# The Reality of Using Digital Repositories at the University of Palestine

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**Abstract:** This study aims to identify the reality of using digital repositories at the University of Palestine, where the researchers used the descriptive and analytical approach, through a questionnaire distributed to a sample of employees at the University of Palestine, where the size of the study population is (234) employees and the sample size is (117) employees who responded Of them (90) employees. The study reached a set of results, the most important of which are: The existence of a good degree of satisfaction with digital repositories at the University of Palestine, with a relative weight (72.13%). Scientific). The results also showed that there are no statistically significant differences in the reality of using digital repositories at the University of Palestine according to demographic variables. The study presented a set of recommendations, the most important of which are: The need for universities to strengthen the digital repositories at the university and urge academics to include their scientific contributions in the digital repository for research.

**Keywords:** Digital Repositories, Storing Scientific Research, Classifying Scientific Research, Creating an Electronic Portfolio for Scientific Research, Receiving and Updating Scientific Research, University Of Palestine.

#### Introduction

Information technology has emerged to meet the urgent need for it, which includes the vast amount of information, increasing its sources and types, and the parties using it, and thus the impossibility of being able to know, know, absorb and remember all information, which led to the inability of traditional means to meet and process information needs. Storage and retrieval, especially in light of the development and complexity of aspects of life, which led to the need for information to a large extent in all areas. In the way that the need arises to collect a huge amount of information from various and scattered sources, to meet the increasing need for information, and to use it in the development of economic, industrial, commercial, financial, business, services, and all other activities and fields, in a way that contributes to making the right decisions. And the occasion. The computer has been used as an advanced and new technology in condensing the more detailed and more accurate information, which is needed to a greater degree, and processing this information, storing it, processing it with retrieval, and distributing it to a greater number of beneficiaries (Abdawi, 2016).

Scientific communication is one of the basic foundations for the continuation of life in general, and therefore it is one of the necessities required by the continuation of scientific research activity, and researchers cannot invest in this field except through the presence of a medium that ensures the flow of information produced here and there, in order to benefit from it in scientific applications, by exploiting it in Other research development (Metwally, 2017, P: 95). As universities face great challenges in order to preserve their files and the knowledge that they have planned and organized, and therefore they need digital repositories that accommodate the vast amount of information, knowledge, and data, as well as these repositories related to the reputation of the university or educational institution, because educational institutions in Gaza Strip face great challenges, It works in an exceptional competitive atmosphere, and therefore keeping the research and reports provided by its employees may be an indicator of the quality of its services, and the extent of its ability to influence and improve the methods and skills of its employees, and this is reflected in its reputation and competitiveness.

# **Problem Statement**

The problem of the study is to answer the following questions:

Q1-: What is the level of satisfaction with the digital repositories at the University of Palestine?

**Q2-**: Are there statistically significant differences in the responses of the respondents to the digital repositories in universities according to demographic variables (gender, age group, academic qualification, years of service, and job title)?

#### **Research Objectives**

The main objective of the study is to identify the reality of using digital repositories at the University of Palestine, and to achieve this goal the following sub-objectives were formulated:

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Vol. 4, Issue 8, August - 2020, Pages: 115-134

- 1. Exposing respondents' trends towards the importance and reality of digital repositories at the University of Palestine towards the services provided by digital repositories and to what extent they relate to their interests, and the degree of use of digital repositories in universities
- 2. Reaching out to test the validity of the main study hypotheses and the sub hypotheses
- 3. Provide recommendations and proposals that could contribute to the development of digital repositories.

#### **Research Importance**

Aspects of the importance of the study can be determined from the expected contribution and addition, as follows:

- 1. The importance of this study stems from the importance of the topic it is discussing, which is considered one of the modern topics as it deals with the reality of using digital repositories at the University of Palestine, which is considered an addition to the scientific library on this topic.
- 2. The study derives its scientific importance from the role that university employees play by promoting the use of universities' digital repositories.
- 3. The availability of this study as a reference in libraries helps researchers to view the results of the study and its recommendations in the field of digital repositories.
- 4. Meet the needs of universities to take advantage of digital repositories to enhance their performance.
- 5. The researchers hope that the results of the study will contribute to directing the attention of university officials towards the need to pay attention to the practice of digital repositories, which ultimately helps raise the overall performance of universities.

# Research hypothesis

In order to provide an appropriate answer to the scholarly questions raised, the study seeks to test the validity of the following hypotheses:

**H0**<sub>1</sub>: There are statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) between the average responses of the respondents on digital repositories at the University of Palestine according to the following personal and organizational variables: (for gender, age group, academic qualification, years of service, job title).

# The Following Sub-Hypotheses Are Divided From It:

**H0**<sub>1-1</sub>: There are statistically significant differences at the level of  $(\alpha \le 0.05)$  between the averages of the respondents' responses about the digital repositories at the University of Palestine according to gender.

**H0**<sub>1-2</sub>: There are statistically significant differences at the level of  $(\alpha \le 0.05)$  between the averages of the respondents' responses about the digital repositories at the University of Palestine, according to the age group.

**H0**<sub>1-3</sub>: There are statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) between the averages of the respondents' responses about the digital repositories at the University of Palestine, according to scientific qualification.

 $\mathbf{H0}_{14\underline{2}}$  There are statistically significant differences at the level of  $(\alpha \le 0.05)$  between the averages of the respondents' responses about the digital repositories at the University of Palestine, according to the years of service.

 $\mathbf{H0}_{1.5\underline{s}}$  There are statistically significant differences at the level of  $(\alpha \le 0.05)$  between the averages of the respondents' responses about the digital repositories at the University of Palestine, according to the job title.

# Research Variables

**Independent Variable**: digital repositories and it consists of (4) main dimensions, which are:

- 1. Storage of scientific research.
- 2. Classification of scientific research.
- 3. Create an electronic portfolio for scientific research.
- 4. Receiving and updating scientific research

Demographic Variables: gender, age group, educational qualification, years of service, and job title

# Research Limits and Scope

The scope of the study shall be as follows:

- 1. **The human limit**: The study was conducted on academic and administrative employees at the University of Palestine in question, who responded by filling out the questionnaire.
- 2. **Institutional limit**: The study was conducted at the University of Palestine, in which the respondents responded to the study tool.
- 3. **Spatial limit**: The study was conducted in Gaza Strip, State of Palestine.
- 4. **Time limit**: The study was conducted in the year (2020).

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Vol. 4, Issue 8, August - 2020, Pages: 115-134

#### Literature Review

Researchers have reviewed previous studies related to the topic, which in turn increase knowledge and knowledge about the current topic of study to conclude the foundations and procedures of the study as well as answer its questions. Therefore, previous studies were reviewed from the most recent to the oldest.

