

The Strategy and Its Impact on the Use of Decision Support Systems in Palestinian Universities

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Abstract: *Research Objective:* The aim of the research is to identify the strategy and its impact on the use of decision support systems in universities. **Research Community and Sample:** The research was applied to Islamic University- Gaza, and the academic research sample with an administrative position, which was 87 employees. **Research Methodology:** A descriptive and analytical approach was used and secondary data was obtained through a questionnaire that was distributed to the research community using the comprehensive enumeration method. The questionnaire was distributed to all members of the study population, and 65 questionnaires were retrieved with a recovery rate of 79.3% **Research Results:** The research concluded with a set of results, the most important of which are:

1. The results confirmed the existence of a positive, statistically significant relationship between the strategy and decision support systems in universities.
2. The results indicated that there was a statistically significant effect at the level of significance ($0.05 \geq \alpha$) of the strategy on the use of decision support systems in universities.
3. The results indicated that there are statistically significant differences between the mean of the respondents' answers attributed to the job title, and for the rest of the variables, it was found that the probability value (Sig.) Is greater than the significance level of 0.05, and thus it can be concluded that there are no statistically significant differences between the mean of the respondents' answers attributable to (Age group, degree, Years Of Service).

Research Recommendations: The research reached a set of recommendations, the most important of which are:

1. Demonstrate the importance of developing an appropriate strategy for universities, following up on their implementation and evaluating them in order to achieve the universities' mission and goals, and linking the strategy to the university's mission, vision and goals in a complete, systematic and clear manner.
2. Urging universities to involve their employees when developing their strategic plan, by communicating with all colleges and departments in them and holding brainstorming sessions, workshops and periodic meetings with all departments.
3. The need for higher management of universities to pay attention to decision support systems, and to make intensive and continuous efforts to support and enhance efforts aimed at enriching and enhancing the role of decision support systems in universities.

Originality of The Research: The research was distinguished as an addition in the field of decision support systems and the field of strategy, as it was concerned with strategy and its impact on the use of decision support systems in universities.

Keywords: Strategy, Decision Support Systems, Palestinian Universities.

Introduction

Challenges at the global and regional levels have brought about a radical and accelerating transformation in all aspects of life, in addition to what resulted from the information and communication technology revolution and the resulting abolition of distance, time and space barriers and the availability of a huge amount of information for decision-makers, which requires decision-makers in many cases to research continuously to identify the variables and challenges that affect the advancement of development and scientific development and increase productivity (Al-Otaibi, and Al-Hamaly, 2004).

Decision support systems are one of the important types of computer-based information systems that are increasingly used in decision-making. The decision support system helps the decision maker find a good formula for decisions, semi-defined or structured problems and situations that have predetermined procedures that can be considered a basic procedure in Decision support system in addition to situations that occur in a rare or infrequent way (Gad Al-Rab, 2009: 80-81).

The study Problem

The researcher found that the strategy is an essential source that contributes to enhancing the use of decision support systems in reaching the best decisions. As Palestinian universities face many difficulties and problems, the most prominent of which is the weak ability of workers to effectively employ information technology in the decision-making process (Al-Masry, 2007), as decision support systems are among the most important information systems, and these systems are used especially in supporting semi and non-structural decisions. It is distinguished by its merging between information technology and operations research, which contributes to supporting decisions in all stages of decision-making, and the applications of these systems vary between enterprise planning and risk management, and the effectiveness of these systems depends on several factors, the most important of which is the

amount of support from senior management, in addition to the availability of technology and mechanisms, Conscious management, specialized human cadres.

And through the researcher's review of a set of previous studies related to the research topic, including the study (Al-Tayeb, 2015), which showed that the decision support systems used in companies are commensurate with the needs of upper and middle management, and the strategic decision-making process fully supports, and the Abu Taym, 2015) who confirmed that Palestinian universities have a clear organizational structure that supports decision support systems, and since universities in Palestine seek to develop, they sought to study the skills, abilities and competencies that would enable them to deal with current and future requirements.

Study questions

Through the researcher's knowledge, and based on the above, the research problem is determined by the following questions:

The first main study question: Is there a relationship between the dimensions of decision support systems and the implementation of strategy in Palestinian universities?

The second main question of the study: Is there an impact of the dimensions of decision support systems on the implementation of the strategy in Palestinian universities?

The third main study question: Are there differences between the respondents' average opinions about the strategy and its impact on the use of decision support systems in universities due to the personal and organizational variables (university, gender, age group, academic degree, years of service, job title)?

Objectives of the study

The main objective of the study is to identify the strategy and its impact on the use of decision support systems in universities, and it also seeks to achieve the following set of objectives:

1. To shed light on the extent to which Palestinian universities have the dimensions of decision support systems, and to show the effectiveness of the current systems used in producing information needed for decision-making in universities.
2. Presenting the philosophical framework and principles of decision support systems, and strategy.
3. Draw the attention of decision-makers and officials to the importance of paying attention to decision support systems, so that they can deal with the rapid changes on the various aspects of his speech entries that have proven successful in developing and distinguishing higher education institutions.
4. Shedding light on the concept and reality of the strategy and the tasks and activities associated with it in light of recent technological developments, which higher education institutions may adopt.
5. Demonstrate the importance and need for universities to implement the strategy related to decision support systems, as one of the approaches to improving academic and administrative services and raising their efficiency.
6. Disclosure of whether there are statistically significant differences between the average grades of members of (academics in an administrative position) about the research axes of different (gender, age group, academic degree, years of service, job title).
7. Presenting a number of recommendations of interest to decision-makers to enhance the use of decision support systems that help in implementing the strategy in Palestinian universities.

