including technical equipment and machines.
- **Organizational Factors:** include the characteristics and structure of the organization, the work environment, the nature of the administrative process in the organization, and the decision-making mechanism, whether centrally or individually.
- **Environmental Factors:** take into account the nature of competitors in the same industry as the organization

Second- Theory of Diffusion of Innovation (DOI):

This theory is considered as a model for guiding the evaluation of the technological innovation process, where the innovation has been developed to meet the requirements of the entity that adopts it, and this term refers to the process that occurs when adopting a distinctive idea to implement any activity. Over time, the number of people adopting it increases, which helps build critical mass.

According to (Kaminski, 2011), the innovation theory indicates that innovation is characterized by a number of characteristics, the most important of which are:

- **Comparative Advantage:** how far an innovation is distinct from current practices.
- **Compatibility:** The extent to which innovation conforms to the social environment, cultural reality, and previous ideas.
- **Observability Of The Results:** the extent to which the results of innovation correspond to the desires of the innovators.
- **Complexity and Difficulty:** Is innovation difficult to use and understand?

- **Testability:** The extent to which an innovation can be tested according to standardized criteria.

The researchers addressed two important components to measure the readiness of charities to implement cloud computing: strategies for change, coordination and transparency.

1. **Change Strategies:** Carnal (1995) defines change as a long-term activity used to improve the organization's ability to solve the obstacles it faces, and (Garvin, 2000) defines change as developing the organization's performance through improvements to become more effective.

The researchers define procedural change as the possibility of mixing the changes of the external and internal environment of organizations in order to apply them in institutions to reach better efficiency, by following clear and specific strategies, and among these strategies, managers are convinced of change.

2. **Coordination and Transparency:** Harb (2011) defines transparency as "implementing things in an impartial manner, so that others can know exactly what you are doing, and it also indicates what can be seen through it. Transparency is also a kind of control over work that works to spread credibility, clarity and participation."

Researchers Define Procedural Transparency: working within clear, specific, and well-known standards that are not exceeded.

Researchers Define Procedural Coordination as sharing data between institutions through the existence of a unified database for all institutions in Gaza Strip.

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 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.

Establishment of Charitable Organizations:

Man has lived since ancient times, relying on the services provided by nature to help him to continue living, and after the development of life and the change in the social structure of society, which in turn led to the emergence of some previously non-existent problems such as unemployment and other social problems, which made man begin to think seriously To get rid of these problems because of their negative impact on social life by trying to eliminate them or mitigate their severity, and that was through social services, especially volunteer and charitable work. (Al-Aloul, 2011).

The formation of NGOs in Palestine has gone through several stages, and they can be classified according to the nature of their work, which are as follows (Al-Imam, 2007):

- Cooperative charitable institutions were among the oldest Palestinian civil formations and are governed by the traditional structure of Palestinian society.
- Mass organizations such as trade unions, women's movements and voluntary organizations.
- Developmental institutions such as committees, agricultural, health and labor institutions.

The number of civil and charitable institutions operating in the Gaza Strip registered with the Ministry of the Interior in Gaza, according to the statistic of 2022, working in various fields reached 846 institutions.

The number of civil and charitable institutions operating in the Gaza Strip registered with the Ministry of the Interior in Gaza, according to the statistic of 2022, which operate in various fields, reached 846 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
Total		415

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

Methodology and Procedures:

First - Study Methodology: The researchers used the descriptive analytical method 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 raised 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 went beyond that 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:

- 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.
- 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.

Second- Study Population and Sample: the target study population consists of workers in social charitable institutions in the Gaza Strip, which number (415) institutions registered in the Ministry of Interior and the Ministry of Social Affairs for the year 2022.

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:

- 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.
- The number of employees in the institution is 10 employees at least.
- The organization has a strategic action plan.
- Taking into account the geographical distribution of institutions at the level of the Gaza Strip.
- Taking into account the proportional representation of some international organizations so that the study includes everyone.