- > Study of (Bhat, 2019) aimed at evaluating nine digital repositories for free access, which was selected from the DOAR directory. Preservation and management of rights, services, feedback, and 120 questionnaires were distributed to collect information, and researchers used the descriptive analytical approach, where the study reached conclusions, the most important of which is that most of the warehouses were built by faculty members, and the Eprints program is the most used program in creating warehouses.
- Study of (Al-Haji and Al-saber, 2019) aimed at introducing the digital contents of the scientific periodicals of the International University of Africa, the most important disciplines that deal with them, and identifying the main societies and their basic components, and their objective trends with reference to the most important languages of authorship and the type of authors from Male and female, and the amount of intellectual production that is part of the university's cultural and civilizational history, the researchers used the bibliometric method: the use of statistical and mathematical methods in analyzing data related to books, periodicals, periodicals articles, authors, publishers, and other elements of documentary communication, and the descriptive and analytical method. The study found that the Arabic language is the first language of authorship for all the studied periodicals, as most of the articles came in Arabic, with a weak percentage for English and French, and the Journal of African Studies brought in subjects in the French language, among the studied periodicals, as well as the Journal of Educational Studies, one article only. And that there are no languages other than Arabic, English and French, and there is a great advantage for male authors over females
- > Study of (Al Yami, 2018) aimed at reviewing the most prominent digital repositories (LOR) in the Kingdom of Saudi Arabia, and also sought to identify the most prominent opportunities available to these warehouses in order to ensure the quality of elearning content, and the survey method was used in this study (Descriptive) analytical, and the study population consisted of all faculty members in Saudi universities. The study found that the idea of digital repositories LOR was not clear among many employees in education and training institutions with an average of 1.54, while the difficulty of using some of the digital repositories LOR came in fifth place with an average of 1.61, and in the sixth place the effort required to develop electronic content in these warehouses with an average of 1.72, while in the eighth place came the difficulty of searching for LOR digital repositories and locating them with an average of 1.72, while in the eighth place came the restrictions and conditions for utilizing the contents of digital LOR repositories with an average of 1.74, and the ninth and last place and the great cost required to develop electronic content in these warehouses with an average of 1.80.
- > Study of (Lindsay, Muijs, Band, & Hartas, 2017), which aimed to verify the effectiveness of the electronic registration system in secondary schools in the United Kingdom, and to achieve the goals, the researchers conducted a longitudinal study on a sample of (45) schools before application and after the application of the electronic registration system. The application period extended for four years. The study found that attendance rates increased slightly after the application of electronic registration. And it became clear that there are differences in favor of the residents of the villages, as the difference between the old attendance and the presence after the application was higher.
- > The study of (Obaidat, 2017) aimed at identifying the role of the University of Dammam library in bridging the digital divide from the point of view of the beneficiaries. The study used the descriptive analytical approach, and to identify this role, a questionnaire was distributed to collect data on a sample of beneficiaries, as it included (52) variables It discusses digital information services to measure the extent of the role the library plays in bridging the digital divide, in addition to the role of languages in bridging the information gap between Western and developing countries. The study found that the arithmetic mean of the respondents 'answers to the role of the library in providing information services ranged from very high to low. And that the most obstacles faced by the beneficiaries regarding the use of foreign languages.
- > Study of (Bin Ghaida, 2017) aimed at identifying the role of institutional digital repositories in making digital contents available to Algerian university libraries on the Internet, and the study used the descriptive and analytical approach, and the study sample consists in selecting an intentional sample representing the best six Algerian institutional repositories according to the global ranking of Webometrics. For digital repositories. The study concluded that the institutional repository of Abu Bakr Belkaid University in Tlemcen topped the list of the best Arab digital repositories for the year 2016. All digital repositories under study belong to university institutions. And that the number of Algerian digital repositories available in the global Webometrics classification is very small compared to the number of Algerian higher education institutions. The category of Applied Sciences, Languages, Arts and Social Sciences is the most covered topics in Algerian repositories.
- > Study of (Ahsan and Nabil, 2017), which aimed to identify the role of the availability of institutional digital repositories requirements at the Algerian University and prepare a mechanism for building and implementing the digital repository of the University of Constantine. The study sample consisted of (120) individuals from Constantine teachers. A questionnaire was used to collect data, and a descriptive analytical approach was used. The study found a variety of topics covered by the digital repositories that are the subject of the study, ranging from research sciences, social sciences, law, politics, computer science, and others, but the number of materials remains insufficient to meet the needs of the beneficiaries. The variety of information

Vol. 4, Issue 8, August - 2020, Pages: 115-134

sources available in the digital repositories in the subject of study are university theses, periodical articles, conference proceedings, e-books, educational materials, and audiovisual materials. University theses were the most common types of information sources available in repositories, and the study also found that there is a great shortage in the availability of audiovisual documents.

- > Study of (Odeh, 2017) aimed at identifying the trends of Syrian researchers towards sources of free access to information, and the researcher used the descriptive and analytical approach and used the questionnaire as a main tool for collecting information, and the sample of the study consisted of (147) male and female researchers at the University of Damascus. The study found that most of the sources relied upon when referring to the sources of free access are articles and scientific research 86% in addition to books 64% then drafts of articles 41% will be followed directly by university theses, 40% presentations, 37% and conference work. 27% assert here that gray literature (draft articles, university theses, conference works) published on the Internet is frequently used by Syrian researchers, even if it comes in the second degree of use after periodicals and books articles. The types of sources published by researchers differed; 50% published research papers and scientific articles, 38% published their university theses, 7% published conference works, and 5% published presentations. As for the reasons that did not encourage researchers to deposit their research in sources of free access, they were numerous, i.e. 40% of the researchers in the study subject are afraid of their research being stolen and their lack of confidence in intellectual property rights for freely available research, and 25% do not know how to participate, and% 20 they believe that the research published through free access sources is not recognized by their scientific institutions, and 10% believe that publishing through free access sources reduces the value of their research, and 5% do not know how the deposit process takes place.
- > Study of (Al-Hiyariet al., 2017) which aimed to explain the factors that affect the application of digital warehouse systems and the quality of information at the University of Utara Malaysia from the students' point of view. The study shows the impact of human resources, information quality and management commitment on accounting information systems and information quality. 119 questionnaires were distributed to collect information to test the hypotheses of the study, and the researchers used the descriptive and analytical approach, where the study reached results, the most important of which is the existence of a statistically significant relationship between management commitment, information quality and information system. However, there is no statistically significant relationship with HR. Moreover, the relationship between management commitment and information quality is not considered to be statistically significant with information quality but is considered to be statistically significant with management information system and human resources.

# **Commentary on Previous Studies**

Aspects Of Agreement Between The Current Study And The Previous Studies: The current study agreed with previous studies in several aspects, as all previous studies dealt with the issue of digital repositories, as well as agreed in the study method used, which is the descriptive and analytical approach, as well as in the study tool, as all previous studies were used. The questionnaire is a tool for the study, while the current study will depend on the descriptive and analytical method, and the questionnaire is a tool for the study.

The Differences Between The Current Study And The Previous Studies: The current study differed with the previous studies, in the size and diversity of the study sample, as the size of the study was less and varied between companies and different administrative institutions, while the current study is less, and it will consist of employees at Al-Quds University The current study focused on the reality of using digital repositories.

#### **Areas of Benefit from Previous Studies:**

- 1. That previous studies, in addition to the researchers 'experience in the nature of universities' work, helped researchers in determining the topic of this research and the manifestations of the research problem.
- 2. Formulating the study methodology.
- 3. Determine the main and sub-variables of the research and the extent of the relationship between them.
- 4. Contribute to building some pillars of the theoretical framework of the research.
- 5. Choose the study methodology and the statistical methods used in these studies, and how the data were analyzed in these studies.
- 6. Determining the appropriate size of the study sample after reviewing the size of the samples approved in these studies, which will facilitate reaching important conclusions and recommendations in the current study.
- 7. Knowing the methods of validity and reliability used in these studies, which enables the identification of appropriate methods for the study variables.

# **Theoretical Framework**

Contemporary scientific institutions of all kinds are facing a wave of rapid transformations and changes sweeping the world today, foremost of which is the informational and technical revolution, that revolution that relies on advanced scientific knowledge and the optimal use of information flow resulting from the great advances in computer technologies and the global network of communications (the Internet), and as a result of those Transformations Knowledge has become the most important strategic source, but it has become the strongest, most influential and controlling factor in the success or failure of the organization.

## First - The Concept of Digital Repositories:

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Vol. 4, Issue 8, August - 2020, Pages: 115-134

Digital repositories are usually referred to as open archives, which is a database on the Internet that includes scientific works managed by researchers and provides the ability to search for those works.