The importance of studying

The study derives its importance from its subject, and aspects of the importance of the study can be determined from the contribution and expected addition, as follows:

First: The importance in theory:

1. The theoretical importance of this study emerges from the scientific enrichment it adds to the studies that dealt with the issue of decision support systems and strategy, and the importance of the variables it dealt with which represent recent topics that constitute the general orientation of the distinguished organizations.
2. This study derives its importance from the vitality of the topic it deals with and its relative scarcity, as this topic is characterized by both modernity and scientific and practical excellence.
3. This study sheds light on the strategy and its impact on the use of decision support systems in universities, which contributes to developing and increasing the efficiency of universities.
4. The study provides a scientific reference that can guide workers in Palestinian universities, especially the higher administrative levels, to face challenges in taking strategic decisions.

Second - Importance from a practical (application) point:

1. Providing the higher management of Palestinian universities with documented recommendations and proposals drawn from the field study that help in improving the strategy and its impact on the use of decision support systems in universities.
2. This study gives a scientific evaluation of universities on the topic of decision support systems, strategy and programs, thus contributing to developing the efficiency and performance of universities and upgrading their academic and administrative level.

3. The study in practice provides recommendations and suggestions for decision makers in Palestinian universities to develop the performance of universities using the strategy, which would help achieve the development of their academic and administrative systems.

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:

H01: There is a statistically significant relationship at ($\alpha \leq 0.05$) between strategy and the use of decision support systems in universities.

H02: There is a statistically significant effect at the level of ($\alpha \leq 0.05$) of the strategy on the use of decision support systems in universities.

H03: There are statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the mean of respondents' responses about the strategy and the use of decision support systems in universities due to personal and organizational data (Age Group, Academic Degree, Years of Service, Job Title).

Research Limits and Scope

For each study, whether scientific or theoretical, objective boundaries, human boundaries, institutional boundaries, spatial boundaries, as well as temporal boundaries, and they can be explained as follows:

1. **The Objective (Academic) Limit:** The study was limited to the objective study of the strategy and its effect on the use of decision support systems Islamic University- Gaza.
2. **The Human Limit:** The study was conducted on academic staff with an administrative position (University President, Vice President, Assistant President, Assistant Vice President, Deans, Assistant / Vice Dean, Directors, Deputy Director, Head of Department) in Islamic University- Gaza.
3. **Institutional Boundary:** The study was conducted on the Islamic University.
4. **Spatial Limit:** The study was conducted in the State of Palestine, specifically in Gaza Strip, where the researcher designed the questionnaire and distributed it to academic workers in an administrative position.
5. **Time Limit:** The study was conducted, data collected, and statistical analyzes conducted in the year (2020).

Terminology of Study

- **Decision Support Systems:** they are information systems that serve the middle management in the decision-making process that does not depend on mechanisms and rules previously prepared as an internal information resource (Laudon & Laudon, 2007: 33). (Al-Omari and Al-Samarrai, 2008) defined it as a system capable of supporting data analysis and presenting models specific to specific topics, and that it is directed towards strategic and long-term planning, and it can be used at irregular intervals.
- **Procedural Definition of Decision Support Systems:** they are interactive systems that help academics in an administrative position in making programmed and semi-programmed decisions. They are computerized systems that provide the necessary data, statistics and indicators in universities that allow tracking of advanced processing results and linking three main elements: (system users, makers System, decision support system) provided they are able to influence each other as an integrated system.
- **University:** An independent scientific institution with a specific organizational structure, regulations, customs, and specific academic traditions, and it consists of a group of colleges and departments of a specialized scientific nature (Al-Thubaity, 2000: 214).

Theoretical Framework

First - The Conceptual Framework of the Strategy

It refers to the set of actions taken by managers to achieve one or more of the goals of the organization. It is the set of general directions for the company and its various components to achieve the desired vision in the future, and it is the product of a detailed strategic planning process (Talwar, 1993: 22-40).

The strategy is defined as a long-term business plan aimed at achieving the enterprise's objective, which includes all sectors and departments of the enterprise, selecting the target markets, developing a mix of appropriate marketing policies for each of them, and allocating the necessary resources to achieve the objectives (Al-Munif, 1998). It is the development of strategic plans for the organization, and defining its long-term goals, in order to ensure harmony between the organization and its mission, and between the mission and the surrounding environment in an effective and efficient manner (Al-Douri, 2010: 25).

Numerous literature has made clear the importance of strategizing when leading the re-engineering process, as the re-engineering program must be linked to the strategic vision and goals of the organization (Al-Otaibi, and Al-Hamaly, 2004: 11). Some have attributed the high failure rate of re-engineering programs to the failure of many organizations to integrate the re-engineering program into their strategic vision and goals (Chan and Chung, 1997: 211-223).

Second - The Conceptual Framework for Decision Support Systems

Decisions are one of the basic functions of managers, as these decisions help the growth and sustainability of the organization, as they are the primary tool that is used in creating opportunities and enhancing the strengths of the organization, facing internal and external challenges, and overcoming weaknesses in the organization, where the success of organizations is based on the right administrative decisions. That you take.

