# Flexibility of Information and Its Relationship to Improving the Quality of Service

Zahi O. Abu-Nahel<sup>1</sup>, Wafiq H. Alagha<sup>2</sup>, Mazen J. Al Shobaki<sup>3</sup>, Samy S. Abu-Naser<sup>4</sup>, Suliman A. El Talla<sup>5</sup>

<sup>1</sup>, <sup>2</sup>Al-Azhar University, Gaza, Palestine.

<sup>3</sup>Dean of Bait Al-Mqds College for technical Science, Gaza- Palestine

<sup>4</sup>Department of Information Technology, Al-Azhar University, Gaza, Palestine.

<sup>5</sup>Vice Dean of Academic Affairs, College of Intermediate Studies – Al-Azhar University – Gaza.

<sup>1</sup>Znahel27@gmail.com, <sup>2</sup>dr.wafiqagha@gmail.com, <sup>3</sup>mazen.alshobaki@gmail.com, <sup>4</sup>abunaser@alazhar.edu.ps,

<sup>5</sup>Eltallasuliman@gmail.com

Abstract: The study aimed to determine the flexibility of information and its relationship to improving the quality of service in non-governmental hospitals in Gaza Strip. The study relied on the descriptive analytical method, and the questionnaire was designed as a tool for data collection and consisted of (21) items. The researchers used the comprehensive survey method, and the number of study population members was (536) singular, where (434) questionnaires were retrieved, and the recovery rate was 80.97%. The study showed many results, the most important of which was the presence of a moderate degree of approval by members of a sample on the flexibility of information, as it obtained an approval percentage with a relative weight of (60.15%). The Quality of Service has a relative weight (79.90%). The results of the study revealed a statistically significant relationship between the flexibility of information and the quality of service in non-governmental hospitals in Gaza Strip with a correlation coefficient of (0.417). The study reached many recommendations, the most important of which is the necessity of working to update information systems, archiving and networks through which data and information are transferred between departments, and to find mechanisms through which the available information can be used to enhance the decision-making process, and to develop an effective system to receive patient complaints in a way that ensures speed Response and treatment to achieve continuous communication between patients and hospital management, as well as periodically updating medical devices and equipment used in hospitals.

Keywords: Flexibility, Information, Information Flexibility, Quality, Service, Hospitals, Gaza, Palestine.

#### Introduction

The change that the business environment has witnessed since the beginning of the last century has become an imposed and insurmountable thing. One of the most important changes facing institutions today is the expansion of the phenomenon of globalization and changing conditions and its development, especially the emergence of new patterns of work, and other complex phenomena that have pushed institutions to Looking for new ways to tackle the expected rapid and surprising changes. The concept of resilience is the most important among the concepts of resilience, providing an element of resilience to face uncertainty and change in the business organization activity environment, it is considered one of the basic requirements for modern strategic thought, and the flexibility of information has become one of the most important criteria in determining the strategic choices of institutions (Ahmed and Al-Sabti, 2015).

Qureshi; et al., (2019) defines information flexibility as "representing the ability of institutions to obtain the required information at the right time, so that they can make decisions efficiently and effectively. Quality is the important and effective element in any aspect, sector or industry, and it has become a measure of the success of any organization, whether industrial or service, and a standard of excellence in providing a product or service. And because the health sector is an important sector in any society, it was imperative to pay attention to the quality of service provided in this sector.

As health organizations include hospitals, clinics and health centers, they are considered the mediator of the contract and the center of the department in providing health and medical services, and thus: it is a haven for patients who seek wellness, and healthy people who seek prevention. With the increasing pressure on an unprecedented scale on all institutions that provide health services at a time when chronic diseases and epidemics spread, which helped the increasing movement of people, and their rapid movement from one place to another in their spread, and the expansion of the scope of their scope, the increasing pressure increased already on these health and medical institutions This is in addition to the steady increase in the number of visitors and the increasing number of visitors to hospitals. This increase was characterized by features that were not available previously, especially with regard to the demand for a rapid response to the needs of citizens, and their needs with the increase in improving the quality of health and medical services provided to them (Zakhroufa, 2018).

Based on the above; this study comes to identify the flexibility of information and its relationship to improving the quality of service in non-governmental hospitals in Gaza Strip. Through this study, the researchers hope to provide a realistic, clearer picture of decision makers in non-governmental hospitals in Gaza Strip on strategic flexibility, and how

ISSN: 2643-640X

Vol. 4, Issue 8, August - 2020, Pages: 214-234

to support and enhance them, leading to improving the quality of service provided in light of the rapid and successive changes in Gaza Strip.

#### **Problem Statement**

The business environment today is characterized by rapid and continuous change, which makes the success or failure of institutions dependent on the extent to which their leaders possess administrative skills, including the ability to formulate and adopt flexible strategic alternatives, and adopt modern management methods and new scientific approaches that enable them to achieve continuous adaptation to the challenges presented by the environment (Abu Rdan and Al-Anzi, 2017). The environment of the health sector in Gaza Strip is witnessing major developments and challenges at various levels, including: administrative, service, organizational and technological, while hospitals and health institutions in Gaza Strip are still operating according to traditional systems, thus: achieving keeping pace with administrative development and progress, and providing complete and fast health services A fundamental problem, especially in an environment that is politically and economically unstable like Gaza Strip. Also, the quality of health services provided to patients is one of the most important issues that health institutions must deal with, not only at the local level only, but also at the international level, as there are many factors that impose themselves on these health and treatment institutions to find these same institutions in front of a merit The necessity of providing a health service that is appropriate to what patients and recipients of health services expect, as well as knowing the standard by which service recipients judge the service.

# **Research Questions**

The study problem can be summarized in the following main question:

**Q1-**: What is the relationship between information flexibility and improving service quality from the viewpoint of the internal beneficiary in non-governmental hospitals in Gaza Strip?

#### The main question is subdivided into the following sub-questions:

- Q1-1: What is the reality of applying information flexibility in non-governmental hospitals in Gaza Strip?
- Q1-2: What is the level of quality of service from the viewpoint of the internal user in the non-governmental hospitals in Gaza Strip?
- **Q1-3**: Are there differences in the responses of the study community members about the information flexibility of employees in non-governmental hospitals in Gaza Strip that are attributed to the variables: (Gender, Age Group, Academic Qualification, Job Title, and And Number of Years of Service)?
- **Q1-4**: Are there differences in the responses of the study community members about the quality of service of employees in nongovernmental hospitals in Gaza Strip that are attributable to the variables: (Gender, Age Group, Educational Qualification, Job Title, and And Number of Years of Service)?

# **Research Objectives**

The study aims to achieve the following:

- 1. Standing on the reality of applying information flexibility and improving service quality, from the point of view of the internal user in non-governmental hospitals in Gaza Strip.
- 2. Knowing the level of service quality, from the point of view of the internal user in the non-governmental hospitals in Gaza Strip.
- 3. Determine the nature of the relationship between information flexibility and quality of service, from the viewpoint of the internal beneficiary of non-governmental hospitals in Gaza Strip.
- 4. Provide a set of recommendations to the decision-makers in the research hospitals, which would improve the relationship between the flexibility of information and the quality of service in non-governmental hospitals in Gaza Strip.

#### **Research Importance**

The importance of the study is evident in two aspects:

#### **Scientific Importance**

- 1. This study derives its importance from the vitality of the subject it deals with, and its relative scarcity, as this topic is characterized by modernity and scientific and practical excellence alike.
- 2. The theoretical importance of this study emerges, from the scientific enrichment that you add to the studies that touched on the topic of information flexibility and improving the quality of service, and the importance of the variables that represent the topics of his speech that shape the general orientation of distinguished organizations.

#### **Practical Importance**

Through this study, researchers hope that:

- 1. It provides decision-makers in non-governmental hospitals in Gaza Strip with a more realistic and clear vision about the concept of information flexibility as a practical concept, which helps institutions in adapting to different variables and circumstances, so that the institution can fully perform its tasks.
- 2. The study should contribute to clarifying the role of flexibility of information in improving the quality of service, as the quality of service and its improvement is the goal of every institution regardless of the nature of its activities. The health sector, on which the study was conducted, is considered one of the most important pillars and pillars for the preservation of society.
- Working to improve the quality of the service provided will have a vital and visible impact on the development and
  preservation of society, and will have a positive impact on it, and increase the levels of satisfaction and satisfaction for
  patients.

# **Research Limits and Scope**

The scope of the study shall be as follows:

- 1. **Objective Limits**: The present study was limited to identifying the relationship between information flexibility and quality of service, from the viewpoint of the internal beneficiary in non-governmental hospitals in Gaza Strip.
- 2. **Human Limit**: The present study was applied to employees in a group of non-governmental hospitals in Gaza Strip.
- 3. **Time Limits**: data and information were collected on the subject of the study during the year (2020)
- 4. **Spatial Limits**: This study was applied to a group of non-governmental hospitals in Gaza Strip, namely (Al-Karamah Hospital, Patient Friends Society Hospital, Al-Wafa Hospital, Dar Al-Salam Hospital, and Kuwaiti Hospital).

# **Research Terminology**

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

• **Information Flexibility**: the organization's ability to extract and use the old data it possesses in its archives, and to analyze it to help it make and support decisions in it (William, Gerald & David, 2008).

The researchers defined the procedural flexibility of the information, "the sufficient amount that the institution possesses of accurate information that is collected from the surrounding environment and from the beneficiaries of the services, which helps the organization in setting plans and goals and how to achieve them and increase the beneficiaries' satisfaction with the service."

- **Flexibility**: the boundary between absolute stability that reaches the point of inertia, and the absolute movement that takes a thing out of its limits and controls, meaning that flexibility is a movement that does not rob cohesion, and stability that does not prevent movement (Al-Sufi, 1995).
- Quality: The extent of product validity for use and its conformity with the specifications contained in its design, which were agreed upon with the customer (Hammouda, 2014), the ability of organizations to satisfy the needs of customers in a manner commensurate with the goals set and desired (Al-Mahyawi, 2006).
- **Service**: an economic activity that takes place from one party to another often without the transfer of goods, and creates value by renting or benefiting from: goods, manpower, professional competencies, networks or systems, individually or collectively, and the activities, benefits and gratifications that are provided are associated with tangible goods (lovelock, 2006).
- Quality Of Service: It is a criterion for the degree to which the actual performance of the service matches the expectations of the customers, or the difference between the expectations of the customers and their awareness of the actual performance of the service (Hoffman, Bateson, 2011), which is the provision of services with high quality by the bodies that provide services to individuals, who in turn expect to provide the best services. Them by service providers. (Lubd, 2019)

The researchers procedurally defined service quality as "an indicator by which the beneficiaries' satisfaction with the service they received is measured in relation to what the service users expected before receiving the service and the resulting feedback."