The term open archive is surrounded by a kind of ambiguity because its vocabulary accepts several interpretations according to the context of its use. The word archive in the traditional context is known as: "It has a collection of documents, regardless of their date, shape or container, which are produced or received by every natural or legal person, general or Private, in the course of its activity." As for the new context of scientific communication, the founders of the open archive movement agree that the archive is an information tank or a repository for electronic scientific documents.

Digital repositories are defined as a database that can be accessed and searched on the web and contains the research work deposited by researchers at the base and aims to protect and preserve research work in the long term, and digital repositories are divided into: thematically specialized repositories and institutional repositories (Faris, 2016).

The digital repository is based on a university and it is a set of services provided by the university to its academic community in order to manage and publish digital materials produced by the institution and members of its community, including long-term preservation, as well as the issue of organization, availability and distribution, and what is noticed on this definition is the focus on long preservation The range for information that can be converted into various forms and formats (Obaidat, 2017, P: 315). As for Mark Ware, the institutional digital repository is a database on the Internet of scientific materials, characterized by accumulation, permanence of availability, open and interoperable, as well as collecting, storing and publishing, in addition to that, it performs the long-term preservation of digital materials as a basic function For digital repositories (Obaidat, 2017, P: 317), according to Bailey, the institutional digital repository includes a set of materials produced by scientists and researchers in many disciplines such as academic publications, technical reports, theses and theses, teaching materials, electronic books and scientific periodicals. As Bailey sees it, the digital repository is based on the diversity of digital materials it can contain (Audrey, Groch, 2016, p. 8)

From the above, it can be said that the digital repository is a collaborative work space on the Internet to collect and preserve the academic scientific output of institutions and research centers in order to create a collective memory that is characterized by accumulation and long-term preservation.

## **Advantages of Digital Repositories:**

Institutions and universities that create digital repositories enjoy a number of advantages, especially in light of the diversity of the repository's goals and the richness of its content, and the extent to which researchers are encouraged to participate and contribute to intellectual production. Among these advantages (Alian, 2016, P: 58-60):

# Advantages of Digital Repositories for Universities and Research Institutions:

- 1. Upgrading and advancing the status of the scientific university through the increase in the times of knowledge and the intensity of reference citation to the intellectual production of researchers affiliated to it in the scientific community locally and internationally.
- 2. It serves to securely preserve the long-term preservation of the university's intellectual production.
- 3. Allowing the university to manage Intelectual Property Right by making researchers in the institution aware of copyright issues.
- 4. Providing value-added services through indexing citations and authority control of names, for the purpose of quantitative and qualitative analysis to measure the performance of researchers in the field.

# Advantages of Digital Repositories for Researchers:

Repositories give researchers, whether authors or readers, a number of advantages, including:

- 1. Repositories act as a central archive for their scholarly production increasing the chance of their broadcast, allowing for increased visibility and cross-referencing and hence the expected impact factor of research increases.
- 2. Communicate and learn about new research findings, resulting in more knowledge accumulation and feedback.
- 3. The restrictions related to the number of pages in the publication of research in scientific periodicals shall be canceled.
- 4. Assisting researchers in managing the research funding requirements by making them available in repositories.

# Advantages of Digital Repositories for Libraries:

- 1. Overcoming the licensing crisis related to dealing with electronic journals.
- 2. Libraries help meet the requirements of the digital age by meeting the needs of their users.
- 3. An attempt to bridge the gap between the needs of the beneficiaries, the decline in library budgets, or the high prices of electronic scientific journals
- 4. It allows libraries to play a leading role through their participation in warehouse preparation processes, according to which entity is responsible for the beneficiaries.

# Basic Elements of Digital Repositories (Nabti et al., 2017, p. 233):

The Association of Academic Resources and Academic Publishing SPARC describes the digital repository as belonging to an institution, academic, cumulative, continuous, free and intertwined, and the following explains these basic elements:

1. **The Digital Repository Belongs to An Institution**: digital repositories offer a tangible and historical embodiment of the intellectual life and the output of the institution, as these institutions become important indicators of the academic quality of the institutions.

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Vol. 4, Issue 8, August - 2020, Pages: 115-134

- 2. **The Digital Repository Includes Academic Content**: Depending on the specific goals of each institution, the institutional repository can contain any work produced by students, faculty members, and employees of the institution, such as periodical articles and research papers, electronic books, theses, lessons and lectures.
- 3. **Institutional Digital Repository Is Cumulative And Permanent**: as digital repositories aim to preserve and provide availability for digital content in the long term, the collected content must be cumulative and continuous forever.
- 4. **The Institutional Digital Repository Is Interconnected And Free**: In order for the repository to provide availability to a wide research community, users from outside the university must be able to find and retrieve information from the repository. The goals that drive the institution to develop a digital repository require enabling users far from the institution's community to access the content.

# **Types of Digital Repositories**: (Afifa, 2018, P: 212)

In general, digital repositories fall into two categories:

- 1. Institutional Warehouses.
- 2. Thematic Repositories.

It is possible to classify digital repositories into several divisions as follows:

# **First: Content Type:**

- Raw research data repositories (primary).
- Full-text repositories for scientific research repositories.
- Full text repositories for refereed research and conference papers.
- Thesis repositories.
- Repositories of technical reports issued by bodies and institutions.
- Educational entities warehouses.

## **Second: Area of Coverage:**

- Thematic Repositories.
- Institutional Warehouses.
- Personal Repositories (The Researcher's Personal Archive).
- Magazine Repositories (Resulting From One Magazine or Group of Magazines).
- National Warehouses.
- Regional Warehouses.
- Global Warehouses.

# Third: The Target Beneficiaries Group:

- Students 'or learners' repositories.
- Teachers' warehouses.
- Researchers' repositories.

## **Characteristics of Digital Repositories**

Digital repositories are characterized by a set of characteristics that they derive from the nature of the jobs that they perform and distinguish them from other materials and digital resources available on the web. There are four characteristics that distinguish digital repositories (Krthio and Battouch, 2014, P: 4-5):

- 1. **An Institution Identifier**: so that the warehouse is affiliated with a research institution that collects and accounts for academic output, original research and other intellectual works produced by faculty members in many different fields and merges these materials into a coordinated presentation, and makes them widely available inside and outside the university.
- 2. **Coordination with Repositories in Other Institutions**: Effective scholarly exchange requires researchers to be able to identify relevant work in multiple institutions. Using uniform standards for indexing and publishing this research simplifies the individual work of faculty in publishing research and ensures greater access by researchers elsewhere.
- 3. **Focus on Academic Content**: Depending on the goals set by each institution, the institutional repository may contain any digital works created by students, faculty, researchers, or employees. These materials may include student files, teaching materials, research or products such as research papers, whether before or after publication, technical reports, audiovisual and computer programs, so digital repositories focus on academic content rather than administrative content.
- 4. Commitment to The Accumulation and Permanence of the Availability of the Institutional Repository: a major role in the process of scientific communication between researchers, so that the content collected is accumulated and available at all times, and the provision of permanent access and long-term preservation of digital entities in the repository, and this requires careful planning and commitment.