Information technology is the beating heart of various business organizations, as it contributes to facilitating the flow of appropriate decisions and in directing and implementing its various operations. It is a vital source for its sustainability, survival and competitive advantage (Al-Lami and Al-Bettani, 2010). Organizations have begun to use decision support systems to obtain the necessary information to support decision-making processes at the higher administrative level, which is a less expensive and time-saving process, as computer-based decision support systems interact with the decision-maker through the information they provide to reach relevant decisions. Quality. The top management is now able to identify its information needs and obtain it in a way that serves its purposes and for this reason, decision support systems are considered one of the most important developments that have occurred in information technology, because of their important and sensitive role in linking the senior management decision-making process with the computer use process (Al-Salmi, 2003).

The Concept and Definition of Decision Support Systems

The main concept of decision support systems is that they represent a relatively new way of thinking using computers for administrative purposes. They are computer-based systems designed with the aim of improving productivity and increasing efficiency by supporting decision-makers and policy makers, and these systems are applied in long-term planning fields. Term, strategic planning, analysis of organizational mergers, policy development, portfolio management, etc. (Al-Kurdi and Al-Abd, 2003). Decision support systems are flexible, and interact with users with high efficiency, as they are designed to support decision makers in an uncertain and unstructured environment, and electronic list software is one of the most common examples used for decision support systems (Yassin, 2006: 25).

Through reviewing a set of definitions of decision support systems, we find that (Haidar, 2002) defined it as one of the types of systems that support decision-making activities within the administrative apparatus, where the decision-making process is the basis of the administrative process. (Al-Kurdi and Al-Abd, 2003) defined them as interactive information systems that provide managers with information, models and data-processing tools that help them in making semi-structured and unstructured decisions, in those circumstances in which no one knows exactly what decision to take. While (Mustafa and Nabil, 2006: 351) defined it as an extension of management information systems, which provide managers with the tools and data they need to make decisions, while management information systems provide the structural and routine information necessary for administrative decision-making, then the field of decision support systems helps managers in solving unstructured and non-routine problems.

Importance of Decision Support Systems:

Decision support systems of different generations have emerged and developed due to the objective need for departments to have techniques and tools to support complex decisions that are subject to conditions of risk and uncertainty, as it is that effective mixture of human intelligence, information technology and software that interact with each other in order to solve complex problems, and the importance and benefits of these can be summarized. The systems are as follows (www.caoa.gov.eg):

- Decision support systems are distinguished by their development from other information systems by integrating technology and operations research within the framework of the decision-maker's competence.
- Increasing the number of alternatives and the possibility of choosing the optimal alternative from among the set of tested alternatives by providing a faster sensitivity analysis and faster response. It can provide support for a successive and interconnected series of decisions, providing support for all stages of the decision-making process.
- Better understanding of the business, enabling decision-makers to see relationships, which can be used to prepare a comprehensive business picture.
- Quick response to unexpected situations, easy review of forms and quick view of variables.
- The ability to perform the analysis for a specific purpose, providing a set of various technical means and methods for preparing analyzes for specific purposes.
- Improved communications and oversight, documented and improved communication channels, more consistent plans and standardized accounting procedures.
- Saving time and costs, shortening office work and reducing overtime, and thus saving costs.
- Better decisions, better teamwork, better efficiency and use of data resources.

The researcher believes that the use of decision support systems provides advanced information technologies that lead to the organization obtaining an important advantage over all its competitors who do not use these systems and technologies.

Aims and Principles of Decision Support Systems:

Decision support systems have many benefits, including the ability to support solutions to multiple problems, quick reactions to unexpected situations that result from a change in circumstances, support the decision-making process and facilitate its completion, improve administrative control, reduce the cost of decision-making, improve management effectiveness through Take quick and accurate decisions (Al-Salmi, 2003). Decision support systems are designed to solve problems in their semi-structural and unstructured parts, to help managers separate the places and parts of the problem so that they can use their expertise and judgment

in solving it through its basic components, namely: data management systems (Al-Omari and Al-Samarrai, 2008), models, knowledge, and user interaction (AL-Maghribi, 2002) stated that the objectives that a decision support system should achieve:

1. Helping managers make decisions to solve semi-structured (complex) problems.
2. Supporting managers' decisions instead of changing them.
3. Improving the effectiveness of decision-making, not just its efficiency.

Capabilities and Capabilities of Decision Support Systems

Decision support systems are distinguished from other types of information systems with high analytical capabilities, as these systems are designed to include within them many data analysis models. Decision support systems rely on the use of programs that are easy to encourage direct use of the system, and the use of these systems is characterized by being interactive (Al- Kurdi and Al- Abd, 2003), there are many capabilities and capabilities of decision support systems, including (Al-Salmi, 2003):

Supports One-Time Decisions That Are Not Repeated Except In a Rare Case.

Harnessing analytical and modeling tools and databases to support the decision-making process.

Assist in the scenario planning process by making use of the possibilities of answering the What-If questions.

Emphasize too much on the graphic display, usually in color.

Emphasis on building reports that serve the decision-maker, in terms of the manner in which they are presented, and also in terms of time that suits the decision-maker, such as reports upon request.

Analyzing the Relationship between Strategy and Decision Support Systems

The university is seen as a symbol of the renaissance and advancement of nations. Universities include the elite of scholars who work to spread, develop and spread knowledge, and universities have a pivotal and fundamental role in the great progress that has been achieved in all fields, and different societies look to higher education institutions to assume increasing roles and functions. And this matter places on these institutions the burden of seeking to develop themselves, improve and increase their effectiveness in order to fulfill these new roles. The university that is able to perform the required vital roles is the basis for the progress of contemporary societies, and based on the greatness of the role placed on the shoulders of universities, it is necessary to provide many requirements for the advancement of these institutions And upgrading its services, including the presence of a conscious management capable of seeing the true dimensions of progress, and to perform basic roles and assume new responsibilities required by the process of modernization and development to keep pace with the needs of the times.