The researchers sought to ensure a balance in selecting the sample from the 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
Total	415	1.0	83

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 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.

The researchers used the scale from 1-10 for the items of the questionnaire in order to obtain better accuracy in evaluating the respondents’ opinions, so that the closer the bike to 10 indicates the high approval of what was mentioned, and vice versa, and the following table shows that:

Table 3: 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 4: The criteria for classifying the research axes

#	Category	Relative Weight
1.	Excellent	91% - 100%
2.	Very Well	81% - 90%
3.	Good	71% - 80%
4.	Acceptable	61% - 70%
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 the questionnaire’s inclusion of 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, the Apparent Sincerity: The researchers presented the study tool in its initial form to a group of arbitrators, specialists in the field of business administration, quality and statistics, who in turn provided advice and guidance, and amended and deleted what was necessary on the paragraphs of the questionnaire.

Second: The Validity of the Scale:

- The Validity of the Internal Consistency of the Paragraphs of the Questionnaire:**

Internal consistency honestly means the consistency of each paragraph of the questionnaire with the axis to which this

paragraph belongs. The internal consistency of the resolution paragraphs was calculated through the pilot study sample size of (30) individuals, as well as it was calculated within the final sample and added to it, by calculating The correlation coefficients between each paragraph and the total score for its axis are as follows:

Table 5: The validity of the internal consistency for all study axes:

#	Statement	Number Of Paragraphs	Correlation Coefficient	Significance
1.	Axis - Strategies for Change	4	0.486	0.014
2.	Axis - Coordination and Transparency	5	0.627	0.000

Table No. (5) Shows the correlation coefficients between each of the axes of the study and the total average of the axes, which shows that the indicated correlation coefficients are significant at the level of significance (0.05), as the probabilistic value of each axis is less than (0.05).

The validity of the internal consistency for the first axis: strategies for change:

Table 6: The validity of the internal consistency for the first axis: strategies for change

#	Statement	Correlation Coefficient	Significance
1.	The organization has the skills to fully transition to cloud computing.	0.771	0.000
2.	The adoption of cloud computing application leads to a radical change in the mission and objectives of charitable organizations	0.433	0.024
3.	The organization is applying a new set of skills to fit in with cloud computing	0.782	0.000
4.	Workers are prepared to accept a new organizational culture that is suitable for the shift towards cloud computing.	0.520	0.005

Table (6) shows the correlation coefficients between all the paragraphs of the third axis, the strategies of change and the total rate of the third 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 validity of the internal consistency of the second axis: coordination and transparency

Table 7: The validity of the internal consistency for the second axis: coordination and transparency

#	Statement	Correlation Coefficient	Significance
1.	There are mechanisms for sharing data between all charities.	0.779	0.001
2.	The Palestinian government encourages cooperation between charities.	0.671	0.001
3.	There are some joint projects between charitable institutions in Gaza Strip.	0.758	0.001
4.	The application of cloud computing achieves a kind of transparency in the work of organizations.	0.652	0.001
5.	The application of cloud computing achieves non-duplication in the provision of services by institutions.	0.446	0.001

The previous table shows the correlation coefficients between all the paragraphs of the fifth axis, coordination, transparency, and the overall average of the fifth 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 stability of the resolution paragraphs:

The stability of the questionnaire means that this questionnaire would give 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 certain periods of time, and to verify the Stability of the study's resolution The reliability steps were carried out on the same exploratory sample in two ways: the half-segmentation and The Cronbach's Alpha method coefficient.