#### **Literature Review**

The review of previous studies of scientific research is a systematic requirement that crystallizes the researchers 'vision, and outlines its steps towards a distinct methodology. Previous studies are also an essential tributary in drawing the frameworks of scientific research. The following is a presentation of the most important studies available to researchers from previous studies that dealt with the subject of this study. The studies were arranged from the most recent to oldest as follows:

A study of (Rialti, et al., 2020), which aimed to examine the precise mechanisms that exist between an organization's ability to perform Big Data Analytics (BDA) and achieve its strategic flexibility. To achieve the objectives of the study, the structural equations modeling (SEM) approach was used, and a structural model was developed and tested based on (215) survey responses collected from managers of organizations in Europe. One of the most important findings of the study is that the capabilities of big data analytics are an important precedent for the organization's strategic resilience. However, this relationship is affected by knowledge and skill management capabilities.

- A study of (Abu-Nahel, 2020) aimed at examining the quality of service in non-governmental hospitals in Gaza Strip between reality and what is hoped from the viewpoint of the internal beneficiary of non-governmental hospitals in Gaza Strip. The study relied on the descriptive analytical method, and the questionnaire was designed as a tool for data collection and consisted of (15) items. The researchers used the comprehensive survey method, and the number of study population members was (536) singular, where (434) questionnaires were retrieved, and the recovery rate was (80.97%). The study showed several results, the most important of which were: The results of the study indicated that there is a high degree of approval by the members of the study sample on the quality of service with a relative weight (79.90%). The results of the study also showed that there were no statistically significant differences in the quality of service according to the variables (gender, educational qualification, and position). And the absence of statistically significant differences in the quality of service according to the variables (years of service, age group).
- A study of (Abu-Nahel, 2020) aimed at examining the reality of applying strategic flexibility in its dimensions: (information flexibility, human resource flexibility, response flexibility, and proactive flexibility) in non-governmental hospitals in Gaza Strip. The study relied on the descriptive analytical approach, and the questionnaire was designed as a tool for data collection and consisted of (24) items. The researchers used the comprehensive survey method, and the number of study population members was (536) singular, where (434) questionnaires were retrieved, and the recovery rate was 80.97%. The study showed several results, the most important of which were: Presence of an average degree by the members of the study sample on strategic flexibility with a relative weight of (60.44%). And that the flexibility of human resources got the largest approval rate, and it occupied the first rank, that the response flexibility occupied the second position, that the flexibility of the information ranked the third, and that the proactive flexibility occupied the fourth and last place. The results showed that the dimensions of strategic flexibility (information flexibility, human resource flexibility, proactive flexibility) had an effect, while there was no effect on the (response flexibility) dimension in improving service quality. The results of the study found that there were no statistically significant differences attributable to the variables of gender and occupation. While the results found that there were statistically significant differences attributable to the variables of the age group, educational qualification and years of service.
- A study of (Al-Saaideh and Al-Sa'id, 2020), which aimed to demonstrate the impact of logistics management on the quality of services provided by the nutrition departments in Jordanian private hospitals. To achieve the goals of the study, the analytical descriptive approach was relied upon by referring to the previous relevant studies. The study community reached (40) hospitals in the Amman region, and the comprehensive survey was chosen to choose the sample. The sampling unit consisted of (188) persons, including the directors of the nutrition departments, their deputies, heads of the purchasing departments and doctors. Therapists. Among the most important results of the study and the most important results of the study are that the logistic management in its dimensions (supply, storage and transportation) affects the quality of services in its dimensions (the quality of food care, the quality of food services and the quality of food education), and the presence of an impact of logistic management on the dimensions of the independent variable separately.
- A study of (Bin Ahmed, 2017) which aimed to measure and assess the level and impact of strategic flexibility in achieving the quality of performance effectiveness and competitiveness of the telecommunications corporation (Mobilis). To achieve the goals of the study, the study method was based on the descriptive, field and analytical approach, which helps clarify and shed light on the important aspects of this study. As for the study sample, it was represented in: (General Manager, Director of Marketing, Director of Operations, Director of Human Resources, Information Director, and Director Financial). The researcher relied on a comprehensive survey method for the purposes of this study. Among the most important results of the study is that strategic flexibility plays an important role in achieving a quality of effective performance to achieve high competitiveness, through its various marketing, production, financial and human functions, at the level of the organizational structure, and at the level of its information system. The study showed through the responses of the sample individuals that the dimensions of strategic flexibility are of varying importance in the Mobilis Foundation, where all the averages of the paragraphs reached a high degree of approval, and this result is due to the awareness of the Mobilis Foundation management of the great importance of strategic flexibility, and taking it into consideration of the career level of the institution while carrying out the strategic planning process.
- A study of (Zhang, et al., 2017), which aimed to measure the extent of improving information flexibility with technical information systems in companies: a study of the performance of emerging companies. To achieve the objectives of the study, data from a matching survey of information technology and business executives in (148) Chinese manufacturing emerging companies were used, and quantitative and descriptive methods were used to analyze the data. Among the most important findings of the study is that there is an important positive relationship between IT support for basic resources and strategic flexibility, and between information flexibility and the company's performance. The results also show that the impact of IT support for basic resources on performance is partly mediated through strategic flexibility, and that IT infrastructure positively modifies the relationship between IT support of core resources and strategic resilience.
- The study of (Al-Anzi, 2014), which aimed to identify the impact of flexibility of information on the quality of institutional performance, and the study was applied to the Kuwaiti Aviation Company, and the study was applied to a number (104) of

directors of departments and departments in the included Kuwaiti Aviation Company. To achieve the objectives of the study, the questionnaire tool was used in collecting data, using the multiple linear regression method to test hypotheses, and using the winding multiple regression method to verify the impact of information flexibility in its dimensions: (market flexibility, competitive flexibility, information flexibility, human capital flexibility, and simplification of procedures) In the quality of performance in the Kuwait Aviation Company, the method of structural equations model was used to build a model, showing the influential and correlational relationships between the study variables. Among the most important findings of the study is the existence of a statistically significant impact of strategic flexibility in its dimensions: (market flexibility, competitive flexibility, information flexibility, human capital flexibility, and simplification of procedures) on the quality of performance in the Kuwait Aviation Company, and the presence of a statistically significant impact of strategic flexibility. With its dimensions on the performance effectiveness of the Kuwait Aviation Company, and the existence of a statistically significant impact of strategic flexibility in its dimensions on the performance efficiency of the Kuwait Aviation Company.

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

Most studies have agreed that information flexibility is of great importance in preserving organizations in the midst of the successive environmental changes surrounding organizations, and that the resources available to organizations are closely related to flexibility, which helps in allocating resources proportionally and maximizing their utilization. Studies have demonstrated the existence of an important intermediate influence of flexibility Information in all other variables, the most important of which is the competitive advantage and competitive position in the market, and that organizations looking to remain in the field must pay attention to building and sustaining indicators of their information resilience, and organizations that enjoy high flexibility in resources tend to promote innovation, improve production, and increase creativity in services and products That are provided to the beneficiaries and beneficiaries, whether internal or external, and previous studies that dealt with the variables have confirmed that improving the flexibility of the information increases the quality of the service provided to the beneficiaries and matching the previous expectations for receiving the service with the actual service provided, which increases the satisfaction of the beneficiaries and thus enhancing the competitive position in the market And stay in the field in light of the cases of Sequential change and uncertainty.

#### **Theoretical Framework**

#### **First - Flexibility of Information**

The ability of organizations and institutions to change and adapt according to the surrounding circumstances, whether technological, political, economic or competitive conditions, are the most important factors for their success, especially in the contemporary work environment, which is characterized by rapid change and intense and continuous competition, in this rapidly changing environment, and highly competitive must Institutions that work to follow developments in the market, and to be able to withstand a high level of successive changes. So; Institutions need to be more aware, distinguished and flexible, as the rapid strategic shifts in the market and the surrounding require a more capable management to work flexibly in order to effectively contribute to drawing future strategies, through which the institution can resist and adapt flexibly to environmental factors inside and outside the organization.

The Concept of Information Flexibility: Defining a clear concept of informational flexibility is a difficult issue, like other terms in administrative sciences, where the concepts varied and differed due to the different trends and approaches that could be adopted in its definition, as the term information flexibility was used by several researchers. Despite this, a comprehensive concept was not agreed upon, due to the differing opinions of researchers on this concept (Yugiong, et al. 2013). The researchers reviewed a set of definitions of the concept of information resiliency, as William (Gerald & David, 2008) mentioned it as the organization's ability to extract and use the old data it has in its archive, and to analyze it to help it make and support decisions in it. While (Lee & Wang, 2000) stated that it is the ability to make a good choice of methods of building information systems with the different needs of the organization for information, to respond to the needs of changing customers, and it is also related to the ability of the organization to do multiple and varied work simultaneously, through the use of communication, exchange and sharing of data within Enterprise. (Kovach, et al., 1999) was mentioned as the ability of information to adapt to more than one user and more than one application, so the information must be available in a flexible manner, as it can be used by different administrative levels effectively in the decision-making process. It appears from the above that researchers have defined the flexibility of information in terms of making use of the information that is extracted within institutions and circulated within the administrative levels to benefit from it in the decision-making process, and the extent of the importance of accurate information in choosing the right decisions, and the success of information systems depends on the efficiency of the administration in investing the available resources. And use it to create value through the information gathered and the support provided for operational and strategic activities.

The researchers define the flexibility of the information procedurally as the sufficient amount that the corporation possesses of accurate information that is collected from the surrounding environment and from the beneficiaries of the services, which helps the corporation in setting plans and goals and how to achieve them and increase the satisfaction of the beneficiaries of the service.

Flexibility is divided within it into two parts: the flexibility of recognition, which is the ability of the institution to observe and collect the required information related to the activity of the organization, and the flexibility of linking and analysis through which

ISSN: 2643-640X

Vol. 4, Issue 8, August - 2020, Pages: 214-234

the organization can extract data through its operations, analyze and link it, and work to benefit from it to help it in the decision support process.