Therefore, it has become imperative for universities in this era to use advanced teaching methods and methods, and to make the university a center of civilized radiation, interact with society and provide services, and it also helps universities achieve tremendous leaps in the performance rates of students and workers and the changing environment surrounding the university and the diversity of its inputs are imposed on The university and its administrative bodies follow developmental methods to achieve efficiency.

In light of the above, it becomes clear to the researcher that Palestinian universities, despite their recent experience, have made serious attempts to improve their performance, emulate their international counterparts that have provided them, and have made efforts to improve their performance, and to provide practical contributions and models in change towards continuous improvement and effective performance, and in response to changes and developments. International, Palestinian education has witnessed remarkable attention at various levels to keep pace with the needs of society and its members, through the preparation of human, technical, scientific, cultural and professional cadres and capacities, in the academic and administrative side.

The role of decision support systems is most prominent in using the models that are permitted at different levels of organization (Al-Kurdi and Al-Abd, 2003: 327):

- A. **The Strategic Level (Senior Management):** in which strategic models are used to contribute to the strategic planning process. Examples of these models are those used in determining strategic objectives, planning mergers or acquisitions, selecting the plant site and conducting environmental analysis.
- B. **Tactical Level (Middle Management):** in which tactical models are used in the processes of allocating and controlling the resources of the institution, examples of which are those that are concerned with planning the workforce, sales promotion planning, and preparing budgets. These models often cover short periods of time. Term compared to strategic models
- C. **The Operational Level:** operational models are used in it to support daily business activities, which take place at the lower executive levels. Examples of these models are those used for production scheduling, inventory control, maintenance planning, and quality control.

The following figure shows the relationship between the types of decisions and the different organizational levels:

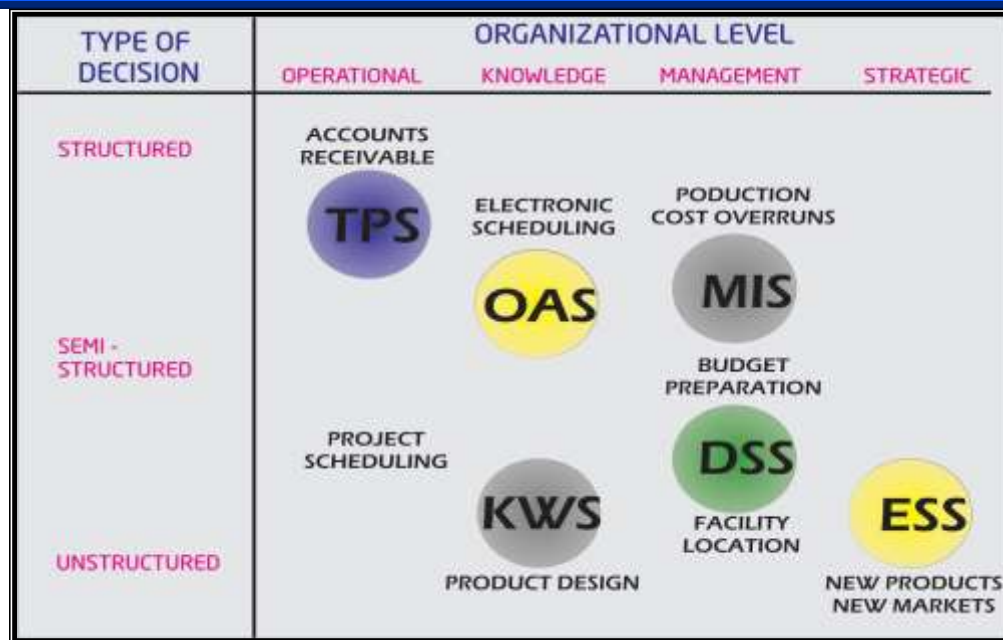


Figure 1: the relationship between decisions and administrative levels

Source: Laudon, Kenneth & Laudon, Jane (2007). "Management Information Systems: Managing the Digital Firm", 9th edition, Prentice Hall, New Jersey, p (82).

The researcher believes that the most important information technology functions revolve around three basic issues, which are data and information recording, translating information into knowledge that can be shared, and then networking between information, data and knowledge to solve complex problems. And that information technology plays a vital and major role in re-engineering processes, and that universities that cannot change their ideas and orientations towards IT technology and invest in it as required, will not be able to re-engineer their processes.

First - The Main Dimensions Affecting Decision Support Systems

Decision support systems are affected by a set of variables that make up these systems, and they affect and are affected by them.

The First Dimension - The Capabilities (Physical, Human, Technical, and Organizational) Available For Using Decision Support Systems: The constant talk about the need for administrative development is due to the fact that management is the cornerstone of building any society and progress, because the main goal of management is to invest the available material, financial and human resources as an optimal investment within the concepts of efficiency and effectiveness, as successful management always seeks to avoid extravagance, chaos and turmoil. And he worked hard and energetically to maintain the effective investment of available resources in order to achieve the goals it aspired (Al-Tamimi and Al-Khatib, 2008: 132).