## Advantages and Disadvantages of Digital Repositories:

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Vol. 4, Issue 8, August - 2020, Pages: 115-134

Institutional repositories are one of the informal channels for academic academic communication through the multiple sources of information available in them, which represent important and legitimate communication outlets. Hence, it can be viewed as a great opportunity to provide value-added services through the advantages it provides to researchers, research institutions and the scientific research community as a whole, by making research results available free of charge on the web. In what follows, we present a review of the most important advantages of institutional repositories for researchers, whether they are authors, shareholders or readers, as well as their benefits for research institutions, which we cite as follows (Muhammad and Khamis, 2013, P: 54-60):

## Advantages and Disadvantages of Digital Repositories for a Shareholder:

- 1. **Increase the Reference Citation Rate**: Studies and research have shown that the materials available for free on the Internet are cited more than their paper counterparts.
- 2. **Speed**: University or college members can self-publish their preprints immediately and receive immediate feedback.
- 3. **Organization**: The institutional repository can contain all the scholarly works of each faculty member, including pre-publication articles, post-publication articles, presentations and teaching materials instead of being dispersed in other databases or in personal pages ... so that it can Easily browse these articles in one place by the user, and easily re-use them by contributors.
- 4. **Preservation**: in order to ensure continued access and the survival of the digital files, they need to be updated and migrated. Keeping up with this update is done by the custodians of the warehouse so that they update and transfer the files deposited by each shareholder.
- 5. **Ease of Use**: every shareholder can easily submit their contributions and articles.
- 6. **Longevity of Hyperlinks**: Deposit digital material in the repository means that it will stay in one place and maintain the same URL permanently.

# Advantages and Disadvantages of Digital Repositories for an Organization:

- The scientific materials produced by the university are available in one place, which reflect the intellectual achievements of the institution and serve as a marketing tool.
- Documents that reflect the institutional history of the university, whether scientific or non-scientific (technical and administrative reports) are reserved for future use.
- Highlight the quality of the institution's intellectual capital.
- Leveraging investments in information systems and content management.

## Advantages and Disadvantages of Digital Repositories for the User:

- Items in digital repositories can be accessed through search engines.
- There is no subscription or entry fee, as the repository contains materials that are displayed in their original digital formats.
- Gray literature is material that is not easy to find in its traditional form. Digital repositories include many types such as scientific papers, pre-publication articles and conference presentations.
- Its advantages include expanding areas of knowledge that can be shared, in addition to providing opportunities for forms
- New scientific communication and contribute to providing flexible ways to develop current scientific communication.

# **Principles of Digital Repositories:**

Digital repositories adhere to the following principles (Bin Ghaida, 2017, P: 24):

- 1. Supporting digital content and encouraging the creation and preservation of research results.
- 2. Support and discovery of relevant research findings across groups and disciplines.
- 3. Supporting and encouraging national and international cooperation to enhance interoperability and digital content management.
- 4. Support and strengthen the links between digital research, learning and management services.
- 5. Support and promote the use of relevant open standards such as: the Open Archives Initiative (OAI) and the Protocol for metadata harvesting.
- 6. Supporting and promoting development through "learning by doing" and building spaces for sharing experiences and knowledge.
- 7. Support and enhance the processes that make it easier for authors and researchers to deposit their research outputs.
- 8. Support and enhance the options available for the long-term preservation of digital entities and access to digital content.

#### **Basic Services for Digital Warehouse Management Systems:**

Digital warehouse management systems and programs provide many services, whether it is related to the administration and management of digital content or what is related to the beneficiary's side, search and retrieval, and these services are (Qabbani, 2013, P: 26):

- 1. **Deposit And Retrieval Service**: Support for personal deposits and deletion of digital entities.
- 2. Availability Control and Rights Management: To restrict access to information.
- 3. **Administrative Services**: warehouse management software supports many administrative functions such as designing the workflow, reviewing articles and scientific papers submitted before or after publication, and reviewing metadata.
- 4. **Metadata Service**: Providing support for creating metadata metadata, and ensuring that it will be available to search engines, whether searching inside the repository and / or Harvesters

Vol. 4, Issue 8, August - 2020, Pages: 115-134

- 5. **User Support**: by creating a library of the most important digital materials he needs, providing support and answering questions, providing alert service and being informed of everything new in a topic.
- 6. **Storage Space**: Ensuring secure data management by providing services such as backup and checking for erroneous data and protection against unauthorized modification or deletion.
- 7. **File Naming Service**: for the permanence of the names of digital entities within the repository, this service is known as the digital entity identifier (DOI), which is a unified number for the entity on the Internet as the unified number of the book .ISBN.
- 8. **Search Engine Support**: whether within the local repository or through the repositories of other institutions or scientific search engines such as Google Scholar.
- 9. **Allow Files to Be Preserved and Migrated**: Warehouse management systems help import and export data in multiple formats such as: XML and MAR.

# The Importance of Digital Repositories:

There is a clear importance for the good use of digital repositories in universities through that they provide services to universities, research institutions, and researchers (Alian, 2016, P: 58-60):

# The Importance of Digital Repositories for Universities and Research Institutions:

- Upgrading and advancing the status of the scientific university through the increase in the number of times of knowledge and
  the intensity of referential citation to the intellectual production of researchers affiliated with it in the scientific community
  locally and internationally.
- It serves to securely preserve the long-term preservation of the university's intellectual production.
- Allowing the university to manage Intelectual Property Rights by making researchers in the institution aware of copyright issues.
- Providing value-added services through indexing citations and authority control of names, for the purpose of quantitative and qualitative analysis to measure the performance of researchers in the field.

# **Methodology and Procedures:**

**First: Methodology Of The Study**: The study used the descriptive and analytical approach that relies on description, analysis and comparison with the aim of describing what is an object, and its interpretation by shedding light on the problem of the study to be investigated and understanding its conditions, and collecting information that increases the clarification of the circumstances surrounding the problem.

## The Researchers Used Two Primary Sources Of Information:

- 1. **Secondary Sources**: Where the researchers turned in addressing the theoretical framework of the study to secondary data sources, which are the relevant Arabic and foreign books and references, periodicals, articles and reports, and previous research and studies that dealt with the subject of the study, and research and reading in various websites on the Internet.
- 2. **Primary Sources**: To address the analytical aspects of the subject of the study, researchers resorted to collecting primary data through a questionnaire as a main tool for the study, designed specifically for this purpose.

**Second**: **The Study Population**: the study community is defined as all the vocabulary of the phenomenon that the researcher studies, and based on the study problem and its objectives, the study population is represented by the employees of the University of Palestine in Gaza Strip, whose number is (234) employees (Personnel Affairs, University of Palestine).

**Third:** The Study Sample: The simple random sampling method was used to collect data by distributing the questionnaire to (50%) of the employees, ie (117) employees, of whom (90) employees responded, or (77%). The following table shows the distribution of respondents according to the study variables:

**Table 1**: Distribution of respondents according to the variables of (Gender, Age Group, Educational Qualification, Years of Service, Job Title)

			Service, Jo	ob rue)				
Condon	Male			Female			Total	
Gender	71		19			90		
Age Group	Less than 30 years o	ild I	less than 40 years old	40- Less than 50 old	) years	50 years or more	90	
	26		22	32		10		
Ovalification	PhD M.A.		M.A.	Bachelor's degree or less			90	
Qualification	38			25		7527	90	
	Less than 5 years	5- Less than 10 years		10 - less than 15 years 15		15 years and over		
Years Of Service			old	old			90	
	40		21	20		9		
Ich Title	Academic		Administrative			00		
Job Title		62			28		90	

ISSN: ISSN: 2643-976X

Vol. 4, Issue 8, August - 2020, Pages: 115-134

Study Tool: A questionnaire was prepared on "the reality of using digital repositories at the University of Palestine," and it consists of three main sections:

The First Section: It is the personal and organizational data of the respondents (gender, age group, academic qualification, years of service, job title).