#### The Importance of Flexibility of Information:

- 1. Raising The Level Of Performance And Productivity Of Organizations: where the advantages of information flexibility are shown by designing products periodically by conducting design processes using modern means to reduce costs, and striving to provide products that ensure customer satisfaction and achieve their desires, as well as looking for new opportunities in global markets by introducing new products to ensure the achievement of Competitive advantage in the same sector.
- 2. **Increasing The Effectiveness Of Decision-Making**: as the flexibility of information simplifies the tasks entrusted to the higher administrative level and facilitates the process of organizational decision-making by providing accurate data and information in a timely manner.
- 3. **The Flourishing of Activities**: the flexibility of information increases discipline and order within the administrative departments and increases the employees' knowledge of what is going on around them by providing them with continuous developments (Twami, 2013).
- 4. **Re-Engineering Operations Processes**: The flexibility of information is an essential element to complete the process engineering process as it provides better proposals and newer designs before designing the operation and production process and through its role in the various production stages after the process design process.
- 5. **Supporting Organizations To Succeed In Administrative And Organizational Fields**: Managers rely on information at all levels and administrative units to solve any problems in complex administrative and organizational aspects that are not addressed by traditional systems.
- 6. **Improving Quality Management**: the flexibility of information contributes to improving quality management by monitoring, collecting and analyzing data, as well as increasing the speed of monitoring and inspection processes and reducing the costs of auditing and monitoring tasks and detecting errors before they occur (Twami, 2013)

#### **Contributions of Information Flexibility:**

The existence of a flexible information system in organizations contributes in several aspects:

- 1. **Increase Efficiency**: by reducing the costs required for organizational operations, in order to increase production processes
- 2. **Decentralization**: Information flexibility in the organization contributes to support the effective decision-making process by gathering information across central and branching sites.
- 3. **Increased Responsibility**: the innovation of new methods of information flow helps in the delivery of information to new beneficiaries, which contributes to raising high responsibility.
- 4. **Improving Resource Management**: where information flexibility can contribute to the creation of new information that helps organizations make effective decisions and increases control and control. (Abu-Nahel et al., 2020).

#### **Second- Quality of Service**

Health and medical services are among the most important services that cannot be dispensed with, and this is evident in several aspects, the most important of which are technological and scientific development, rapidly successive discoveries, and the corresponding health and medical challenges that appear through complex and mysterious diseases, as modern medical and therapeutic discoveries, and the intensification of competition between Centers that provide medical and health services and curative hospitals, all this made it imperative for those health institutions to make their health services new and developed and compatible with the latest international medical systems to keep pace with intense competition. These health services represent the basis for the survival and growth of these institutions.

It is difficult to define a specific concept of service quality, and several researchers have seen that the concept of quality is not a fixed or specific concept, such as (Carman & Parasuraman, 1990). Where they defined it as a measure of matching the level of services provided by the service provider with what is expected of the recipient of the service (Jad Al-Rab and Obaid, 2009), and a set of definitions of service quality will be mentioned as follows:

- 1. Quality services are provided by those who provide services to individuals, who in turn expect to provide the best services to them by service providers (Lubd, 2019).
- 2. Is a standard for the degree to which actual service performance matches the expectations of customers, or the difference between customers 'expectations and their awareness of the actual service performance (Bateson, Hoffman, 2011).
- 3. The degree to which the patient sees the health service provided to him, and what can be surpassed by it compared to what is expected (Nashedah and Bin Abdulaziz, 2011).
- 4. Being able to surpass customers' expectations, enjoyment and surprises with unforeseen features (Zikmund, 2010).
- 5. The extent to which customers expect to match how well they perceive the service actually provided (Fadila, 2010).

The researchers defined the quality of service in a semi-integrated manner so that most of the definitions agreed that the quality of service is to compare the results with the expectations that the recipient of the service was waiting for, which increases directly with the satisfaction of the service recipient, and perhaps the healthy environment and institutions that provide health services are the ones who should care more. The quality provided because it is related to the souls of the beneficiaries of the services.

Researchers know it quality of service procedurally; It is the indicator by which beneficiaries' satisfaction with the service they received is measured, relative to what the service beneficiaries expected before receiving the service and the resulting feedback.

The Importance of Service Quality: The importance of quality of service is one of the priorities in all organizations that work on its success and increasing its revenues, and the quality of services varies according to the quality of products or services, as tangible products are used as planning in their production, but in the field of intangible services, customers and employees interact with each other to find the service And market it, and this requires service providers to deal with customers in a sophisticated manner. As the quality of service is reflected internally on the internal beneficiary (employees), and we can mention several elements that show the importance of service quality, which relate to the organizations' internal environment, which he mentioned (Hammoud, 2007), including:

- 1. **Increased Indicators of Job Satisfaction**: Where satisfaction is achieved for employees, and increased loyalty to the organization is to improve the quality of the internal work environment.
- 2. **Quality Of Service In The Internal Work Environment**: this means the ability of the organization's management to make a careful selection of highly qualified, experienced and highly skilled employees, and to provide the necessary training support to support the manpower, place them in a high-quality work environment, and assign employees who permanently meet the customers with the necessary support.

#### **Dimensions and Methods of Measuring Service Quality:**

By reviewing several studies related to the topic of service quality, researchers noted a difference between researchers' views on determining the dimensions of service quality, and their choice of service measurement model. Two methods used to measure the quality of service will be reviewed:

- **The First Method**: the gap model (SERVQUAL), which is based on measuring the gap between what the customers expects of quality and what they are actually aware of.
- **The Second Method**: the actual performance model (SERVPERF), which measures the methods and processes associated with providing the service.

The Model of the Gap between Perceptions and Expectations (Model SERVQUAL): The research of the Three Americans (Berry, Parasuraman and Zeithaml) in 1985, which worked on researching the dimensions and components of service quality, showed that they developed a model for which they called the (service) model, which is an abbreviation of two words, service and quality, and the scale was designed to identify Subsequent studies were quoted from this model and the scale and studies developed by the three researchers, and the three researchers conducted an exploratory study aimed at increasing the understanding of the nature of service quality from the viewpoint of customers and organizations management, and they conducted the study on four American companies operating in the service sectors And the researchers conducted several in-depth interviews with the directors of these four companies. The interviews included unspecified questions answering: What is the quality according to the customer's vision? What are the steps that are taken to improve the quality of the service?

The three researchers found that there were five gaps that they assumed affect the customer's evaluation of quality:

- 1. The difference between what the customer expects and what the administration realizes to the customer's expectations, as it appears that there are some expectations that the customer expects that the administration does not realize or realize its importance.
- 2. The difference that arises when management translates customers' expectations as they see them into specifications, as it emerged from the interviews conducted with employees and managers that it is impossible to translate all expectations that customers expect into specifications for several reasons, including: fluctuating demand and the lack of skilled manpower.
- 3. There is a difference between the actual performance and the level of quality promoted, and also the exaggeration in marketing methods for the service increases the expectations of the customers and the evaluation of the customers decreases automatically when his expectations are not met, and the differences also arise when the administration does not show the effort that it exerts and the employees exert in order to satisfy the customer and meet his needs Which may increase the customer's evaluation of the service.
- 4. The difference in the specifications that are determined for the quality and the actual performance, as company directors reported a variation in the performance of employees.
- 5. The gap between the performance that the customer expects from the services sector institutions and the actual performance of the organization. According to the three researcher's model, this gap is what surprises customers and was expressed through the formula: Quality = Perceptions Expectations.

**Model SERVPERF:** This scale is considered one of the effective tools that can help to show aspects of failure in the level of service quality from the viewpoint of customers. The name of the model (SERVPERF) was derived from two words, namely the word "service" and the word "performance", the model was based on for direct evaluation.

It can include in the assessment of quality according to this model several assumptions, as mentioned by (Fadila, 2010), namely:

1. The evaluation process is based on the customer's previous experience, and as a result of repeated interactions with the organization; therefore, the reason for dissatisfaction with the level of quality of service makes him review the level of quality.

# International Journal of Engineering and Information Systems (IJEAIS) ISSN: 2643-640X

Vol. 4, Issue 8, August - 2020, Pages: 214-234

- 2. The customer has no experience from any previous dealings with the organization, and the customer's expectations about the service are determined based on his initial evaluation of the organization's quality.
- 3. The successive experiences with the organization will lead the customer to perceptual reviews of the quality level, and this leads to the customer's evaluation of the level of service quality that is cumulative for all the perceptual adjustment processes that the customer makes.

# Analyzing the Relationship between Information Flexibility and Improving Service Quality

It is certain that there is a relationship between the flexibility of information and the quality of service that is provided to customers, especially at such a time when there is a rapid and successive change in the institutional and organizational environments in which the organization must be flexible and able to maneuver, seize opportunities and exploit them, and respond to the changes that occur. In the internal and external environments of the organizations, and that the organization is able to obtain adequate, correct and realistic information about its competitors and the market in which it operates, and to work within it efficient and qualified human powers with distinct capabilities that enable it to compete and achieve its goals, which increases its ability to improve the services it provides Organizations, and increase the satisfaction of the beneficiaries of services, which increases its revenues if it is a profit organization or reflects a positive image of it in the case of a non-profit organization.

Successful organizations are not just about attracting new customers; rather, it is searching for the methods and methods by which it maintains its existing and new customers, in an effort to improve its quality by adopting an efficient information system. The information systems in the institutions specialize in collecting, operating, analyzing and sending the analyzed information to the decision-making centers within the institutions in a timely and necessary manner, in order to serve the goals of the institution.

# Second- Non-governmental hospitals in Gaza Strip

Hospitals are considered to have the pioneering and important role in providing health and medical services to patients, and the health system in Palestine, especially in Gaza Strip, is working under high pressure to be able to provide health and medical services in light of the limited resources, environmental conditions and the blockade and closures, and hospitals are one of the most important The components of this health system, and the technological changes taking place in this field play a prominent role in challenging this sector. The study will be conducted within five hospitals distributed geographically in the governorates of Gaza Strip, and the following is the definition of hospitals that the study was applied to:

**Al-Karamah Hospital**: It is a non-profit hospital established in 2007, it works in the field of health, education and care, and it provides services to the residents of the northern and northern Gaza governorates. Al-Karamah Hospital was built on an area of 700 square meters, and it was established in 2007 in an intermediate location between the governorates of Gaza and the North, because the region is empty of institutions that provide secondary health services and the region's need for such services. The hospital was operated at the end of 2008, and it offers its medical services in the areas of reception and emergency, surgeries, obstetrics and gynecology services, overnight services for men and women, gastroscopy services, dental services, radiology, laboratories, pharmacy, and a number of specialized clinics, in addition to services Support, and more than 150,000 people benefit from its services annually.

The Patient Friends Society Hospital: It is a private non-governmental organization founded in 1980, and the association was established under No. (1984) on December 16, 1980, according to the Ottoman Associations Law issued in (1909), and according to the Charitable Societies and Private Associations Law No. (1) For the year 2000. The hospital provides services in the reception and emergency department, the gynecology and obstetrics department, the surgical operations department, the outpatient department, and the support services section (x-ray and television photography, a laboratory, a pharmacy).