The available capabilities for using decision support systems can be divided into:

- **The material capabilities available for the use of decision support systems:** It includes all the physical devices and materials used to operate the information, and it includes computers, peripherals, and media, as the amount of funding required depends on the type of problems that the system deals with (Al-Kurdi and Al-Abd, 2003). And that as far as the funding support is the efficiency of the system, in light of its reliance on expensive technology, highly equipped human cadres, and high dynamism to keep pace with change, and continuous updating of all system components (AL-Maghribi, 2002).
- **The human capabilities available to use decision support systems:** It has become necessary for any organization that wants to survive and work in a changing environment to have a global outlook in its field of work, whether it is a global or local company, as global competition and online movement penetrate local borders. In light of these changes, attention must be paid to human resources in the organization, as it became clear to the management the important role that these resources play in achieving the goals of these institutions, and human resources are considered the most important part of the organizational environment, as it affects and is affected by it on all administrative, structural and technical dimensions, and it falls on Management is responsible for developing and developing the existing human resources (Alouti, 2008). Human resources are the most valuable resource in the information technology structure, as they represent the knowledge, intellectual, administrative and organizational wealth of the organization represented by workers on information technology systems (Yassin, 2006). Where human cadres must be formed and work as a team, the team consists of cadres covering aspects of the problem and requirements for designing and implementing the system, and in all cases there are fixed cadres such as (economic analysis cadres of all kinds, cadres for operations research and decision support, cadres for systems analysis and design, cadres for statistical analysis. Kawader for Computer and Information Technology, Kawader for Computer and Communication Networks Service (Al Hassania, 2002: 55).

The availability, training, development and motivation of human skills and competencies is one of the most important pillars that achieve the institution's achievement of its objectives, and achieving meaningful success requires devoting the necessary attention and care to individuals, starting with the selection and appointment process, performance evaluation, training and development programs, and methods of motivation seeking to prove the differences in work, participation, cooperation and showing an image Work for the purpose of achieving continuous improvement in performance (Hammoud, 2002: 99).

- **The technical capabilities available for the use of decision support systems:** Among the most important of these capabilities are administrative information technologies and computer system technologies and communications, as these technologies provide the necessary information and data, and this affects the work of the institution in terms of increasing efficiency, saving time and effort, accuracy and speed in Achievement process, reduce costs, simplify procedures, increase administrative productivity, in addition to the aforementioned importance of traditional information technology such as computers, software, communications and the Internet in assisting decision-making processes (Al-Salmi, 2003)
- **The organizational capabilities available for the use of decision support systems:** Today's organizations operate in a rapidly changing and highly competitive global society, and in their pursuit of survival, organizations must take upon themselves the coordination between their components as the force that enables the linking and unification of everything in business organizations and making it In perpetual motion, through the organizational requirements and dimensions that coordinate and connect the elements of the organization to enable it to achieve its goals (Rachman and others, 2001). Today information and its systems have taken on a new dimension as it is treated as a resource (Brown and Jeffrey, 1994: 639).

The Second Dimension - Senior Management Support for Using Decision Support Systems:

There is no doubt that the higher management represents an essential and important element in all stages of the administrative process in general, as the higher management represents the focus of the process in all its aspects and dimensions, so without the effective contribution of the higher management it is not possible in any way to implement the system or reap the fruits of any of its multiple benefits (Tawfiq (2008: 150), and the effectiveness of the system depends on the commitment, support and support of the higher management of the organization served by the system, whether at the level of its data inputs, or the level of its policy outputs, and without support at the level of which one does not perform the required system (AL-Maghribi, 2002) : 44).

The Third Dimension - The Training Process: The importance of training for the organization is represented by removing or addressing weaknesses in performance, as effective training programs achieve a set of benefits represented in increasing the positive trends of workers towards work and the organization, and contributing to productivity and improving organizational performance by providing workers with the skills and knowledge necessary to perform their jobs so that it helps them in carrying out the tasks. The training works to rationalize administrative decisions and develop methods and skills of managerial leadership, as well as the training works to clarify the general policies of the organization, thus raising the performance of workers through their knowledge of what the organization wants them to achieve its goals, in addition to it helps in renewing information And updating them in accordance with what the organization wants from them to achieve its goals (Abbas, 2003). Training is a continuous organized process to develop areas and trends of the individual or group to improve performance, provide them with organized experience, and create appropriate opportunities for change in behavior by expanding their knowledge, refining their skills and abilities through continuous stimulation to learn and use modern methods, to achieve their personal ambition, and achieve the goals of the organization, and that. Within a program planned by the management, taking into account their needs, the needs of the organization, and the future needs of the state in business (Aqili, 2009: 438).

Third - The Islamic University: The Islamic University- Gaza is an independent academic institution of higher education institutions, and the Islamic University in Gaza Governorate was established in (1978) based on the Palestine Religious Institute (Al-Azhar), to meet the needs of the people of Gaza Strip in graduating academic staff, and it works under the supervision of the Ministry of Education and Higher Education, and it is a member In the Association of Arab Universities, the Association of Islamic Universities, the Association of Mediterranean Universities, and the International Federation of Universities, and they have cooperative relations with many Arab and foreign universities (www.iugaza.edu.ps). The following table shows the sample of academics working in an administrative position at the Islamic University during the year (2020).