Half-Segmentation Method: The Pearson correlation coefficient was found between the average of odd-ranked questions and the rate of paired questions

Table 8: shows the stability coefficient (split-half method) and Cronbach's Alpha Coefficient

#	Statement	Number Of Paragraphs	Cronbach's Alpha Coefficient	Spearman Brown
1.	The first axis -	4	0.707	0.860

#	Statement	Number Of Paragraphs	Cronbach's Alpha Coefficient	Spearman Brown
	strategies for change			
2.	The second axis - coordination and transparency	5	0.759	0.778

The Cronbach's Alpha method was used to measure the stability of the resolution as a second method for measuring the stability, and it was shown that the reliability coefficients are high, which encourages researchers to use the resolution with all reassurance.

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.

The Results of the Field Study

Descriptive Analysis of the Study Variables:

Normal Distribution Test (1-Sample Kolmogorov-Smirnov Test):

The researchers used 1-Sample Kolmogorov-Smirnov test to find out whether the data follow a normal distribution or not.

Table 9: Shows the normal distribution test (1-Sample Kolmogorov-Smirnov)

#	Fields	Number Of Paragraphs	Z. Value	Probability Value
1.	The first axis - strategies for change	4	0.071	0.113
2.	The second axis - coordination and transparency	5	0.089	0.120

The previous table shows the test results, as the p value of all axes is greater than 0.05 (Sig > 0.05), which indicates that the data follow a normal distribution and parametric tests should be used.

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
Total		241	100.0
Gender	Male	198	82.2
	Female	43	17.8
Total		241	100.0
Scientific Qualification	Diploma Degree	29	12.0
	Bachelor Degree	155	64.3
	Postgraduate Degree	57	23.7
Total		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
	15 years and over	8	3.3
Total		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
Total		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
Total		241	100.0
Data Storage Locations	PC	108	44.8
	Server	133	55.2
Total		241	100.0
Data Exchange With Funders Through	Gmail	58	24.1
	yahoo	7	2.9
	Hotmail	176	73.0
Total		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-: What are the strategies for change that help charities adopt the application of cloud computing?

The one-sample t-test was used and the results are shown in Table No. (10), which shows the opinions of the study sample members in the third axis paragraphs of strategies for change.

Table 10: Analysis of the paragraphs of the third axis: strategies for change

#	Statement	SM A	Relati ve Weigh t	Standa rd Deviati on	T. Value	Ran k
1.	The organizati on has the skills to	7.27	72.70	1.14	17.247*	2

#	Statement	SM A	Relati ve Weigh t	Standa rd Deviati on	T. Value	Ran k
	fully transition to cloud computing .					
2.	The adoption of cloud computing application leads to a radical change in the mission and objectives of charitable organizations	7.29	72.90	1.20	16.736*	1
3.	The organization is applying a new set of skills to fit in with cloud computing	6.86	68.60	1.18	11.317*	3
4.	Workers are prepared to accept a new organizational culture that is suitable for the shift towards cloud computing .	6.01	60.10	2.00	0.097*	4
All Paragraphs		6.86	68.59	8.30	117.113	

*All values are significant at the level of significance .050 Through the previous table, the results show that the relative weight of the third axis “Strategies for Change” (68.59%), which is the largest assumed value of the number (6), which

is greater than 60.0%, and the probabilistic value was (0.000) which is less than (0.05), which means that the respondents' responses to This axis was positive, and the researchers attribute that this relative weight came to a medium and close degree to the relative weight of the senior management support axis, because technological development usually needs to find strategies for change, and it becomes clear that whoever believes in the support of senior management almost believes in strategies of change. Senior management is not building and developing strategies, but rather it is building an institution with a creative and constructive culture to take care of a complete strategic context, in order to introduce everything that is new and useful to work. This study agrees with the study (Bahour, 2016), which emphasized the highest importance of the role of change strategies in the transformation process. Towards the adoption of cloud computing.

Paragraph (2) "Adopting the application of cloud computing leads to a radical change in the mission and goals of charitable organizations" came first in the order of the paragraphs of this axis, where the relative weight reached (72.90%), 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 (4), which is "the workers are prepared to accept a new organizational culture suitable for the shift towards computing "Cloud" with a relative weight of 60.1%, which is less than 60.0%, and the probabilistic value of the paragraph amounted to (0.923), which is greater than (0.05), which indicates that the respondents' opinions on this paragraph are neutral.