**Al-Wafa Hospital**: Al-Wafa Hospital for Medical Rehabilitation and Specialized Surgery was established in 1996 as one of the most important programs of Al-Wafa Charitable Society to meet the urgent societal need, as it is the first and only medical rehabilitation center in the governorates of Gaza, targeting groups of movement and cognitive disabilities, fractures and their complications, and chronic diseases, And problems of ischemia of the extremities. The hospital provides services in several areas, including: nursing care, physical therapy, occupational therapy, and outpatient clinics such as: orthopedics, cosmetology, nerves, and rehabilitation. (Hospital page on social media)

**Dar Al Salam Hospital**: Dar Al Salam Hospital is a charitable, non-profit charitable hospital affiliated to the Dar Al Salam Charity Association, established in 1995 to provide distinguished health service to citizens, to be the first charitable hospital to serve the southern region of Gaza Strip, and it is now the only charitable hospital that serves the Khan Yunis governorate in the southern Gaza Strip Gaza, since the hospital was founded, has benefited thousands of Palestinian citizens from its medical services.

**Kuwaiti Hospital**: The Kuwaiti Charitable Specialized Hospital specializes in women and childbirth, and it has clinics that include all specialties, and was established in 2007 and its headquarters in the Rafah Governorate, and the hospital plays an important role in alleviating the burden on the patients that they face in government hospitals, and the hospital includes (11) sections Medically, it serves monthly (3000) patients. (Hospital page on social media)

Quality of health services in non-governmental hospitals: Non-governmental hospitals are obligated to allocate a portion of their human resources to study and confirm patients' satisfaction with their provided health services, in confirmation of obtaining the necessary licenses from the Ministry of Health, and these resources should work to follow up and review health work inside hospitals. Where the competent departments should improve the quality of health services provided in non-governmental hospitals,

by conducting studies and continuous checks of the quality of service by distributing questionnaires that collect data about service quality and patient satisfaction, and also opening the way for employees inside hospitals to provide their views and suggestions to improve the service. The results that are set are compared with the established international standards, through which you try to reach a high degree of quality and mastery to ensure patient satisfaction.

# **Methodology and Procedures:**

First- The Study Methodology: The study used the descriptive analytical method that relies on description, analysis and comparison with the aim of describing what is an object, and its interpretation by shedding light on the study problem to be examined, and a close understanding of its conditions, and collecting information that increases clarification of the conditions surrounding the problem. This approach is not sufficient when collecting information on the phenomenon in order to explore its manifestations and relationships; rather, it goes beyond analysis and interpretation in order to arrive at conclusions, and the proposed perception is built upon to increase knowledge of the topic.

# Researchers have used two primary sources of information:

- Secondary Sources: Where the researchers moved in addressing the theoretical framework of the study to secondary data sources, which are books and related references, periodicals, articles and reports, previous research and studies that dealt with the topic of study, research and reading in books and articles, refereed research, practical messages and various websites.
- **Primary Sources:** To address the analytical aspects of the subject of the study, the researchers resorted to collecting primary data through the questionnaire as a main tool for the study, specially designed for this purpose.

**Second- Study Community**: The study community is defined as all the vocabulary of the phenomenon that the researcher studies, as he used the comprehensive inventory method in collecting data from the study community. Based on the study problem and its goals; the population of this study is represented by the employees of the non-governmental hospitals in Gaza Strip covered by this study, according to the following schedule:

**Table** 1: Characteristics of the study population

Work Nature	The Nature Of The Contract	Al-Karamah Hospital	Patient Friends Society Hospital	Al-Wafa Hospital	Dar Al Salam Hospital	Kuwaiti Hospital	
The Doctors	Full-time	7	21	5	0	17	
The Doctors	Unavailable	13	38	6	28	0	
Nurses And Wise	Full-time	21	27	36	0	11	
Men	Unavailable	0	15th	17	20	0	
Chariolists	Full-time	10	16	21	5	15th	Total
Specialists	Unavailable	Jnavailable 11	3	3	8	0	
Technicians	Full-time	0	13	15th	1	5	
Technicians	Unavailable	0	0	0	1	0	
A durinistus tous	Full-time	0	20	17	10	9	
Administrators	Unavailable	6	1	0	13	0	
<b>Employees And</b>	Full-time	0	5	18	6	10	
Services	Unavailable	4	2	0	6	0	
Total Commention	Full-time	38	102	112	22	67	341
Total Summation	Unavailable	34	59	26	76	0	195
The Fina	al Total	72	160	138	98	68	536

Source: prepared by the researchers based on the Palestinian Health Information Center data and data hospitals (2020) (434) individuals from the study population responded, and the following table shows the distribution of respondents according to the study variables:

**Table 2:** Distribution of respondents according to Personal variables

Table 2. Distribution of respondents according to reisonal variables							
Male		ale	Female		Total		
Gender		27	73		161		
Qualification	Diplomas of	Diplomas or less Bachelor		Postgraduate		aduate	434
Qualification	92 308			34		434	
Age Group	20 - less than30		30 - Less than40	40 - ]	Less than 50	50 years and over	434
gr sarap	79		238	87		30	
Years Of Service	Less than 5 years	5	5 - Less than 10 years		10 - Less than 20 years		434

# ${\bf International\ Journal\ of\ Engineering\ and\ Information\ Systems\ (IJEAIS)}$

ISSN: 2643-640X

Vol. 4, Issue 8, August – 2020, Pages: 214-234

	74		236			92		32	
Occupation	A doctor	Nurse	specialis	st	Tech	nical	Administrative	Services employee	434
Occupation	67	148	84		34	4	76	25	737
	Al-Karamah	Pa	atient Friends	Al-Wa	ıfa	I	Oar Al Salaam	Kuwaiti	
Hospital Name	Hospital	So	ciety Hospital	Hospi	al		Hospital	Hospital	434
	59		147	92			76	60	

**Third- The Study Tool:** The questionnaire was prepared on "Information flexibility and its relationship to improving service quality in non-governmental hospitals in Gaza Strip, and the following table explains that:

**Table 3**: Distribution of the items for measuring flexibility of information on the various fields

#	Domain	Number Of Paragraphs
1.	Information Flexibility	6
2.	Improve Service Quality	15

**Correcting the Scale**: Each paragraph is answered according to the decimal scale, and this scale has been given scores from (1-10). Based on that, the highest score on the scale is (210), and the lowest score is (21).

#### Fourth: The Truth of the Questionnaire

The Second Stage: the rationing stage, which included the validity and reliability calculation of the test.

- 1. **The Validity of The Arbitrators**: The scale was presented in its current form to a number of specialized arbitrators from business administration professors, to identify the suitability of the questionnaire expressions and their representation of the aspects involved. The required adjustments have been made to the scale, which means that the scale is valid for application.
- 2. **The Validity Of The Construction Using The Internal Validity Method**: The scale was applied to the experimental sample and it numbered (32) from the original community members of the study. All paragraphs obtained a significance level of 0.05, and this indicates that the scale is characterized by a high degree of validity of the internal consistency.

# Results of the internal consistency of the Scale

**Table 4**: the correlation coefficient between each paragraph of the field of "flexibility of information" and the total degree of the field

#	Paragraph	R	Sig.
1.	The hospital uses the information it has to help it support decision-making	.718	0.00
2.	The hospital continuously archives and saves the information available to it	.600	0.00
3.	The hospital builds information systems to suit its different needs	.686	0.00
4.	The required information is made available to each administrative level in the necessary time for its effective use	.568	0.00
5.	The hospital administration works on linking and analyzing information, which helps it to benefit from it	.717	0.00
6.	The hospital allocates part of its human and financial resources for data collection and analysis purposes	.448	0.01

**Table 5**: The correlation coefficient between each paragraph of the service quality improvement scale and the overall score of the scale

#	Paragraph	R	Sig.
1.	The hospital has comfortable and convenient public facilities for patients	.574	0.00
2.	There are enough beds for patients inside the hospital	.507	0.00
3.	The hospital enjoys an easily accessible location	.671	0.00
4.	Patients are informed of when the service is provided	.503	0.00
5.	Hospital staff are keen to answer patients' inquiries	.722	0.00
6.	The hospital takes care of patient complaints	.560	0.00
7.	Medical cases are monitored continuously	.729	0.00
8.	The hospital is working to simplify administrative procedures that facilitate the provision of services to patients	.676	0.00
9.	Provide basic medicines or direct patients to their places outside the hospital	.788	0.00
10.	Medical services are provided to patients on a permanent basis	.737	0.00
11.	The hospital management is able to control the external factors that affect the provision of services to patients	.499	0.00
12.	The hospital maintains the confidentiality of patient information	.738	0.00

# International Journal of Engineering and Information Systems (IJEAIS)

ISSN: 2643-640X

Vol. 4, Issue 8, August - 2020, Pages: 214-234

Ī	13.	Community customs and traditions are taken into account when providing medical services	.749	0.00
Ī	14.	There is a high level of order within the hospital	.772	0.00
Ī	15.	The hospital can handle a large number of patients	.675	0.00

# Fifth- The Stability of the Questionnaire.

#### **Stability of scale:**

The researchers verified the stability of the scale on a pilot sample of (32) individuals. The stability of the scale was calculated using the two half-segmentation methods and Cronbach's Alpha.

# 1. Split-Half Method

The correlation coefficient was calculated between the total of the even and the total of the individual statements for the test and its ranges, and by using the Spearman Brown equation, the overall reliability coefficient was (0.959), and the reliability coefficients were all high, which indicates that the scale has a high degree of stability. The following table shows that:

Table 6: the coefficient of consistency of the measure of elasticity of information by the half-segmentation method

#	Dimensions	Number Of Paragraphs	Correlation Coefficient Before Adjustment	Correlation Coefficient After Adjustment	Indication Level
1.	Information Flexibility	6	0.773	0.872	0.00
2.	Improve Service Quality	15	0.886	0.935	0.00

# 2. Alpha Cronbach Method

The reliability coefficient of the Cronbach alpha was calculated, and the overall scale reliability coefficient was (0.909), which is a significant and high reliability coefficient, and the reliability was calculated by the Cronbach alpha method for all areas of the scale, and the following table shows that:

Table 7: The stability coefficients of Cronbach Alpha for each area of strategic flexibility

ſ	#	Dimensions	Stability Coefficient
	1.	Information Flexibility	0.666
	2.	Improve Service Quality	0.907

It is evident from the previous table that the reliability coefficients are all statistically significant, confirming the validity of the scale for application. By doing so; the researchers have confirmed the validity and reliability of the study tool, which makes him fully confident of the validity of the questionnaire and its validity to analyze the results, answer the study questions and test its hypotheses.