Table 1: Distribution of employees from the research sample of the Islamic University

Gender	University's President	Vice President Of The University	Assistant President Of The University	Dean	Deputy / Assistant Dean	Director	Head Of The Department	Total
Male	1	4	6	17	18	2	35	83
Female	-	-	1	1	-	-	2	4
Total	1	4	7	18	18	2	37	87

Source: The data of the Personnel Affairs Department at the Islamic University.2020 ,

* Note / All academics in an administrative positions in the Islamic University are those with a doctorate degree

Previous Studies

- A study (Lu, 2019), which aimed to manage the financial business of colleges and universities, and establish a financial participation platform centered on "cloud computing", and re-establish the financial accounting process, financial institutions,

employee allocation, financial reimbursement process, and fund settlement process. The system can handle a wide range of large financial data. The most important results of the study were the huge financial data led to an increase in complex spending, which led to the inability of employees to deal with financial data, and the re-engineering of the financial system of colleges and universities became imminent, and it is necessary to use completely new thinking in the implementation of comprehensive reforms.

- Study of (Al-Buhairi, 2015), which aimed to identify the role of re-engineering of administrative processes in improving administrative performance in the Palestinian Ministry of Health in Gaza Strip, and to know the extent of the availability of the basic requirements needed to implement re-engineering of administrative processes, and their impact on improving administrative performance. The most important results of the study were the availability of the basic requirements necessary for the application of re-engineering of administrative processes, and this means the availability of the minimum requirements of (strategy, support for senior management, information technology, administrative communication, employee empowerment, readiness for change). There is a direct relationship between applying the principles of re-engineering administrative processes in the Palestinian Ministry of Health in Gaza Strip and improving administrative performance through improving (quality of performance, simplification of work, volume of performance, speed of completion, and efficiency of performance).
- Study of (Al Shobaki and Abu Naser, 2017) aimed to identify the degree of use of decision support systems capabilities in Palestinian higher education institutions, Al-Aqsa University in Gaza - a case study. The study used the descriptive and analytical approach, and the researchers used the questionnaire tool to collect data. The researchers used a stratified random sample distributed (150) questionnaires over the study population, and (126) were obtained again with a rate of 84%. The study indicated that the most important results are: that the senior management supports the existence of decision support systems and that there is agreement from the respondents on the paragraphs of using the capabilities of decision support systems in general. And that there are no statistically significant differences between the average of the respondents' answers about the degree of use of the capabilities of decision support systems attributed to personal data.
- .Study of (Abu Naser and Al Shobaki, 2016), which aimed to enhance the use of decision support systems and re-engineering processes and business. This study was applied to the Palestinian University in Gaza Strip. This research relies on decision support systems. The second dimension reengineering of processes and business was developed by the authors. And the control sample reached (500). Several statistical tools have been used to analyze data and test hypotheses. The results indicate that there is no statistically significant effect on supporting senior management to enhance the use of decision support systems in re-engineering operations and business in the universities of Gaza Strip, and the results showed that there is a significant impact on the impact of the type of decision support systems used to enhance the use of decision support systems in re-engineering Operations and business in Palestinian universities in Gaza Strip, and there are statistically significant differences between the average of the study sample estimates of the impact of re-engineering decision support systems for operations and business in Palestinian universities in Gaza due to the gender variable in favor of males, and the existence of age variants in relation to the field of "senior management support for the use of support systems. The decision by respondents (45-55 years) and (55) years or more, and the existence of differences in the education level variable in the field of "supporting senior management for the use of decision support" by respondents with a master's degree, and the existence of differences in the variable name of university systems and that all The field of study for the benefit of the Islamic University, Al-Azhar University, and Al-Aqsa University, and the existence of differences in the variables of the years of service in the field of "supporting senior management for the use of decision support systems". The current study is unique by virtue of its nature, scope, and method of implicit investigation.
- Study of (Abu Naser and Al Shobaki, 2016) which aimed to identify the use of decision support systems as an input to re-engineering operations in Palestinian universities in Gaza Strip. The researchers used the questionnaire method to collect data, and the researchers used a stratified random sample, and (350) questionnaires were distributed to the research sample, and (312) questionnaires were collected (89.1%). The results of the study showed that the most important of them are: There is a statistically significant effect at the level of significance ($\alpha \leq 0.05$) for physical and human requirements. Technical and regulatory requirements. The results also showed that there are statistically significant differences between the averages of the study sample estimates on the use of decision support systems as an entry point for re-engineering operations in Palestinian universities in Gaza Strip due to the variable of gender in favor. Male requirements. The results also showed that there are differences in the name of the university variable and each field of study in favor of the Islamic University, then Al-Azhar University, and then Al-Aqsa University.
- Study of (Al Shobaki and Abu Naser, 2016), which aimed to identify decision support systems and their role in developing strategic management in universities - a case study: the Islamic University in Gaza. A descriptive approach was used where a questionnaire was developed and distributed to a stratified random sample. (230) questionnaires were distributed and (204) questionnaires with a response rate of (88.7%). The most important results of the study: There is a positive correlation with statistical significance between decision support systems and strategic management in the Islamic University- Gaza, and this shows that there is a role for decision support systems in developing strategic management. The top management is convinced of the importance of the strategic management of the organization, and this conviction drives a clear understanding of the strategic management development process and thus led to commitment to this process to improve its performance. There is an

impact on the strategic management of the capabilities available to use decision support systems, and the type of decision support systems to be used, while there is little impact on supporting the top management to use decision support systems. The results also showed that there were no statistically significant differences between the mean of the respondents' answers due to the personal data.