**Section Two**: The Scale of Digital Repositories.

The scale consists of (24) paragraphs, measuring 4 sub-dimensions of digital repositories, and the following table explains that:

Table 2: Distribution of the paragraphs of the questionnaire on the different fields

#	Dimension	Number Of Paragraphs
1.	Storage of Scientific Research.	8
2.	Classification of Scientific Research.	4
3.	Create An Electronic Portfolio For Scientific Research.	5
4.	Receiving And Updating Scientific Research	7
	The Overall Score for Digital Repositories	24

**Correcting the Scale**: Each paragraph is answered according to a five-point scale consisting of alternatives: strongly agree, agree, neutral, disagree, strongly disagree, and this scale has been given the following grades in order (5, 4, 3, 2, 1).

The Second Stage: the legalization stage: It included a validity and consistency account for the test.

- 1. **Referees' Validity**: The scale was presented in its current form to a number of specialized referees, including business administration professors, in order to identify the suitability of the questionnaire phrases and their representation of the aspects included in them, and the scale was modified based on the observations provided.
- 2. **The Validation Of The Construct, Using The Internal Consistency Method**: the scale was applied to a survey sample of (32) members of the original community for the study, and the correlation coefficients for each paragraph were calculated in the domain to which they belong, as well as the correlation coefficients between the domains with each other, and all the paragraphs obtained a significant level 0.05 This indicates that the scale has a high degree of validity for internal consistency.
- Results of the Internal Consistency of the Scale

Table 3: the correlation coefficient between each paragraph of each dimension and the overall degree of the dimension

Paragraph	R	Sig.	Paragraph	R	Sig.	Paragraph	R	Sig.	Paragraph	R	Sig.
Storage of	of Scient	ific	Classification	on of Sci	entific	Create an Electronic Portfolio			Receiving and Updating		
Res	search		Res	search		for Scient	ific Resea	rch	Scientifi	c Resear	ch
1	0.844	0.000	1	0.824	0.000	1	0.930	0.000	1	0.678	0.000
2	0.877	0.000	2	0.854	0.000	2	0.894	0.000	2	0.594	0.000
3	0.873	0.000	3	0.911	0.000	3	0.875	0.000	3	0.894	0.000
4	0.915	0.000	4	0.886	0.000	4	0.887	0.000	4	0.724	0.000
5	0.875	0.000				5	0.763	0.000	5	0.764	0.000
6	0.805	0.000							6	0.793	0.000
7	0.665	0.000							7	0.786	0.000
8	0.716	0.000									

**Stability Of The 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.

The correlation coefficient was calculated between the total of the paired expressions 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 (0.972), and the reliability coefficients were all high, indicating that the scale has a high degree of stability. The reliability coefficient of the Cronbach alpha was also calculated, and the overall scale reliability coefficient was (0.969), 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 illustrates this:

**Table 4:** The scale stability coefficient by the Alpha-Carnbach split method

#	Domains	Number Of Paragraphs	Correlation Coefficient before Adjustment	Correlation Coefficient after Adjustment	Cronbach's Coefficient Alpha	Significance Level
1.	Storage of Scientific Research.	8	0.904	0.950	0.931	0.01
2.	Classification of Scientific Research.	4	0.822	0.904	0.891	0.01

ISSN: ISSN: 2643-976X

Vol. 4, Issue 8, August – 2020, Pages: 115-134

#	Domains	Number Of Paragraphs	Correlation Coefficient before Adjustment	Correlation Coefficient after Adjustment	Cronbach's Coefficient Alpha	Significance Level
3.	Create An Electronic Portfolio For Scientific Research.	5	0.857	0.924	0.918	0.01
4.	Receiving And Updating Scientific Research	7	0.745	0.855	0.866	0.01
	The Overall Score for Digital Repositories	24	0.945	0.972	0.969	0.01

It is clear from the previous table that the reliability coefficients are all statistically significant, confirming the validity of the scale for application. Thus, the researchers have made sure of the validity and reliability of the study tool, which makes them fully confident of the validity of the questionnaire and its validity to analyze the results, answer the study questions and test its hypotheses.

# Test hypotheses of the study

# The statistical description of the study sample according to personal and organizational data

The following is a review of the characteristics of the study sample according to personal and organizational data

Table 5: Distribution of the study sample according to personal and organizational data

Person	al And Organizational Data	The Number	Percentage%
Gender	Male	71	78.9
Gender	Female	19	21.1
	Total	90	100.0
	Less than 30 years old	26	28.9
A	30 - less than 40 years old	22	24.4
Age Group	40- Less than 50 years old	31	35.6
	50 years or more	10	11.1
	50 years or more  Total PhD Qualification M.A.		100.0
	PhD	38	42.2
Qualification	M.A.	25	27.8
	Bachelor's degree or less	27	30.0
	Total	90	100.0
	Less than 5 years	40	44.4
V 000	5- Less than 10 years old	21	23.3
Years Of Service	10 - less than 15 years old	20	22.3
	15 years and over	9	10.0
	Total	90	100.0
T.1. 77941.	Academic	62	68.9
Job Title	Administrative	28	31.1
	Total	90	100.0

It is evident from the previous table that 78.1% of the study sample is male, while 21.1% are females, and this is proportional to the percentage of males employed in the University of Palestine in particular and Palestinian universities in general. It is clear that 28.9% of the study sample is under the age of 30 years, while we find that 24.4% of those under the age of 40 years. This reflects the fact that the university is relatively young and recently established, and the rest of the percentage is from the older age group. It is clear that 42.2% of the study sample are doctoral degree holders, while 27.8% of master's holders and 30.0% of bachelor's degree holders or less, and this is consistent with the nature of work of academic institutions and their need for holders of higher qualifications. It is also evident that 67.7% of the study sample is of those with less than 10 years of service. This corresponds to a young and developing

ISSN: ISSN: 2643-976X

Vol. 4, Issue 8, August - 2020, Pages: 115-134

university, while 17.9% and the same are recruiting new competencies, and the remaining percentage are those with greater years of service. It is clear from the previous table that 68.9% of the study sample was from the academic staff, while 31.1% were from the administrative staff, and this reflects the nature of the staff distribution at the university.

The Criterion Adopted In the Study (Ozen et al., 2012):

**Table 6:** Explains the criterion adopted in the study

SMA	Relative Weight	Degree Of Approval
From 1.79 - 1	From 35.9% -20%	Strongly Disagree
From 2.59 - 1.80	From 51.99% -36%	Disagree
From 3.39 - 2.60	From 67.99% -52%	Medium (neutral)
From 4.19 - 3.40	From 83.99% -68%	Agree
From 4.20 - 5	From 100% - 84%	Strongly Agree

To interpret the results of the study and judge the level of response, the researchers relied on arranging the arithmetic averages at the level of the fields of the questionnaire and the level of the paragraphs in each field. The researchers determined the degree of approval according to the criterion adopted for the study.

# The Answer to the Study's Questions:

# The result of the first question: which states:

Q1-: What is the level of satisfaction with the digital repositories at the University of Palestine?

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

**The First Dimension: Storing Scientific Research**: The arithmetic mean, standard deviation, relative weight, and order were used to find the degree of approval. The results are shown in the following table:

**Table 7:** The arithmetic mean, standard deviation, relative weight, and arrangement for each paragraph of the first dimension: storage of scientific research

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university has the computers needed to store research.	3.4000	0.88432	68.00%	8	Agree
2.	Available hardware and computers allow fast research storage.	3.5778	0.89916	71.56%	4	Agree
3.	The university relies on a research registration program.	3.6444	0.85211	72.89%	2	Agree
4.	The university relies on a unified electronic archive system for all its departments.	3.5000	0.76804	70.00%	6	Agree
5.	There is a large space on the university's computers to store as much research as possible.	3.5667	0.82175	71.33%	5	Agree
6.	The university administration provides specialized training for electronic registration systems.	3.6333	0.91737	72.67%	3	Agree
7.	Available storage systems allow free access to research through convenient search systems.	3.7222	0.82145	74.44%	1	Agree
8.	The university provides storage from outside the university.	3.4831	0.89331	69.66%	7	Agree
	Total Marks	3.5663	0.69756	71.33%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the seventh paragraph, "Available storage systems allow free access to research through appropriate search systems" equals 3.72 (total score out of 5), meaning that the relative weight is 74.44%, and this means that there is a high agreement by the sample members for this paragraph.
- The arithmetic mean of the first paragraph "The University has the computers necessary to store research" equals 3.40, meaning that the relative weight is 68.00%, and this means that there is high agreement by the sample members for this paragraph.