Q2-: What is the extent of coordination between charities in the application of cloud computing?

The single-sample t-test was used and the results are shown in Table No. (11) Which shows the opinions of the study sample members in the paragraphs of the fifth axis, coordination and transparency

Table 11: analysis of the paragraphs of the fifth axis: coordination and transparency

#	Statement	SM A	Relative Weight	Standard Deviation	T. Value	Rank
1.	There are mechanisms for sharing data between all charities.	7.79	77.90	2.00	13.880*	4
2.	The Palestinian government	7.46	74.60	1.53	14.819*	5

#	Statement	SM A	Relative Weight	Standard Deviation	T. Value	Rank
	encourages cooperation between charities.					
3.	There are some joint projects between charitable institutions in Gaza Strip.	8.37	83.70	1.37	26.798	3
4.	The application of cloud computing achieves a kind of transparency in the work of organizations.	8.66	86.60	1.34	30.856	2
5.	The application of cloud computing achieves non-duplication in the provision of services by institutions.	8.73	87.30	1.48	28.647	1
All Paragraphs		8.20	82.02	11.59	101.793	

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

Through the previous table, the results show that the relative weight of the fifth axis "coordination and transparency" (82.02%), which is the largest assumed value of the number (6), which is greater than 60.0%, and the probabilistic value was (0.000) which is less than (0.05), which means that the respondents' responses to This axis was positive, and the researchers attribute the high relative weight of the coordination and transparency axis to the tightening of external oversight by the Ministry of Interior as well as donors, in addition to activating internal control, which in turn contributed to the transparency of institutions in the distribution of services, especially in light of the economic

conditions in Gaza Strip. And the increase in the number of needy people has forced institutions to put in place mechanisms for coordination and integration among them in order to reach the largest number of needy people. Paragraph (5) “the application of cloud computing achieves non-duplication in the provision of services by institutions” came in the first place in the order of the paragraphs of this axis, as the relative weight reached (87.3%), 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 (2), which is “The Palestinian government encourages cooperation between charitable institutions” with a relative weight of 74.6%, which is equal to Approximately 60.0% and the probabilistic value of the item was (0.000), which is less than (0.05), which indicates that the respondents' opinions on this paragraph were positive.

Third- Analysis of the Dimensions of the Study Axes:

Table 12: Analysis of the dimensions of the study's axes

#	Axles	Relative Weight	Arithmetic Broker	Standard Deviation
1.	The First Axis - Strategies For Change	68.6	70.0	8.3
2.	The Second Axis - Coordination And Transparency	82.0	84.0	11.6
Total		78.1	79.2	4.8

By analyzing the levels of the study's axes as shown in the previous table, it becomes clear that the relative weight of the level of readiness of charitable institutions in Gaza Strip to adopt and apply cloud computing reached 78.1%, and it is considered a good degree to some extent, despite the different environment in which the study was applied to study (Radwan, 2016), (Budniks and Didenko, 2014) and a study (Mansour, 2013), but it is noted that these studies agree in the positive view of organizations' adoption of cloud computing technology. The senior management of organizations of all kinds due to the importance of using technological systems in the administrative field, including cloud computing, in addition to the fact that the technological development in Gaza Strip has risen to the level of e-government and this is consistent with the study (Al-Aloul, 2011) and the study (Bahour, 2016), This made institutions fertile ground for the application of advanced technologies, and the study also differed with the study (Hsu, 2014), which indicated that the rates of cloud computing adoption are still low and in its early stages, and researchers attribute This is due to the difference in the study environment as well as the place and purpose of the study's application, and as the current study differed with the study (Gabi, 2015), which indicated that the Palestinian public sector is not ready to adopt cloud computing in its operations, and the researchers believe that the reason for the

difference in the result is due to the difference in the study environment in particular. In light of the challenges facing the Palestinian public sector in the last ten years, the most important of which is the Zionist and international blockade after the 2005 elections, which in turn negatively affected the government sector, in addition to the political division between Gaza and the West Bank, which negatively affected the public sector.