#### Data analysis, study hypotheses, and discussion

It includes an offer to analyze data and test the hypotheses of the study, by answering the study questions, reviewing the most prominent results of the study tool that was reached through analyzing its paragraphs, and finding out the personal data of the respondents; Therefore, statistical treatments were performed for data collected from the study questionnaire, as the Statistical Packages Program for Social Studies (SPSS) was used to obtain the results of the study that was presented and analyzed.

# Statistical description of the study sample according to personal data

The following is a presentation of the characteristics of the study sample according to personal data

Table 8: Distribution of the study sample according to personal data

	Personal Data	The Number	Percentage%
	Male	273	62.9%
Gender	Female	161	37.1%
	Total	434	100.0%
	Diploma or less	92	%21.2
Onalification	Bachelor 30	308	71.0%
Qualification	Postgraduate	34	7.8%
	Total	434	100.0%
	20 - Less than 30 years old	79	18.2%
	30 Less than 40 years old	238	54.8%
Age Group	40 Less than 50 years old	87	20.0%
	50 years and over	30	6.9%
	Total	434	100.0%

	Less than 5 years	74	17.1%
	5 - Less than 10 years	236	54.4%
Years Of Service	10 - Less than 20 years	92	21.2%
	20 years and over 32	7.4%	
	Total	434	100.0%
	A doctor	67	15.4%
	Nurse	148	34.1%
	Specialist	84	19.4%
Occupation	Technical	34	7.8%
	Administrative	76	17.5%
	Services employee	25	5.8%
	Total	434	100.0%
	Al-Karamah Hospital	59	13.6%
	Patient Friends Society Hospital	147	33.9%
The Heavitel	Al-Wafa Hospital	92	21.2%
The Hospital	Dar Al Salaam Hospital	76	17.5%
	Kuwaiti Hospital	60	13.8%
	Total	434	100.0%

It is clear from the previous table that 62.9% of the study sample are male, while 37.1% are female. The researchers attribute this increase to males compared to females to the fact that there is a noticeable tendency to appoint males more than females, due to the prevailing cultural and societal factors in Palestinian society, in addition to the nature of hospital work that focuses more on males, their ability to withstand the pressure of work in the medical field and what it needs from work and shifts around the clock, in addition to the population distribution in Gaza Strip, and this statistic is consistent with statistics for the male to female ratio of the workforce in Palestine, where the workforce survey published by the Palestinian Central Bureau of Statistics for 2017, showed that a rate of 71 % Of the workforce is male, while 29% are female, which partly explains the increase in the number of males in the study population.

It is clear that 71.0% of the study sample are holders of a bachelor's degree, while 21.2% of diploma holders or less, and 7.8% of graduate students. The researchers attribute that the largest number of individuals in the sample hold a bachelor's degree, as it is the basic academic qualification for employment standards within the hospitals under study.

As it is clear from the previous table, that 54.8% of the study sample is from the age group between 30-less than 40 years, while we find that 20% of the age group between 40-less than 50 years, and that 18.2% of Category: The age group is between 20 - less than 30, and the rest is greater than the older age group. The researchers attribute that the largest proportion of the study population are from the age group less than 40 years, and that the tasks and burdens placed on the occupants of these jobs need to bear the pressure of work, and require the spirit of youth, and this means that the study population is a young community, given the category of 50 Years and above, which was 6.9% of the study population.

It is clear from the previous table, that 54.4% of the study sample have years of service between 5-less than 10 years, while we find that 21.2% of those with years of service are between 10 - less than 20 years, and that 17.1% of Those with years of service between less than 5 years, and the remainder of the years with the largest service. The researchers attribute that the percentage of those who have been serving for less than 5 years is 17.1% to the weakness and lack of job opportunities in the labor market in Gaza Strip in the past five years, according to the Central Bureau of Statistics that the unemployment rate in Gaza Strip for the year 2018 amounted to 53.7%. The researchers attribute the reason that the largest percentage of the study population is for those who served for a period ranging from 5 to less than 10 years, due to the rapid and successive political and security changes in Gaza Strip in the last ten years, which required the departments of these hospitals under study to absorb a greater number of Employees, albeit with fixed-term contracts, to cover the needs of citizens and beneficiaries of medical services.

It is also clear that 34.1% of the study sample are nurses and wise men, while we find that 19.4% are specialists, that 17.5% of administrators, 15.4% of doctors, 7.8% of technicians, and the rest of the service staff. The researchers attribute that the largest percentage of the study population are nurses and sages, because the tasks that fall on them and the experiences they have are greatly appropriate, because of the services provided to patients in these hospitals, and that the number of graduates from the nursing specialties is increasing significantly, especially That high school graduates, both science and humanities, can enroll in

nursing programs at universities, especially diploma. The researchers attribute the percentage of doctors, which is 15.4%, because most of the employees in these hospitals work part-time inside.

It is also clear that 33.9% of the study sample is from the Friends of the Patient Hospital. The researchers attribute this to being located in Gaza City and it is the oldest among the hospitals searched, while 21.2% of Al-Wafa Hospital, and the researchers attribute that the number of employees in Al-Wafa Hospital, is the second in terms of the number to that it is the only hospital that provides services to the elderly in Gaza Strip, and 17 .5% of Dar Al-Salam Hospital, 13.8% of Al-Karamah Hospital, and the remainder 13.6% of Al-Karamah Hospital, and this is consistent with the distribution of the study population. In the opinion of the researcher, these ratios are reasonable and logical, and they attribute them to the natural distribution of the population in each of the governorates to which the hospitals under study were distributed.

The Criterion Adopted In The Study (Ozen et al., 2012): To determine the criterion adopted in the study, the length of the cells was determined in the Likert pentaton scale by calculating the range between the degrees of the scale (10-1=9), and then dividing it by 5 to get five Categories; Thus: the length of the cell is i.e. (5/9=1.80), after which this value was added to the lowest value in the scale (the beginning of the scale which is a correct one), in order to determine the upper limit of this cell, and so the length of the cells became as shown in the following table:

**Table 9:** Shows the test approved in the study

SMA	Relative Weight	Degree Of Approval
From 1 - 2.79	From 10% - 27.9%	Strongly Disagree
From 2.80 - 4.59	From 28% - 45.9%	Disagree
From 4.60 - 6.39	From 46% % - 63.9	Medium (neutral)
From 6.40 - 8.19	From 64% - 81.9%	Agree
From 8.20 - 10	From 82% - 100%	Strongly Agree

To explain the results of the study and judge the level of response, the researchers relied on the arrangement of arithmetic averages at the level of the questionnaire and the level of paragraphs in each field, and the researchers determined the degree of approval according to the criterion approved for the study.

#### The Answer to the Study's Questions:

Q1-: What is the level of information flexibility among employees in non-governmental hospitals in Gaza Strip?

To answer the question, the researchers used averages, standard deviations, and percentages, according to the following table:

**Table 10**: the arithmetic mean, standard deviation, relative weight, and arrangement for each paragraph of the field "Information flexibility"

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The hospital works to make use of the information it has to help it support decision-making	5.57	2.344	55.70%	6	Neutral
2.	The hospital continuously archives and saves the information available to it	6.38	2.335	63.80%	1	Neutral
3.	The hospital builds information systems to suit its different needs	6.07	1.994	60.70%	3	Neutral
4.	The required information is made available to each administrative level in the necessary time for its effective use	6.18	2.047	61.80%	2	Neutral
5.	The hospital administration works on linking and analyzing information, which helps it to benefit from it	6.23	2.137	60.30%	4	Neutral
6.	The hospital allocates part of its human and financial resources for the purposes of collecting and analyzing information	5.67	2.259	56.70%	5	Neutral
	Total Marks	6.0148	1.56457	60.15%		Neutral

From the previous table, the following can be drawn:

- The arithmetic mean of the second paragraph: "The hospital is working to continuously archive and save the information available to it" equals 6.38 (total score out of 10), meaning that the relative weight is 63.80%, and this means that there is an average (neutral) agreement on the part of the sample members for this paragraph. The researchers attribute this to the fact that hospitals in the Gaza Strip clearly archive all patient data, and save them at the request of the Ministry of Health.
- The arithmetic mean of the first paragraph: "The hospital works to benefit from the information it has to help it support decision-making" equals 5.57, meaning that the relative weight is 55.7%, and this means that there is an average (neutral)

agreement by the sample members for this paragraph. The researchers attribute this to the fact that the decision-making processes within hospitals are not based on the information kept, but on the basis of the emerging situation, due to the rapid dynamic change in the surrounding environment of the hospitals, and the instability of the data provided by the information.

In general, it can be said that the arithmetic mean of the field of information flexibility equals 6.01, meaning that the relative weight is 60.15%, and this means that there is a neutral agreement by the sample members on the paragraphs of this field. The researchers attribute this to the lack of advanced archiving systems, database systems, linking and analysis between information within hospitals, and their reliance on basic programs and systems for storing data and information. Beneficiaries of health and medical services, and many facilities and awareness and guidance programs are provided to them, due to the poor material economic conditions in the Gaza Strip, and the weak funding of hospitals, especially since part of these hospitals are affiliated with civil charitable work.

These results are in agreement with some previous studies. As a study (Al-Anzi, 2014), (Rialti, et al., 2020), (Zhang, et al., 2017), (Vasudeva, 2020), and (Chen, et al., 2017).

Q2-: What is the improvement in the quality of service in non-governmental hospitals in Gaza Strip?