In general, it can be said that the arithmetic mean of the first dimension: storing scientific research is equal to 3.56, meaning that the relative weight is 71.33%, and this means that there is high agreement by the sample members for the paragraphs of this dimension. The researchers explain this result to the fact that the users of digital repositories are academics working at the university, and each of them is keen to make the research effort published in the journals available to researchers by storing these researches on the university's digital repositories.

Vol. 4, Issue 8, August - 2020, Pages: 115-134

This result is in agreement with some studies, such as the study (Bhat, 2019), which reached results, the most important of which is that most of the warehouses were built by faculty members. And the study (Bin Ghaida, 2017), which concluded that the category of Applied Sciences, Languages, Arts and Social Sciences is the most covered topic in the Algerian repositories that compose the study sample. And the study (Ahsan and Nabil, 2017), which concluded the diversity of topics covered by digital repositories, between research sciences, social sciences, law, politics, computer science, etc., and the diversity of information sources available in digital repositories subject of the study, including university theses, periodical articles, conference proceedings, e-books, educational materials, and audio materials. Visual theses were the most common types of information sources available in repositories.

These results differed with some studies, such as a study (Al Yami, 2018), which found the lack of clarity of the idea of digital repositories LOR among many employees in educational and training institutions, the difficulty of searching for digital repositories and locating LORs, and a study (Odeh, 2017) that found the reasons Which did not encourage researchers to deposit their research in sources of free access, as it was numerous, i.e. 40% of the researchers in the study subject are afraid of their research being stolen and their lack of confidence in intellectual property rights for freely available research, 25% do not know how to participate, and 20% believe that research Published by free access sources is not recognized by their scientific institutions, and 10% believe that publishing via free access sources reduces the value of their research, and 5% do not know how the deposit process takes place.

**The Second Dimension: Classification Of Scientific Research**: The arithmetic mean, standard deviation, relative weight, order and degree of approval were used. The results are shown in the following table:

**Table 8:** The arithmetic mean, standard deviation, relative weight and arrangement for each paragraph of the second dimension: Classification of scientific research

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	Available in hardware and computers specialized programs to include new research.	3.5333	0.87666	70.67%	4	Agree
2.	The university follows unified classification systems in all majors and departments with an understandable serial number.	3.5889	0.88552	71.78%	3	Agree
3.	The university relies on the latest classification systems, including mathematical, scientific, and statistical.	3.6333	0.99944	72.67%	2	Agree
4.	There are clear scientific criteria for including research in the digital repository.	3.6889	0.86951	73.78%	1	Agree
	Total Marks	3.6111	0.80213	72.22%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the fourth paragraph "There are clear scientific criteria for the inclusion of research in the digital repository" equals 3.69 (total score out of 5), meaning that the relative weight is 73.78%, and this means that there is a high agreement by the sample members for this paragraph.
- The arithmetic mean of the first paragraph, "Devices and computers have specialized programs for the inclusion of new research," is equal to 3.53, meaning that the relative weight is 70.67%, and this means that there is high agreement by the sample members for this paragraph.

In general, it can be said that the arithmetic mean of the second dimension: the classification of scientific research "is equal to 3.61, meaning that the relative weight is 72.22%, and this means that there is high approval by the sample members for the paragraphs of this dimension.

The researchers explain this result to the fact that Palestinian universities, especially the University of Palestine, urge researchers from their academics to publish their research in prestigious scientific journals, and that universities classify research production within their repositories based on the specialty, college, or volume of quotations for each researcher, and thus the classification methods used differ.

This result is in agreement with some studies, such as a study (Bin Ghaida, 2017), which concluded that the category of Applied Sciences, Languages, Literature and Social Sciences is the most covered topic in the Algerian repositories. And the study (Ahsan and Nabil, 2017), which concluded the diversity of topics covered by digital repositories, the subject of the study, between research sciences, social sciences, law, politics, computer science, etc., and the diversity of information sources available in digital repositories, the subject of the study, including university theses, periodical articles, conference proceedings, e-books, and educational materials. And audiovisual materials. Theses were the most available types of information in repositories. And the study (Odeh, 2017), which concluded that most of the sources relied upon when referring to the sources of free access are articles and scientific research 86% in addition to books 64%, then drafts of articles 41% will be followed directly by university theses, 40% presentations and 37% then conference works .

Vol. 4, Issue 8, August – 2020, Pages: 115-134

These results differed with some studies, such as a study (Al Yami, 2018), which concluded that the idea of digital LOR repositories was not clear among many employees in education and training institutions. And the study (Bin Ghaida, 2017), which concluded that the number of Algerian digital repositories in the global Pebometrics classification is very small compared to the number of Algerian higher education institutions.

The Third Dimension: Creating An Electronic Portfolio for Scientific Research: The arithmetic mean, standard deviation, relative weight and order were used to find the degree of approval. The results are shown in the following table:

**Table 9**: The arithmetic mean, standard deviation, relative weight, and arrangement for each paragraph of the third dimension:

Creating an electronic portfolio for scientific research

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university has the possibility to insert important data into electronic folders.	3.6333	0.89254	72.67%	1	Agree
2.	It stores primary information about research in a way that can be retrieved and searched.	3.4556	1.01849	69.11%	4	Agree
3.	The university provides the facility to store research papers in secure electronic folders.	3.4111	0.95863	68.22%	5	Agree
4.	E-folders have sufficient flexibility to change information and re-create the folder.	3.6111	0.97950	72.22%	2	Agree
5.	The university provides large areas for electronic portfolios for research.	3.5778	0.93590	71.56%	3	Agree
	Total Marks	3.5378	0.81152	70.76%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the first paragraph, "The university has the possibility of inserting important data into electronic folders" is equal to 3.63 (total score out of 5), meaning that the relative weight is 72.67%, and this means that there is high approval by the sample members for this paragraph.
- The arithmetic mean of the third paragraph, "The University provides the facility to store research in secure electronic folders," is equal to 3.41, meaning that the relative weight is 68.22%, and this means that there is high agreement by the sample members for this paragraph.

In general, it can be said that the arithmetic mean of the third dimension: creating an electronic portfolio for scientific research is equal to 3.54, meaning that the relative weight is 70.76%, and this means that there is high approval by the sample members for the paragraphs of this dimension.

The researchers explain this result to digital repositories, which are electronic portfolios concerned with preserving and making available research content when needed through the presence of this scientific production and it has been stored within those digital repositories.

This result is in agreement with some studies, such as (Al Yami, 2018), which concluded the effort required to develop electronic content in these repositories. And the study (Ahsan and Nabil, 2017), which concluded the diversity of information sources available in the digital repositories subject of the study, including university theses, periodical articles, conference proceedings, e-books, educational materials, and audiovisual materials. Theses were the most types of information sources available in the repositories.