The Second Axis: coordination and transparency gained a relative weight of (82%), which is a high degree. This result is attributed to the importance of coordinating between civil institutions in order to achieve social justice in the provision of services to citizens.

While The First Axis: strategies of change received a relative weight (68.6%), which is a high degree, and this result is attributed to the managers' awareness of the importance of having clear change strategies towards the application of modern technologies in their work, including cloud computing.

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 "Change Strategies" axis reached (68.59%), and the relative weight of the paragraph "Adopting the application of cloud computing leads to a radical change in the mission and goals of charitable organizations" reached (72.90%).
- The results showed that the relative weight of the axis "coordination and transparency" reached (82.02%), and the relative weight of a paragraph that achieves the application of cloud computing without duplication in the provision of services by institutions "has reached (87.3%).

Recommendations

In light of the findings, the study recommended a number of recommendations, the most important of which are:

- Work on developing remedial plans to eliminate the obstacles that hinder the use of any new technology, such as cloud computing technology.
- Preparing workers to accept a new organizational culture suitable for the shift towards cloud computing "by holding workshops and training courses, and sending scholarships, if possible, or bringing experts to work in institutions.
- Working on enhancing and clarifying the concept of cloud computing for employees and the mechanisms of its application and the extent of the desired benefits from it.
- The need to draw up policies and strategies that support partnership between charitable institutions in Gaza Strip.

- The need for charitable institutions to exert more efforts in the framework of meeting the aspirations and aspirations of donors by enhancing the effectiveness of self-monitoring.
- Intensifying coordination and joint cooperation between charitable institutions to exchange the largest volume of data and build a digital cloud.
- The necessity of adopting cloud computing by charitable organizations in their work, as it achieves a competitive advantage to obtain more support and funding.