To answer this question, the arithmetic mean, standard deviation, relative weight, and ranking were used to find the degree of approval, and the results are shown in the following tables:

**Table 11:** the arithmetic mean, standard deviation, relative weight, and ranking for each paragraph of the service quality improvement scale

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The hospital has comfortable and convenient public facilities for patients	7.19	2.150	71.90%	15	Agree
2.	There are enough beds for patients inside the hospital	7.71	1.851	77.10%	8	Agree
3.	The hospital enjoys an easily accessible location	7.97	1.819	79.70%	4	Agree
4.	Patients are informed of when the service is provided	7.98	1.714	79.80%	2	Agree
5.	Hospital staff are keen to answer patient inquiries	7.99	1.718	79.90%	1	Agree
6.	The hospital takes care of patient complaints	7.67	1.956	76.70%	10	Agree
7.	Medical cases are monitored continuously	7.69	1.922	76.90%	9	Agree
8.	The hospital is working to simplify administrative procedures that facilitate the provision of services to patients	7.54	1.881	75.40%	13	Agree
9.	Provide basic medicines or direct patients to their places outside the hospital	7.61	1.801	76.10%	11	Agree
10.	Medical services are provided to patients on a permanent basis	7.97	1.744	79.70%	4	Agree
11.	The hospital management is able to control the external factors that affect the provision of services to patients	7.32	1.957	73.20%	14	Agree
12.	The hospital maintains the confidentiality of patient information	7.98	1.762	79.80%	2	Agree
13.	Community customs and traditions are taken into account when providing medical services	7.97	1.758	79.70%	4	Agree
14.	There is a high level of order within the hospital	7.55	1.878	75.50%	12	Agree
15.	The hospital can handle a large number of patients	7.85	1.956	78.50%	7	Agree
	Total Marks	7.7312	1.10796	77.31%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the fifth paragraph: "Hospital employees are keen to answer patients' inquiries" equals 7.99 (total score out of 10), meaning that the relative weight is 79.90%, and this means that there is high approval by the sample members for this paragraph. The researchers attribute this to the fact that most hospitals under study provide health services to patients for a specific fee. Thus: Patients tend to benefit from health services in non-governmental hospitals, hoping for better services, and in order to answer their inquiries and questions, and the hospitals under study have a good number of administrators, nurses and wise men, which increases the improvement of services provided to patients, In addition, administrative and organizational regulations within hospitals oblige employees to provide the necessary services to patients and their companions at any time.
- The arithmetic mean of the fifteenth paragraph: "The hospital has comfortable and suitable public facilities for patients" equals 7.19, meaning that the relative weight is 71.90%, and this means that there is high agreement by the sample members for this

paragraph. The researchers attribute this to the fact that all the hospitals under study do not have a garden, or a place to rest for patients or their companions, due to the limited space of the hospitals, and the lack of rooms of the size or large number, as in the central hospitals in Gaza, and this is due to limited financial and spatial resources, and the hospitals The subject of study is directed to take advantage of urgent medical services, which do not require a stay in the hospital for several days.

In general, it can be said that the arithmetic mean of the service quality improvement scale is equal to 7.73, meaning that the relative weight is 77.31%, and this means that there is high approval by the sample members for the paragraphs of this scale. The researchers attribute the high approval of the sample members, because the hospitals under study, which are non-governmental hospitals, provide services somewhat better than government hospitals that provide services to citizens on health insurance for free, because non-governmental hospitals provide services for a fee, Or through private insurance institutions; Therefore, it is obligated to provide better health services, to provide qualified medical personnel, and to try to provide modern medical equipment and devices, so that the recipient of the service avoids delay in receiving the service, which may reach in cases of surgeries in government hospitals for more than a year, or failure to provide the necessary health aid In addition, the relative improvement in the organizational structures of non-governmental hospitals, the increase in the level of control, and the correction increase the percentage of job satisfaction among their employees, which reflects positively on the health services provided to patients.

These results are in agreement with some previous studies. As a study (Al-Saaideh and Al-Sa'id, 2020), a study (Al-Anzi, 2014), and a study (Julius; Jatmika, 2019).

#### **Hypothesis Testing:**

**H0**<sub>1</sub>: There is a correlation relationship with statistical significance at a significance level ( $\alpha$  0.05 $\geq$ ) between information flexibility and service quality in non-governmental hospitals in Gaza Strip.

To test this hypothesis, a "Pearson correlation coefficient" test was used, and the following table shows that.

Table 12: The correlation coefficient between information flexibility and improving service quality

The Variable	Improve Service Quality	Sig
Information Flexibility	0.417	0.000

The previous table shows that the correlation coefficient is 0.417, which is a function at the significance level of 0.05, and this indicates a statistically significant relationship between information elasticity and quality of service in non-governmental hospitals in Gaza Strip, and confirms the validity of the hypothesis, and this means that the application of information flexibility will lead to improvement Quality of service in non-governmental hospitals in Gaza Strip. Researchers attribute this to the increase in information flexibility and expansion in the field of information technology that will save time and effort, and will increase the logical link between the information entered, which in turn will lead to further improvement in decision-making, and the development of future plans and strategies; Thus: it will further improve the quality of service provided to patients, and increase their satisfaction.

These results are in agreement with some previous studies. As a study (Al-Anzi, 2014), (Rialti, et al., 2020), (Zhang, et al., 2017), (Vasudeva, 2020), and (Chen, et al., 2017).

 $H0_2$ : There are statistically significant differences at the level of significance ( $\alpha \le 0.05$ ), between the mean of respondents' responses about (flexibility of information and its relationship to improving service quality in non-governmental hospitals in Gaza Strip), which are attributed to the following demographic variables: (gender, age group, and qualification) Scientific, occupation, and number of years of service).

#### The Following Sub-Hypotheses Are Divided Into:

 $\mathbf{H0}_{2-1}$ : There are statistically significant differences at the level of ( $\alpha \le 0.05$ ), between the mean of the respondents' responses, about (information flexibility and its relationship to improving service quality in non-governmental hospitals in Gaza Strip), which is attributed to gender.

To verify the hypothesis, the differences between the sample mean averages were calculated according to the gender variable, using the (T) test, and the following table shows that:

**Table 13**: means, standard deviations, and "T" of the scale due to the gender variable

Domains	Gender	Number	Average	Standard Deviation	T Value	Significance Level	Indicatio n
Information	Male	273	6.0488	1.52124	0.578	0.564	Not Cia
Flexibility	Female	161	5.9571	1.63865	0.578		Not Sig.
<b>Total Score For</b>	Male	273	7.7269	1.15480	0.109	0.914	Not Cia
Service Quality	Female	161	7.7385	1.02713	0.108-		Not Sig.

The previous table indicates that there are no statistically significant differences in the scale dimensions due to the gender variable. The researchers attribute this result to the fact that employees in non-governmental hospitals in Gaza Strip - regardless of their gender - they view the flexibility of information in a unified way, because they follow a unified work strategy, and they live under

the same work conditions, and they receive the same instructions, the same courses and workshops. As well as, they usually receive their education in the same universities, educational, cultural and social milieu. Consequently: we find no difference in their answers regarding the field of information elasticity according to the gender variable.

 $\mathbf{H0}_{2-2}$ : There are statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) between the averages of the respondents' responses to (information flexibility and its relationship to improving the quality of service in non-governmental hospitals in Gaza Strip), which are attributed to the educational qualification.

To test this hypothesis, the "unilateral variance" test was used, and the following table illustrates that.

Table 14: Results of the "one-size-fits-all" test for the level of academic qualification variable

Domain		Test Value	Probability Value (Sig.)			
	Diploma or less	Bachelor	Postgraduate	Value	value (big.)	
Information Flexibility	6.3543	5.9305	5.8598	2.803	0.062	
<b>Total Score For Service Quality</b>	7.6604	7.7067	8.1451	2.656	0.071	

<sup>\*</sup> The difference between the averages is statistically significant at a significance level of ( $\alpha \le 0.05$ )

From the previous table, the following can be drawn:

It was found that the probability value (Sig.) Corresponding to the "mono-variance" test showed that there were no differences in information flexibility and quality of service according to the educational qualification. The researchers attribute this to the fact that employees, regardless of their academic qualifications, are concerned with the flexibility of information and the quality of service, so they are keen to respond and adapt to environmental changes quickly

 $\mathbf{H0}_{2-3}$ : There are statistically significant differences at the level of ( $\alpha \le 0.05$ ) between the mean of the respondents' responses about (information flexibility and its relationship to improving service quality in non-governmental hospitals in Gaza Strip), which are attributed to the age group variable.

To test this hypothesis, the "unilateral variance" test was used, and the following table illustrates that.

Table 15: Results of the "single-factor variance" test - for the variable of the age group

		Aver				
Domain	20 - Less Than 30 Years Old	30 Less Than 40 Years Old	40 Less Than 50 Years Old	50 Years And Over	Test Value	Sig
Information Flexibility	6.8228*	5.8902	5.6015	6.0744	10.172	0.000
<b>Total Score For Service Quality</b>	7.9676*	7.6600	7.5935	*8.0733	2.968	0.032

<sup>\*</sup> The difference between the averages is statistically significant at a significance level of ( $\alpha \le 0.05$ )

From the previous table, the following can be drawn:

It was found that the probability value (Sig.) Corresponding to the "one-way variance" test is less than the significance level 0.05 for all dimensions. Thus, it can be concluded that there are statistically significant differences between the averages of the study sample estimates attributable to the age group variable. The researchers attribute this to the fact that employees with a lower age group work more efficiently and with greater vitality, and this is a natural result of employees under 30 years of age, especially in the field of information.

To find out the direction of the differences, the LSD test was used, as in the following tables:

Table 16: LSD test results to compare the averages of age groups in the field of information flexibility

	The Difference Between The Averages						
Age Group	20 - Less Than 30 Years Old	30 Less Than 40 Years Old	40 Less Than 50 Years Old	50 Years And Over			
	1 ears Olu	1 cars Olu	1 ears Olu				
20 - Less Than 30 Years Old							
30 Less Than 40 Years Old	0.9326*-						
40 Less Than 50 Years Old	1.2212*-	0.2886-					
50 Years And Over	0.7483*-	0.1842	0.4729				

<sup>\*</sup> The difference between the two averages is statistically significant at the level of significance ( $\alpha \le 0.05$ )

The previous table shows the results of the LSD test to compare the averages of the age groups for the field of information elasticity, where the results show that there are statistically significant differences between the averages of the age groups, in favor of the younger age group (20-less than 30 years) and no differences were found between the rest of the category categories Age.

Table 17: LSD test results to compare the average age groups for the overall score to improve service quality

	The Difference Between The Averages				
Age Group	20 - Less Than 30	30 Less Than 40	40 Less Than 50	50 Years And Over	
	Years Old	Years Old	Years Old	30 Tears And Over	

ISSN: 2643-640X

Vol. 4, Issue 8, August – 2020, Pages: 214-234

20 - Less than 30 years old				
30 Less than 40 years old	0.3076*-			
40 Less than 50 years old	0.3740*-	0.0664		
50 years and over	0.1058	0.4134*	0.4798*	

<sup>\*</sup> The difference between the two averages is statistically significant at the level of significance ( $\alpha \le 0.05$ )

The previous table shows the results of the LSD test for comparing the average age groups to the overall quality of service score, as the results show the existence of statistically significant differences between the average age groups, in favor of the younger age group (20 - less than 30 years) compared to the older age group. And that there are differences between the age group 50 years and over with the age group 30-less than 40 years, and the category 40- less than 50 years in favor of the age group 50 years and over and no differences were found between the rest of the age group. The researchers attribute that the differences are in favor of the older group because of the accumulated experience that was generated, through working for a greater number of years and possibly working in several different places and environments, which have a significant impact on improving the quality of health services provided to patients, and employees with the age group of 50 Years or more, the concepts of services, especially health, have become entrenched in them, due to their personal need for such services, and this is what they wish to present to patients because they know for sure that patients need them.