- Study of (Al Shobaki and Abu Naser, 2016), which aimed to explain the requirements for implementing decision support systems in Palestinian higher education institutions - an applied study on Al Aqsa University in Gaza. The researchers used the descriptive and analytical approach. The study population is the faculty of Al-Aqsa University in Gaza. The researchers used the random sampling method. 150 questionnaires were distributed to the study population and 126 responses were obtained with a recovery rate (84%). The results of the study showed the following: - The approval of the sample members of the requirements of implementing decision support systems in general. The approval rate for "supporting senior management for the use of decision support systems" is (62.60%). While the percentage of approval for "possibilities to use decision support systems" (69.03%). Finally, the level of approval for the type of decision support systems used was 69.73%. The results showed that there were no statistically significant differences between the respondents' responses to the requirements of applying decision support systems due to demographic variables (gender, Age Group, qualification, and years of service).
- A study (Al-Tayeb, 2015) which aimed to identify the impact of decision support systems on making strategic decisions. The most important results of the study were the decision support systems used in companies that are commensurate with the needs of higher management, and the strategic decision-making process fully supports, and that the senior management supports the efforts of employees to design decision support systems, and the management evaluation makes the decision support systems process part of the overall organizational development process.
- Study of (Diop et al., 2015) aimed at evaluating opportunities for applying re-engineering of administrative processes as an entry point to simplify administrative procedures in the Real Estate Bank branch in Tartous Governorate. The most important results of the study were the existence of a relationship between the bank's management support and the possibility of applying re-engineering, and the presence of interested and encouraging leadership in applying engineering. And the existence of a relationship between the re-characterization of banking operations and the possibility of applying engineering, through redesigning banking operations from the time they are issued until the delivery of service to customers, and the conviction of the need to change working methods and procedures within the bank. Re-engineering can contribute to eliminating unnecessary procedures and increasing cooperation between workers, which will positively affect the speed of completion of work, reduce costs of completion, and decrease the degree of authority and authorization granted to workers.
- A study (Jamal and Ayachi, 2016), which aimed to present one of the most important modern methods and models in management science, which is the re-engineering method. Highlighting the impact of re-engineering information systems on the performance of the port institution in the state of Sikida. The most important results of the study were that the majority of respondents believe that the port institution of the state of Sakida applies the re-engineering of information systems using advanced technology. And that the application of re-engineering information systems in the institution had a positive effect in facilitating work in the institution and raising its productivity in general. And that the application of re-engineering information systems in the institution had a positive impact on the decision-making process, as it contributed to reducing the time required to save time for the decision-maker, and increased the speed of the decision-making process in the organization.
- A study (Abu Taym, 2015) which aimed to identify decision support systems and their relationship to the effectiveness of administrative decisions in Palestinian universities in Gaza Strip (Islamic University, Al-Azhar University, Al-Aqsa University). The most important results of the study were the upper management's realization of the importance of using decision support systems, that the material capabilities are compatible with work requirements, that universities attract qualified and specialized staff and individuals with competence and experience, and that Palestinian universities have a clear organizational structure that supports decision support systems, ease of procedures and communication between departments. There are statistically significant differences about the reality of decision support systems in Palestinian universities in Gaza Strip due to the gender variable in favor of males, and the existence of differences about the reality of decision support systems due to the variable of years of service from the point of view of individuals whose years of service ranged from (15) To less than (20) years old.

Commentary on previous studies and their analysis:

By reviewing the previous studies, it became evident to the researcher that there is an increasing interest in decision support systems and strategy, and the current study was concerned that all studies should be recent to represent the reality present in our time, which is characterized as a rapidly developing and changing reality. Through the presentation and analysis of previous studies, the current study reached a set of the following conclusions and observations:

- ❖ Aspects of agreement and difference between the current study and previous studies
 - In terms of the aims and objectives of the study: The previous studies focused on linking the strategy on the one hand and computerized information systems on the other hand, without addressing decision support systems alone. It also dealt with decision support systems alone and the strategy alone. The researcher was not able to obtain a study that linked support systems. Decide by strategy.

- In terms of the method used in the study: The previous studies as well as the current study used the descriptive and analytical method as the method of the study, because this approach has characteristics that fit the naturalness of the current study, as it depends on studying the reality accurately, and depends on the description of the phenomenon under study.
- In terms of the study tool: The studies agreed to use the questionnaire as a main tool for the study.
- In terms of the community and the sample of the study: Most of the previous studies highlighted the strategic or decision support systems in governmental and industrial institutions and the scarcity of studies in universities. Researchers in previous studies have chosen their study population in line with the nature of the study, while the current research sample is Palestinian universities, and the target group she is academics with a management position.

❖ Areas to benefit from previous studies

The current study benefited from previous studies in forming an initial picture of decision support systems and strategy in universities. Benefits can be clarified in the following points:

- The previous studies, in addition to the exploratory study, helped the researcher to determine the topic of this research and the aspects of the research problem.
- The researcher has benefited in building some of the pillars of the theoretical framework of the research, and in determining the main and sub-variables of the research and the extent of the relationship between them that the previous studies relied on to save time and effort.
- The researcher benefited from previous studies in choosing the research methodology and the statistical methods used in these studies, and how the data were analyzed in these studies.
- The researcher benefited from previous studies in forming the questionnaire.
- The researcher benefited from previous studies in linking their results with the current study.