The Fourth Dimension: Receiving And Updating the Scientific Research: The arithmetic mean, standard deviation, relative weight and order were used to find the degree of approval. The results are shown in the following table:

Table 10: the arithmetic mean, standard deviation, relative weight and arrangement for each paragraph of the fourth dimension:

reception and updating of scientific research

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university has a unified system for receiving research.	3.5111	0.96273	70.22%	7	Agree
2.	The data is sent to the competent authorities in a timely manner.	3.8523	0.86489	77.05%	2	Agree
3.	The repository administrator is informed of the research that it stores.	3.7222	0.83502	74.44%	3	Agree
4.	The electronic portfolios are sent to the competent authorities to be used in decision-making.	3.6111	0.88298	72.22%	5	Agree
5.	The university's electronic registration systems provide quick access to research.	3.6000	0.99210	72.00%	6	Agree

ISSN: ISSN: 2643-976X

Vol. 4, Issue 8, August - 2020, Pages: 115-134

6.	The university's data reception and export system is secure enough.	4.0568	0.87570	81.14%	1	Agree
7.	The university takes into consideration the continuous maintenance of electronic wallets.	3.6556	0.85013	73.11%	4	Agree
	Total Marks	3.7108	0.73331	74.22%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the sixth paragraph "The university's receiving and exporting data system has sufficient security" equals 4.06 (total score out of 5), meaning that the relative weight is 81.14%, and this means that there is high approval by the sample members for this paragraph.
- The arithmetic mean of the first paragraph "there is a unified system for receiving research at the university" is equal to 3.51, meaning that the relative weight is 70.22%, and this means that there is high agreement by the sample members for this paragraph.

In general, it can be said that the arithmetic mean of the fourth dimension: receiving and updating scientific research is equal to 3.71, meaning that the relative weight is 74.22%, and this means that there is high approval by the sample members for the paragraphs of this dimension.

The researchers explain this result to the fact that the university enables researchers from its employees to have authority so that they can receive and update their research in the digital repository or what is published in other scientific journals.

This result is in agreement with some studies such as (Al Yami, 2018), which concluded the effort required to develop electronic content in these repositories and the large cost required to develop electronic content in these repositories. And the study (Ahsan and Nabil, 2017), which concluded the diversity of topics covered by digital repositories, the subject of the study, between research sciences, social sciences, law, politics, computer science and others.

These results differed with some studies, such as a study (Odeh, 2017), which concluded that 40% of the researchers in the study are afraid that their research will be stolen and that they do not trust intellectual property rights for freely available research, and 25% do not know how to participate, and 20% believe that Research published through free access sources is not recognized by their scientific institutions, and 10% believe that publishing via free access sources reduces the value of their research, and 5% do not know how the deposit process is done.

#### **Total Score For Digital Warehouse Scale:**

The arithmetic mean, standard deviation, relative weight, and ranking were used to find out the degree of agreement. The results are shown in the following table:

**Table 11**: The arithmetic mean, standard deviation, relative weight, and arrangement for each dimension of the "digital warehouse" scale

#	Dimension	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	Storage of Scientific Research.	3.5663	0.69756	71.33%	3	Agree
2.	Classification of Scientific Research.	3.6111	0.80213	72.22%	2	Agree
3.	Create An Electronic Portfolio For Scientific Research.	3.5378	0.81152	70.76%	4	Agree
4.	Receiving And Updating Scientific Research	3.7108	0.73331	74.22%	1	Agree
	The Overall Score for Digital Repositories		0.69899	72.13%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the fourth dimension "receiving and updating scientific research" is equal to 3.60 (total score out of 5), meaning that the relative weight is 72.22%, in the first place, and this means that there is high agreement by the sample members on this dimension.
- The arithmetic mean of the third dimension "creating an electronic portfolio for scientific research" is equal to 3.54, meaning that the relative weight is 70.76%, and this means that there is high approval by the sample members on this dimension.

In general, it can be said that the arithmetic mean of the digital warehouse scale "equals 3.61, meaning that the relative weight is 72.13%, and this means that there is a high agreement by the sample members on the scale dimensions."

The researchers explain this result to the fact that digital repositories operate in a technically thoughtful manner and achieve the goals for which they were created, such as the ability of these digital repositories to receive and update scientific research, as well as classify scientific research, and then store scientific research, all of this leads to the formation of an electronic portfolio for Scientific research.

ISSN: ISSN: 2643-976X

Vol. 4, Issue 8, August - 2020, Pages: 115-134

This result is in agreement with some studies, such as the study (Bhat, 2019), which reached conclusions, the most important of which is that most of the warehouses were built by faculty members. And the study (Ahsan and Nabil, 2017), which concluded the diversity of topics covered by digital repositories.

These results differed with some studies, such as a study (Al Yami, 2018), which concluded that the idea of digital LOR repositories was not clear among many employees in education and training institutions.

## **Hypothesis Testing**

 $H0_1$ : There are statistically significant differences at the level of significance  $(0.05 \ \alpha)$  between the average responses of the respondents on digital repositories at the University of Palestine according to the following personal and organizational variables: (for gender, age group, academic qualification, years of service, job title).

# The following sub-hypotheses are divided from it:

**H0**<sub>1-1</sub>: There are statistically significant differences at the level of  $(\alpha \le 0.05)$  between the averages of the respondents' responses about the digital repositories at the University of Palestine according to gender.

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

Table 12: means, standard deviations, and the value of "t" due to the gender variable

Domains	Gender	The Number	The Average	Standard Deviation	T Value	Significance Level	Indication	
Storage of Scientific	Male	71	3.5998	.61212	0.882	0.380	Not Sig	
Research.	Female	19	3.4408	.96318	0.002	0.380	Not Sig.	
Classification of	Male	71	3.6620	.68543	1.165	0.247	No4 Cla	
Scientific Research.	Female	19	3.4211	1.14277	1.165	0.247	Not Sig.	
Create An Electronic	Male	71	3.5859	.69802				
Portfolio For Scientific Research.	Female	19	3.3579	1.14810	1.089	0.279	Not Sig.	
Receiving And	Male	71	3.7824	.63591	1 011	0.074	Not Cia	
Updating Scientific	Female	19	3.4436	.99533	1.811	0.074	Not Sig.	
The Overall Score for	Male	71	3.6575	.58040	1.345	0.182	Not Cia	
Digital Repositories	Femalea	19	3.4158	1.02817	1.343	0.182	Not Sig.	

<sup>•</sup> The value of "t" is statistically significant at the level of significance of  $0.05 \ge \alpha$ .

The previous table indicates that there are no statistically significant differences in the scale dimensions due to the gender variable in all digital repositories and the overall degree of the scale.

The researchers explain these results in light of the fact that academic institutions do not differentiate between male and female, and that all employees have the same level of supervision and the nature and characteristics of the tasks assigned to them. Gender, and therefore the sample responses were close, and there were no differences attributed to the gender variable.

**H0**<sub>1-2</sub>: There are statistically significant differences at the level of  $(\alpha \le 0.05)$  between the averages of the respondents' responses about the digital repositories at the University of Palestine, according to the age group.

To test this hypothesis, the "one-way contrast" test was used, and the following table illustrates that.

Table 13: The results of the "single variance" test for the variable of the age group

Domains	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
Storage of Scientific Research.	Between groups	.837	3	.279		
	Within groups	42.470	86	.494	.565	.640
	Total	43.307	89			
	Between groups	2.657	3	.886		.250
Classification of Scientific Research.	Within groups	54.607	86	.635	1.395	
Research.	Total	57.264	89			
Create An Electronic Portfolio	Between groups	2.838	3	.946		
For Scientific Research.	Within groups	55.774	86	.649	1.459	.232
1 of Scientific Research.	Total	58.612	89			
	Between groups	3.161	3	1.054	2.027	.116

ISSN: ISSN: 2643-976X

Vol. 4, Issue 8, August - 2020, Pages: 115-134

Receiving And Updating	Within groups	44.698	86	.520		
Scientific Research	Total	47.859	89			
The Overall Score for Digital Repositories	Between groups	2.171	3	.724		
	Within groups	41.314	86	.480	1.506	.219
	Total	43.484	89			

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

It was found that the probability value (Sig.) Corresponding to the "one-way variance" test is higher than the significance level 0.05 for all dimensions and for the total score of digital repositories. Thus, it can be concluded that there are no statistically significant differences between the averages of the study sample estimates attributable to the age group variable.