 $H0_{2-4}$ : There are statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) between the averages of the respondents' responses to (the flexibility of information and its relationship to improving the quality of service in non-governmental hospitals in Gaza Strip), which are attributed to the variable of years of service.

To test this hypothesis, the "unilateral variance" test was used, and the following table illustrates that.

Table 18: Results of the "single variance" test - for the years of service variable

		Averages				
Domains	Less Than 5 Years	5 - Less Than 10 Years	10 - Less Than 20 Years	20 Years And Over	Test Value	sig
Information Flexibility	6.4495*	5.7811	6.3109	5.8823	4.968	0.002
<b>Total Score For Service Quality</b>	7.8773	7.5783	7.9247	7.9646*	3.391	0.018

<sup>\*</sup> The difference between the averages is statistically significant at a significance level of ( $\alpha \le 0.05$ ) From the previous table, the following can be drawn:

It turns out that the probability value (Sig.) Corresponding to the "mono-variance" test is less than the significance level 0.05 for all dimensions, and thus it can be concluded that there are statistically significant differences between the averages of the study sample estimates attributed to the variable of years of service, in favor of the least years of service (less) From 5 years), while we find that there are differences in the quality of service in favor of the largest category of years of service (20 years or more). The researchers attribute that the increase in the level of quality of service of the category of employees for 20 years or more, to the increase in experience and knowledge, which is refined by the frequency of years, and the coexistence of a greater number of patients and cases, which increases the percentage of efficiency and skill, which translates into a noticeable increase in health and medical services provided to patients.

To find out the direction of the differences, the LSD test was used as in the following tables:

Table 19: LSD test results for comparing average years of service for the field of information flexibility

	The Difference Between The Averages						
Years Of Service	Less Than 5 Years	5 - Less Than 10 Years	10 - Less Than 20 Years	20 Years And Over			
Less Than 5 Years							
5 - Less Than 10 Years	0.6685*-						
10 - Less Than 20 Years	0.1378-	0.5298*					
20 Years And Over	0.5673*-	0.1012	0.4289*-				

<sup>\*</sup> The difference between the two averages is statistically significant at the level of significance ( $\alpha \le 0.05$ )

The previous table shows the results of the LSD test to compare the years of service averages for the field of information elasticity, where the results show that there are statistically significant differences between the years of service averages, in favor of the least years of service category (less than 5 years), as it was found that there were differences between years of service 10-less From 20 years and between years of service 20 years and more in favor of the lowest group, and there were no differences between the remaining years of service.

Table 20: LSD test results for comparing average years of service to the overall score for improving service quality

	The Difference Between The Averages				
Years Of Service	Less Than 5 Years	5 - Less Than 10 Years	10 - Less Than 20 Years	20 Years And Over	

Less Than 5 Years				
5 - Less Than 10 Years	0.2989*-			
10 - Less Than 20 Years	0.0474-	0.3464*		
20 Years And Over	0.0873-	0.3862	0.0398-	

<sup>\*</sup> The difference between the two averages is statistically significant at the level of significance ( $\alpha \le 0.05$ )

The previous table shows the results of the LSD test for comparing the average years of service to the total degree of service quality, as the results show that there are statistically significant differences between the average years of service, in favor of the category of years of service less (less than 5 years) compared with other categories of years of service. Differences between 10 years of service - less than 20 years with the category (5 - less than 10 years) in favor of the category (10 - less than 20 years), and no differences were found between the remaining years of service. Researchers attribute this to the existence of single policies, controls and systems that regulate work within hospitals, and the existence of a homogenous environment within them.

 $\mathbf{H0}_{2-5}$ : There are statistically significant differences at the level of significance ( $\alpha \le 0.05$ ), between the mean of the respondents' responses, about (information flexibility and its relationship to improving service quality in non-governmental hospitals in Gaza Strip), which is attributed to the job variable.

To test this hypothesis, the "unilateral variance" test was used, and the following table illustrates that.

Table 21: Results of the "unilateral variance" test - for the function variable

	Averages					Test		
Domain	A Doctor	Nurse	Specialist	Technical	Administrative	Services Employee	Value	Sig
Information Flexibility	5.8244	5.8363	6.0667	5.8578	6.5417*	6.0200	2.434	0.034
Total Score For Service Quality	7.9037	7.7971	7.6596	7.3863	7.7205	7.6213	1.212	0.302

<sup>\*</sup> The difference between the averages is statistically significant at a significance level of  $\alpha \le 0.05$ 

From the results shown in the previous table, the following can be concluded:

It was found that the probability value (Sig.) Corresponding to the "one-way variance" test is less than the significance level 0.05 for the field of information flexibility, as there were differences in favor of the administrative staff, and no differences were found in the quality of service depending on the job; Researchers attribute this to the existence of single policies, controls and systems that regulate work within hospitals, and the existence of a homogenous environment within them.

To find the difference direction, LSD test was used, as in the following table:

Table 22: LSD test results for comparing the averages of job categories for the field of information flexibility

Categories	The Difference Between The Averages						
	A Doctor	Nurse	Specialist	Technical	Administrative	Services Employee	
A Doctor							
Nurse	0.0118						
Specialist	0.2423	0.2304					
Technical	0.0335	0.0215	0.2088-				
Administrative	0.7173*	0.7054*	0.4750*	0.6838*			
Services Employee	0.1956	0.1837	0.0467-	0.1622	0.5217*-		

<sup>\*</sup> The difference between the two averages is statistically significant at the level of significance ( $\alpha \le 0.05$ )

The previous table shows LSD test results to compare job category averages for the field of information resilience, where the results show that there are statistically significant differences between the averages of administrative staff with the qualification with the rest of the jobs for the benefit of administrators, and there were no differences in other job categories. The researchers attribute this result to the fact that administrators, by virtue of their work, are more knowledgeable about the information than other hospital employees, and therefore their assessments are higher in the field of information flexibility.

#### **Conclusions**

The study reached several results and was categorized as follows:

- 1. Results For The Independent Variable (Information Elasticity):
- The results of the study showed that the study sample agreed to a moderate degree of information flexibility among employees in non-governmental hospitals in Gaza Strip, as it was evident from the data flexibility field having a relative weight of 60.15%.
- 2. Results For Dependent Variable (Quality Of Service):

- The results of the study showed a high degree of agreement by the study sample on the quality of service of employees in non-governmental hospitals in Gaza Strip, as it was evident through the field of service quality that obtained a relative weight of 79.90%.

# 3. Results For Hypothesis Testing:

#### A. Results Related To Testing The First Main Hypothesis And The Sub-Hypotheses

− The results of the study revealed a statistically significant relationship at the significance level  $(0.05 \ge \alpha)$  between the flexibility of information and the quality of service in non-governmental hospitals in Gaza Strip with a correlation coefficient of 0. 417.

# B. Results Related To The Second Main Hypothesis Test:

- The results of the study found that there were no statistically significant differences at the level of significance (0.05≥ α) in the dimensions of the scale in non-governmental hospitals in Gaza Strip, due to the variables of gender and educational qualification.
- The results of the study found that there were statistically significant differences at the level of significance ( $\alpha$  0.05  $\stackrel{\cdot}{\omega}$ ) in the scale dimensions in non-governmental hospitals in Gaza Strip due to the variables of the age group and years of service.

#### Recommendations

Through the findings of this study, the most important recommendations that can contribute to increasing the flexibility of information for employees in non-governmental hospitals in the governorates of Gaza Strip can be explained, in addition to recommendations related to strengthening their role in improving service quality in the hospitals under study, and general recommendations. According to Salima's visions. The researchers here hope that these recommendations will be implemented in order to improve the quality of service in the searched hospitals, and to enhance the role of information flexibility in them.

#### A. Recommendations Related To Demographic Variables:

- Striking a balance in the percentage of males and females in the cadres that are employed, by attracting a sufficient number of females.
- Work to appoint young people and people with energies to vacate jobs in the hospitals under study, because this group is dynamic and active, similar to the elderly.
- The use of an administrative cadre who is distinguished by scientific and practical qualifications and holders of certificates, because they may be able to perform administrative functions and understand their requirements.
- The necessity of harmonizing the expertise and academic qualifications of the titles and heads of departments, who have experience and higher degrees, with the requirements of their work.

#### **B.** Flexibility Of Information Recommendations:

- Work on updating information systems, archiving and networks through which data and information are transferred between departments.
- Find mechanisms by which the available information can be used to enhance decision-making.
- Creating new strategies through which possible future scenarios are developed, so that the hospital cannot deal with any change and determine the required response to the change.
- Decreasing the degree of centralization in decision-making, and delegating some powers, with a focus on interaction between employees to achieve cooperation.
- Increasing coordination between employees inside the hospital and between departments, functional units and pharmacies, and determining the nature of the overlap in tasks between each of them.

#### C. Quality Of Service Recommendations:

- Removing barriers between doctors and patients, creating a language of dialogue and speaking with patients in a manner that they understand.
- Establishing an effective system to receive patients' complaints that guarantees prompt response and treatment, to achieve continuous communication between them and the hospital administration, or to activate the complaints boxes in the hospital, and to notify patients of dealing with the complaints they submit.
- Working to provide all medical and health specialties in the hospitals under study, by making use of the medical delegations entering Gaza Strip and involving them in the treatment processes, and bringing in doctors and specialists from abroad.
- Developing the waiting system and booking appointments for patients, which reduces the waiting time for health service beneficiaries.
- Development of facilities in hospitals, such as: (waiting rooms, cafeterias, parks, toilets), for their role in increasing the improvement of service in hospitals.

- Update medical devices and equipment used in hospitals periodically.
- Continuously updating the criteria for measuring the services provided to patients, based on patients' suggestions and complaints.
- Provide clear information about the prices of medicines and medical supplies, or where to sell them, if they are not available in the hospital pharmacy.
- Encouraging employees inside the hospitals under study to submit ideas and proposals that will improve the quality of services in hospitals, and provide better services for patients.