References

- [1] Abdalmenem, S. A., et al. (2019). "E-Learning Strategies in Developing Research Performance Efficiency: Higher Education Institutions." *International Journal of Academic Pedagogical Research (IJAPR)* 3(9): 8-19.
- [2] Abdalmenem, S. A., et al. (2019). "Improving Research Performance Efficiency in Palestinian Universities Using E-learning Strategies." *International Journal of Academic Information Systems Research (IJAIRS)* 3(8): 20-27.
- [3] Abdalmenem, S. A., et al. (2019). "Increasing the Efficiency of Palestinian University Performance through the Implementation of E-Learning Strategies." *International Journal of Academic Management Science Research (IJAMSR)* 3(7): 15-28.
- [4] 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 (IJAIRS)* 3(6): 1-7.
- [5] Al Najjar, Mahmoud T., Al Shobaki, Mazen J. and El Talla, Suliman A. (2022). "Supporting Senior Management and the Readiness of the Organizational Structure in Palestinian Charitable Institutions to Adopt and Implement Cloud Computing", *International Journal of Academic Information Systems Research (IJAIRS)*, 6 (3), March - 2022, Pages:1-17
- [6] Al Shobaki, M. J. and S. S. Abu Naser (2017). "The Reality of Computerized MIS in the Palestinian Ministry of Education and Higher Education in Gaza Strip." *International Journal of Engineering and Information Systems (IJEAIS)* 1(6): 89-104.
- [7] Al Shobaki, M. J. and S. S. Abu-Naser (2017). "The Requirements of Computerized Management Information Systems and Their Role in Improving the Quality of Administrative Decisions in the Palestinian Ministry of Education and Higher Education." *International Journal of Academic Pedagogical Research (IJAPR)* 6(6): 7-35.
- [8] Al Shobaki, M. J. and S. S. Abu-Naser (2017). "The Role of the Practice of Excellence Strategies in Education to Achieve Sustainable Competitive Advantage to Institutions of Higher Education-Faculty of Engineering and Information Technology at Al-Azhar University in Gaza a Model." *International Journal of Digital Publication Technology* 1(2): 135-157.
- [9] Al Shobaki, M. J., et al. (2017). "The Degree of Administrative Transparency in the Palestinian Higher Educational Institutions." *International Journal of Engineering and Information Systems (IJEAIS)* 1(2): 15-32.
- [10] Al Shobaki, M. J., et al. (2018). "The Entrepreneurial Creativity Reality among Palestinian Universities Students." *International Journal of Academic Management Science Research (IJAMSR)* 2(3): 1-13.
- [11] Al Shobaki, M. J., et al. (2018). "The Relationship Reality between the Components of Internal Control and Administrative Transparency in the Palestinian Universities." *International Journal of Academic Information Systems Research (IJAIRS)* 2(3): 1-18.
- [12] Al Shobaki, M. J., et al. (2019). "Viral Marketing Strategies in Palestine Cellular Communications Company (Jawwal)." *International Journal of Academic Information Systems Research (IJAIRS)* 3(10): 12-27.
- [13] 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 (IJAIRS)* 4(9): 1-18.
- [14] Ammar, T. M., et al. (2018). "Evaluation and Follow-Up and Their Relationship to the Level of Administrative Transparency in the Palestinian Universities." *International Journal of Academic and Applied Research (IJAAR)* 2(2): 30-44.
- [15] El Shobaky, A. M., et al. (2020). "Job Engagement level Among the Administrative Employees in Palestinian Universities." *International Journal of Academic Information Systems Research (IJAIRS)* 4(10): 18-33.
- [16] El Talla, S. A., et al. (2017). "The effectiveness of a training program in increasing crowd funding awareness." *International Journal of Advanced Educational Research* 2(1): 31-37.
- [17] El Talla, S. A., et al. (2017). "The Reality of Technical Education in Palestine." *International Journal of Engineering and Information Systems (IJEAIS)* 1(10): 102-117.
- [18] El Talla, S. A., et al. (2017). Technical Colleges as Smart Organizations and their Relationship to Sustainability. Second Scientific Conference on Sustainability and enhancing the creative environment of the technical sector Palestine Technical College - Deir Al Balah 6-7 December 2017.
- [19] El Talla, S. A., et al. (2017). The Creative Environment and Its Relationship to the Lean Management of Technical Colleges Operating in Gaza Strip. Second Scientific Conference on Sustainability and enhancing the creative environment of the technical sector Palestine Technical College - Deir Al Balah 6-7 December 2017.
- [20] El Talla, S. A., et al. (2018). "Crowdfunding Role in Boosting the Entrepreneurial Creativity of University Students." *International Journal of Academic Management Science Research (IJAMSR)* 2(4): 1-12.
- [21] 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.
- [22] El Talla, S. A., et al. (2018). "The Availability of the Resource Standard and Partnership as One of the Possibilities of Excellence in Palestinian Universities According to the European Model." *International Journal of Academic Multidisciplinary Research (IJAMR)* 2(11): 31-40.
- [23] 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.
- [24] El Talla, S. A., et al. (2018). "The Reality of Applying the Policy and Strategy Standard in the Palestinian Universities According to the International Quality Models." *International Journal of Engineering and Information Systems (IJEAIS)* 2(9): 1-9.
- [25] Bhumgara, A & Salman, M. (2015). Cloud Computing as a Tool for NGOs in India and Pakistan. *International*