The researchers explain this result because employees at the University of Palestine have sufficient awareness about digital repositories. The employees at the University of Palestine have scientific qualifications and academic capabilities, so you find them keen to pursue all strategies, sciences and skills that would develop their abilities and knowledge, and have an acceptance of challenges and the ability to overcome them.

**H0**<sub>1-3</sub>: There are statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) between the averages of the respondents' responses about the digital repositories at the University of Palestine, according to scientific qualification.

To test this hypothesis, the "one-way contrast" test was used, and the following table illustrates that.

Table 14: The results of the "one-way covariance" test for the variable of the level of academic qualification

Domains	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
g.	Between groups	.392	2	.196	200	672
Storage of Scientific Research.	Within groups	42.915	87	.493	.398	.673
Research.	Total	43.307	89			
C1 'C' ' CC ' 'C'	Between groups		2	.573	000	415
Classification of Scientific Research.	Within groups	56.117	87	.645	.889	.415
	Total	57.264	89			
Create An Electronic	Between groups	.515	2	.258	.386	<b>CO1</b>
Portfolio For Scientific	Within groups	58.096	87	.668	.360	.681
Research.	Total	58.612	89			
D ' ' A 177 1 4'	Between groups	1.743	2	.871	1.644	100
Receiving And Updating Scientific Research	Within groups	46.116	87	.530	1.644	.199
Scientific Research	Total	47.859	89			
	Between groups	.816	2	.408		
The Overall Score for	Within groups	42.669	87	.490	.831	.439
Digital Repositories	Total	43.484	89			

It was found that the probability value (Sig.) Corresponding to the "one-way variance" test is higher than the significance level 0.05 for all dimensions and for the total score of digital repositories. Thus, it can be concluded that there are no statistically significant differences between the averages of the study sample estimates due to the scientific qualification variable.

The researchers explain this result because the employees of the University of Palestine have sufficient awareness about digital repositories and have an acceptance of the challenges and the ability to overcome them. Employees at the University of Palestine are those who hold a first university degree at the least to be qualified to work within the walls of the university.

**H0**<sub>1-4</sub>: There are statistically significant differences at the level of  $(\alpha \le 0.05)$  between the averages of the respondents' responses about the digital repositories at the University of Palestine, according to the years of service.

To test this hypothesis, the "one-way contrast" test was used, and the following table illustrates that.

Table 15: Results of the "single variance" test - years of service variable

Domains	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
Storage of Scientific Research.	Between groups	.161	3	.054		.956
	Within groups	43.146	86	.502	.107	
	Total	43.307	89			

ISSN: ISSN: 2643-976X

Vol. 4, Issue 8, August - 2020, Pages: 115-134

Classification of Scientific Research.	Between groups	1.048	3	.349			
	Within groups	56.216	86	.654	.534	.660	
Scientific Research.	<b>Total</b> 57.264 89						
Create An Electronic Portfolio For Scientific Research.	Between groups	.586	3	.195			
	Within groups	58.026	86	.675	.289	.833	
	Total	58.612	89				
Desciving And Undeting	Between groups	1.395	3	.465		.465	
Receiving And Updating Scientific Research	Within groups	46.464	86	.540	.860		
Scientific Research	Total	47.859	89				
The Overall Score for Digital Repositories	Between groups	.674	3	.225			
	Within groups	42.811	86	.498	.451	.717	
	Total	43.484	89				

It was found that the probability value (Sig.) Corresponding to the "one-way variance" test is higher than the significance level 0.05 for all dimensions and for the overall score of digital repositories. Thus, it can be concluded that there are no statistically significant differences between the averages of the study sample estimates attributable to the years of service variable.

The researchers explain this result that the study sample, despite the different years of service, works in an academic institution that has its own characteristics, which is one of the pioneering institutions in Gaza Strip and provides the necessary capabilities for its employees, and therefore no differences appeared about the digital repositories at the University of Palestine due to years of service.  $\mathbf{H0}_{1.5\underline{:}}$  There are statistically significant differences at the level of  $(\alpha \le 0.05)$  between the averages of the respondents' responses about the digital repositories at the University of Palestine, according to the job title.

To verify the validity of the hypothesis, the differences between the averages of the sample members according to the job title variable were calculated using the (T) test. The following table explains that:

Table 16: means, standard deviations, and "t" value attributed to the job title variable

Domains	The Job Title	The Number	The Average	<b>Standard Deviation</b>	T Value	Significance Level	Indication	
Storage of	Academic	62	3.6103	.62554	0.707	0.276	NI-4 C!-	
Scientific	Administrative	28	3.4688	.83999	0.797	0.376	Not Sig.	
Classification of	Academic	62	3.6734	.70215	0.066	0.240	Not Cia	
Scientific	Administrative	28	3.4732	.98915	0.966	0.340	Not Sig.	
Create An	Academic	62	3.5774	.72889	0.688	0.494	Not Cia	
Electronic	Administrative	28	3.4500	.97923	0.000	0.494	Not Sig.	
Receiving And	Academic	62	3.7853	.60852	1.443	0.153	Not Cia	
Updating Scientific	Administrative	28	3.5459	.94605	1.443	0.133	Not Sig.	
The Overall Score	Academic	62	3.6616	.59866				
for Digital Repositories	Administrative	28	3.4845	.88227	1.115	0.268	Not Sig.	

<sup>•</sup> The value of "t" is statistically significant at the level of significance of  $0.05 \ge \alpha$ .

The previous table indicates that there are no statistically significant differences in all dimensions and the overall degree of digital repositories, and thus it can be concluded that there are no statistically significant differences between the averages of the study sample estimates attributable to the functional staff.

The researchers interpret these results as reflecting the reality of work in the academic field and in administrative positions that it imparts sufficient knowledge about digital repositories at the University of Palestine.

#### **Conclusion and Recommendations**

# Conclusions

Through the statistical analysis of the study questions and hypotheses, the study reached the following results:

- The existence of a high level of satisfaction with digital repositories at the University of Palestine, where the total score for digital repositories reached (72.13%).
- The order of the dimensions of the digital repositories is as follows (receiving and updating scientific research, classifying scientific research, storing scientific research, creating an electronic portfolio for scientific research).

ISSN: ISSN: 2643-976X

Vol. 4, Issue 8, August - 2020, Pages: 115-134

- There are no statistically significant differences in the reality of using digital repositories at the University of Palestine for demographic variables.

#### Recommendations

In light of the findings of the results, the study came out with a set of recommendations, as follows:

- Awareness of interest in digital repositories that store content and provide a large number of links.
- Urging universities to establish institutional digital repositories that contribute to the service of the educational and research process in them, and to provide the intellectual production for the faculty members affiliated with them.
- The necessity of establishing centers for designing and producing educational digital repository content in various fields and supporting it financially.
- The need for digital repositories to prepare policies for preservation, content management, quality control, and metadata.
- The necessity for universities' digital repositories to create clusters between them and to allow unified searches in all digital repositories in one single agency.
- The importance of providing faculty members with the skills of producing digital content for warehouses and employing it in various educational situations.
- The need for the university to enhance its digital repositories and raise their level, while making the contents of its digital repositories available in the free access to information.
- Urging academics at the university to include their scientific contributions in the digital repository for research.
- The importance of expanding the establishment and development of educational digital repositories.

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