#### References

- [1] Abu-Nahel, Zahi, Alagha, Wafiq, Al Shobaki, Mazen, Abu-Naser, Samy and El Talla, Suliman (2020). Quality of Service in Non-Governmental Hospitals in Gaza Strip between Reality and Expectations, International Journal of Academic Information Systems Research (IJAISR), 4(7), 18-36.
- [2] Abu-Nahel, Zahi, Alagha, Wafiq, Al Shobaki, Mazen, Abu-Naser, Samy and El Talla, Suliman (2020). The Reality of Applying Strategic Flexibility in Non-Governmental Hospitals, I International Journal of Academic Management Science Research (IJAMSR), 4(7), 144-170
- [3] Abu-Naser, S. S. and M. J. Al Shobaki (2016). "Computerized Management Information Systems Resources and their Relationship to the Development of Performance in the Electricity Distribution Company in Gaza." EUROPEAN ACADEMIC RESEARCH 6(8): 6969-7002.
- [4]Ahmed, Slimay; Al-Sabti, Juraibi (2015). "Strategic Flexibility from the Traditional Theory of Strategy to the Theory of Resources, Philosophical Reading," Baghdad Administrative College Journal, 44 (5), 84-104.
- [5]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.
- [6]Al Shobaki, M. J., et al. (2019). "The Intermediate Role of Knowledge and Information Management in the Relationship between Adopting the Strategy Criterion and Improving Overall Performance." International Journal of Academic Management Science Research (IJAMSR) 2(12): 16-30.
- [7] Alayoubi, M. M., et al. (2020). "Strategic Leadership Practices and their Relationship to Improving the Quality of Educational Service in Palestinian Universities." International Journal of Business Marketing and Management (IJBMM) 5(3): 11-26.
- [8]Al-Habil, W. I., et al. (2017). "The Impact of the Quality of Banking Services on Improving the Marketing Performance of Banks in Gaza Governorates from the Point of View of Their Employees." International Journal of Engineering and Information Systems (IJEAIS) 1(7): 197-217.
- [9] Alhelou, E., et al. (2017). "The Quality of Banking Services as an Input to Improve the Marketing Performance of Banks in Gaza Governorates from the Point of View of Customers." International Journal of Information Technology and Electrical Engineering 6(5): 58-66.
- [10]Al-Hila, A. A., et al. (2017). "The Quality of Banking Services in Light of the Financial Transformations and Their Impact on the Marketing Performance of the Banks in Gaza Strip." International Journal of Engineering and Information Systems (IJEAIS) 1(8): 36-57.
- [11]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.
- [12] Arqawi, S., Et Al. (2020). "Integration of the Dimensions of Computerized Health Information Systems and Their Role in Improving Administrative Performance In Al-Shifa Medical Complex." Journal of Theoretical and Applied Information Technology 98(06): 1087.
- [13]El Talla, S. A., et al. (2018). "The Reality of Applying Leadership Standard in Palestinian Universities According to the International Quality Models." International Journal of Academic Management Science Research (IJAMSR) 2(9): 73-82.
- [14]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.
- [15]FarajAllah, A. M., et al. (2018). "The Impact of the Leadership Standard in International Quality Models on Improving University Performance through the Intermediate Role of the Strategy Standard." International Journal of Engineering and Information Systems (IJEAIS) 2(9): 21-32.
- [16]Zaqout, I., et al. (2018). "Information Technology used and it's Impact on the Participation of Administrative Staff in Decision-Making in Palestinian Universities." International Journal of Academic Multidisciplinary Research (IJAMR) 2(8): 7-26.
- [17]Zaid, A. A., et al. (2020). "The Impact of Total Quality Management and Perceived Service Quality on Patient Satisfaction and Behavior Intention in Palestinian Healthcare Organizations." Technology Reports of Kansai University 62(03): 221-232.
- [18]Kassab, M. K. I., et al. (2019). "Impact of Information Technology on the Success of Office Management Systems in the Palestinian Pension Agency." International Journal of Academic Information Systems Research (IJAISR) 3(2): 7-26.
- [19]Msallam, A. A., et al. (2018). "The Reality of Computerized Management Information Systems in the Palestinian Cellular Communications Company-Jawwal." The Reality of Computerized Management Information Systems in the Palestinian Cellular Communications Company-Jawwal 2.
- [20]Msallam, A. A., et al. (2019). "Computerized Management Information Systems and Its Relationship to Improving the Job Performance of the Employees of the Palestinian Cellular Telecommunications Company-Jawwal." International Journal of Academic Information Systems Research (IJAISR) 3(1): 15-29.
- [21]Bin Ahmed, Asia (2017). The Impact of Strategic Flexibility on Quality of Efficiency of Performance and Competitiveness of the Enterprise (An Empirical Study on Mobilis Telecom Company), Unpublished Ph.D. Thesis, Al-Jilali Al-Yabis University, Sidi Bel Abbes, Algeria.

- [22]Chen Jin; li weizi, (2015). The Relationship between Flexible Human Resource Management and Enterprise Innovation Performance: a Study from Organizational Learning Capability Perspective, University of Shanghai for Science and Technology, Shanghai, China.
- [23]Darwish, Marwan; Al-Damiri, Ibtisam (2010). "Evaluating the quality of Arab banking services operating in the Jerusalem governorate from the viewpoint of customers", Al-Quds Open University Journal for Research and Studies, No. 18.
- [24]Al-Saaideh, Lina, Al-Sa'id, Rashad, (2020). "The Impact of Logistics Management on the Quality of Services Provided by Nutrition Departments in Jordanian Private Hospitals," Journal of the Islamic University for Economic and Administrative Studies, 28 (1), 114-133.
- [25]Al-Sufi, Hamdan Abdullah (1995). The concept of originality and modernity and its applications in Islamic education. Unpublished PhD thesis, Makkah Al-Mukarramah, Umm Al-Qura University, College of Education, Department of Islamic Education and Comparison.
- [26] Al-Mahyawi, Qasim Nayef (2006). Quality Management in Services, 1st Floor, Dar Al-Shorouk for Publishing and Distribution, Amman.
- [27]Fadila, Cherouf (2010). The Impact of E-Marketing on the Quality of Banking Services: A Case Study of Some Banks in Algeria, Unpublished Master Thesis, University of Menthouri, Constantine.
- [28]Al-Anzi, dalal (2014). The Impact of Strategic Flexibility on Quality of Institutional Performance (An Applied Study on Kuwait Aviation Company), Unpublished Master Thesis, Middle East University, Jordan.
- [29]Hammoud, Khudair (2007). Quality Management and Customer Service, Al Masirah House for Publishing, Distribution and Printing, Amman.
- [30]Hammouda, Khaled (2014). The Status of Quality Costs in Palestinian Industrial Companies, Unpublished Master Thesis, Islamic University, Gaza.
- [31]Hoffman K., Douglas Bateson, John E.G., (2011). Services Marketing, Concepts, Strategies & Cases, South- Western, Cengage Learning, U.S.A.
- [32]Jad Al-Rab, Hisham and Obaid, Ahmed (2009). "Evaluating the quality of the training service in the programs of developing the capabilities of faculty members and their assistants: a suggested model for measuring the quality of the training service using written structural models," Journal of the Faculty of Education, Mansoura University, No. 69.
- [33] Johnson J. L.; Lee R. P. W.; Saini A. & Grohmann B., (2003). "Market-focused strategic flexibility: Conceptual advances and an integrative model", Journal of the Academy of Marketing Science, 31(1), pp. 74–89.
- [34]Kim W. Chan & Maubroge Renee, (Jan-Feb 1997). "Value Innovation: The Strategic Logic of High Growth", Harvard Business Review, USA.
- [35] Lee H., Wang S., (2000). "Information Sharing in Supply Chain", International Journal of Technology Management, Vol. 20, pp. 65-73.
- [36]Lovelock et al., (2008), Marketing des services, 6me édition, Pearson Education, Paris.
- [37] Lubd, Hamza (2019). The Effect of Transparency in Tender Management on the Quality of Services Provided in Projects Funded from Service Providers' Viewpoint: Case Study: Universities of Gaza Strip, Unpublished Master Thesis, Islamic University, Gaza.
- [38] Narayanan, V. K., Nath, R. (1993), Organization Theory A Strategic Approach, R.D., Lrwin, Inc, Burr Ridge.
- [39]Nashedah Mazuz and Bin Abdulaziz, Fatimah (2011). Organizational Change and its Relationship with Total Quality Management in Health Organizations, an intervention presented by the International Conference on "Creativity and Organizational Change in Modern Organizations", Faculty of Economic Sciences and Management Sciences, Saad Dahlab University, Blida.
- [40]Parasuraman A., Zeithaml V.A. & Berry L.L., (Jan. 1985). "A Conceptual Model of Service Quality and its Implication for Future Research (SERVQUAL)", Journal of Marketing, 49, pp. 41-50.
- [41]Rahouma, Naglaa Farahat (2012). "Requirements for achieving the quality of health services in the Great Jamahiriya: with an applied study on the health sector," the organization's database.
- [42] Rialti Riccardo, Marzi Giacomo, Caputo Andrea and Mayah Kayode A. (2020). "Achieving Strategic Flexibility in the Era of Big Data: The Importance of Knowledge Management and Ambidexterity", University of Lincoln, Management Decision .ISSN 0025-1747.
- [43]Twami, Jacob (2013). "The Impact of Using Information and Communication Technology on the Financial Performance of the Economic Corporation A Case Study of the National Well Works Complex during the period 2010-2012," Master Thesis, Faculty of Economic, Commercial and Facilitation Sciences, Fasdi Merbah University, Algeria.
- [44] Vasudeva Savdeep, (August 2019). "Quality Strategies for Customer Loyalty in an E-Service Environment: A Case of M-Banking Customers", in book: Strategies and Tools for Managing Connected Consumers.
- [45] Wang Yonggui & Lo Hing-Po, (Jan. 2004). "Customer Focused Performance and Its Key Resource Based Determinants: An Integrated Framework", Competitiveness Review, Vol. 14, No. 1/2, pp. 34-59.
- [46] Yugiong Li; Dongmei Z. & Fuquan Z., (2013). "The Empirical Study on the Relations among Network Structure, Strategic Flexibility and Technology Innovation Performance", International Business & Management, Vol. 6, No.1.
- [47]Zakhroufa, Khaira (2018). The importance of quality of service in developing the health sector in Algeria, unpublished Master Thesis, University of Abdel Hamid bin Badis, Algeria.
- [48]Zhang Y., Wang Y., Nevo S., Benitez J., Kou G., (2017). "Improving strategic flexibility with information technologies: insights for firm performance in an emerging economy", Journal of Information Technology, 32(1), 10-25.
- [49]Abu Rdan, Iman; Al-Anzi, Dalal (2017). "Strategic Flexibility: An Introduction to Achieving Sustainable Competitive Advantage (An Exploratory Study of Sample Opinions from Managers of Asiacell Mobile Communications Company in Iraq)", Duhok University Journal, 20 (2), 237-270.