- Journal of Computer Science and Information Technologies, 6 (6) , 5226-5237.
- [26]Budņiks, L. &. (2014). Factors Determining Application of Cloud Computing Services in Latvian.
- [27]Buyya, R. ,. (2011). Cloud Computing Principles and Paradigms. United States: Johan Wiley &SONS, INC., Publication.
- [28]Carnal, C. (1995). Managing Change in organ (3rd edition). London: prentice tall Europe.
- [29]Dillon, T. (2010). Cloud Computing: Issues and Challenges. Perth, Australia: Curtin University of Technology.
- [30]Garvin, D. A. (2000). Building a learning organization. Org Dev & Trng.
- [31]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.
- [32]Gupta, P. S. (2013). The usage and adoption of cloud computing by small and medium businesses. International Journal of Information Management.
- [33]Hsu, P. F.-H. (2014). "Examining cloud computing adoption intention,pricingmechanism, and deployment model". International Journal of Information Management 34(4), 474-488.
- [34]Kaminski J ,(2011) Diffusion of innovation theory . Canadian Journal of Nursing Informatics. Journal of Management and Strategy. 8(2) 47-62
- [35]Laudon, C, & Laudon P. (2017). Management information system. Managing the Digithl form. (14th Edition). Pearson.
- [36]Lin, a (2012). Cloud computing as an innovation: Perception, attitude, and adoption. International Journal of Information Management.
- [37]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.
- [38]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.
- [39]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.
- [40]Stieninger, M. N. (2014). Impacts on the organizational adoption of cloud computing: A reconceptualization of influencing factors.
- [41]Trivedi, H. R. (2013). Cloud Adoption Model for Governments and Large Enterprises. Cambridge: Massachusetts Institute of Technology.
- [42]Wang, L. V. (2010). Cloud computing: a perspective study. New Generation Computing.
- Arabic References in Roman Scripts:**
- [1]Al-Agha, Ehsan. (2004). Introduction to educational research design. i 3. Gaza: Al-Rantissi Press.
- [2]Al-Alimi, Tharuat (2014). Ways to benefit from cloud computing applications in providing information services in the United Arab Emirates.” Dubai: College of Islamic and Arabic Studies.
- [3]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.
- [4]Al-Assaf, Saleh bin Hamad (2000). The researcher's guide to the behavioral sciences. Rabbad: Obeikan Library.
- [5]Al-Fadl, Ali (2015). The effectiveness of cloud computing in strengthening banking databases “An analytical study of a sample of information specialists in Iraqi banks. Kufa: Al-Qadisiyah Journal of Administrative and Economic Sciences. (7) 11-40.
- [6]Al-Imam, Amjad Jamil. (2007). Charitable societies and tax evasion in the West Bank during the era of the Palestinian Authority. Nablus - Palestine: An-Najah University.
- [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]Gabi, Shaher (2015). Adopting cloud computing in the Palestinian public sector, opportunities and challenges. Nablus - Palestine: An-Najah University.
- [9]Harb, Naima Mohammed (2011). The reality of administrative transparency and the requirements for its application in Palestinian universities in Gaza Strip. (Unpublished Master's Thesis) The Islamic University, Gaza.
- [10]Mansour, Ahmed (2013). Fears and challenges of adopting cloud computing in higher education institutions. (Unpublished Master's Thesis) The Islamic University, Gaza.
- [11]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.
- [12]Saad Eddin, Laith (2012). Public Cloud Computing Applications in Organizations, A Proposed Model for Iraqi Learning Organizations (Unpublished Master's Thesis), University of Mosul, Mosul.
- [13]Shaath, Ahmed (2014). A proposal for applying the government cloud to develop electronic management in the Palestinian government "Gaza Strip. Gaza: Academy of Politics and Leadership".
- [14]Syed, Rehab Fayeze. (2013). Open Source Cloud Computing Systems "A Comparative Analytical Study. Iraq. The Iraqi Journal of Information Technology. (17) 180-201.
- [15]Zaki, Marwa Tawfik (2012). Developing an e-learning system based on some cloud applications to develop

innovative thinking and a trend towards programs that work as services. Journal of the College of Education. (147) 543.

[16]