❖ What distinguishes this study from previous studies:

This study is in addition to the existing studies that examined the variables of decision support systems and the variables of strategy implementation. The research sample is four Palestinian universities, and the inspection unit is academics with an administrative position. From the above, the basic features of this study can be explained from others as follows:

1. The importance of the university education sector, and the need to develop academic and administrative systems in universities, by reviewing the application models of re-engineering global university systems.
2. The practical aspect, which was carried out on the major Palestinian universities in Gaza Strip, and the research sample from Palestinian universities (governmental, private, and public).
3. It differs in the time domain from the previous studies conducted in this field.
4. The viewpoint of all academics in an administrative position was taken from (university presidents, vice-presidents, assistants to university presidents, assistant vice-presidents, faculty deans, deputy or assistant dean, directors, deputy directors, heads of departments) in the Palestinian universities in Gaza Strip.
5. Studies related to decision support systems and re-engineering are still few. The studies dealt with topics including information technology, its success factors, its requirements and its relationship with organizations.
6. The researcher seeks to benefit from the summary of previous studies in presenting a theoretical model for decision support systems and implementing the strategy, which was dealt with in the theoretical chapter of the study.

Field study

Method and procedures

Study Population and Sample:

The study population is represented by academics in an administrative position working in Islamic University- Gaza, who number 87 employees, and the researcher used the comprehensive enumeration method, whereby the questionnaire was distributed to all members of the study population and 65 questionnaires were retrieved with a recovery rate of 79.3%.

Describe the characteristics of the study sample

The following shows the distribution of the study sample according to the personal and organizational data of the individuals in it:

Table 2: Distribution of the study population according to personal and organizational data (n = 65)

Personal And Organizational Data		The Number	Percentage %
Age Group	Less than 30 years old	-	-
	30 years old-less than 40 years old	15	23.1
	40 years old-less than 50 years old	27	41.5
	50 years or more	23	35.4
Qualification	BA	15	23.1
	M.A.	27	41.5
	PhD	23	35.4
Years Of Service	Less than 5 years old	5	7.7

	5 years-less than 10 years	12	18.5
	10 years-less than 15 years	10	15.4
	15 years and over	38	58.5
Job Title	University President	1	1.5
	Vice President of the University	2	3.1
	Assistant Vice President	7	10.8
	dean	9	13.8
	Deputy / Assistant Dean	14	21.5
	Director	4	6.2
	Deputy Director	2	3.1
	Head of the Department	25	38.5
	Other	1	1.5

Study Tool: A questionnaire was prepared on “Strategy and its Impact on the Use of Decision Support Systems in Universities - Case Study: The Islamic University”, whereby the five-year Likert scale was used to measure respondents' responses to the questionnaire items according to Table (2):

Table 3: The degrees of the five-point Likert scale

Response	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Degree	5	4	3	2	1

Validity of the study instrument: The researcher verified the validity of the questionnaire by approving the validity of the scale:

1. **Internal Consistency:** Internal consistency sincerely means the extent to which each paragraph of the questionnaire is consistent with the field to which this paragraph belongs, and the researcher has calculated the internal consistency of the questionnaire by calculating the correlation coefficients between each paragraph of the areas of the questionnaire and the total score of the same field.
2. **Constructive Validity:** It is considered one of the measures of validity of the tool, which measures the extent to which the objectives the tool wants to reach, and shows the extent to which each field of study is related to the total degree of the paragraphs of the questionnaire, and the researcher has done so.

The stability of the questionnaire: it means the stability of the questionnaire to what degree the questionnaire gives close readings every time it is used, or what is the degree of its consistency, consistency and continuity when it is repeated at different times. Among the most famous tests used to measure stability is the Cronbach alpha coefficient, as it was found that its value for the resolution as a whole (0.907), and this value is considered high and reassuring of the stability of the study tool.

It is concluded from the results of the validity and reliability tests that the measuring instrument (the questionnaire) is honest in measuring what it has been designed to measure, and it is very stable, which qualifies it to be an appropriate and effective measurement tool for this study and can be applied with confidence.

Normality Distribution Test:

The Kolmogorov-Smirnov Test was used to test whether the data follow the normal distribution or not, as it was found that the test value is equal to (0.720) and the probability value (Sig.) Is equal to (0.359), which is greater than the significance level 0.05. The distribution of the data follows a normal distribution where the parameter tests were used to analyze the data and test hypotheses for the study.

The statistical tools used: The data were extracted and analyzed from the reality of the questionnaire through the SPSS statistical analysis program, where the following statistical tests were used:

1. Percentages and frequencies.
2. The arithmetic mean, the relative arithmetic mean, and the standard deviation.
3. Cronbach's alpha test.
4. Pearson Correlation Coefficient.
5. Kolmogorov - Smernov test.
6. T test in case of one sample.
7. Simple Linear Regression.
8. Test of monolithic analysis of variance.

Data analysis and hypothesis testing

Analysis of the axes of the questionnaire:

The first axis: strategy

The T-test was used to find out whether the average response score had reached the average approval score of 3 or not, as in the following table:

Table 4: the arithmetic mean, standard deviation, and t-test value for all strategy paragraphs

#	Item	SMA	Standard Deviation	Relative Arithmetic Mean	T-Test Value	Probability Value (Sig)	Arrangement
1.	University plans are linked to the goals set.	4.03	0.85	80.62	*9.81	0.000	2
2.	The university analyzes its strengths, weaknesses, opportunities and threats.	3.91	0.84	78.15	*8.68	0.000	3
3.	There is a clear and written strategic plan for the university.	4.08	0.94	81.54	*9.23	0.000	1
4.	The implementation of the university's strategic plan is periodically monitored.	3.74	0.94	74.77	*6.33	0.000	5
5.	Corrective decisions are taken for the performance of the university in light of the evaluation results.	3.85	1.06	76.92	*6.41	0.000	4
Strategy In General		3.92	0.57	78.40	*12.99	0.000	

* The mean is statistically significant at a significance level of 0.05.

It is clear from the previous table (4) that the arithmetic mean of all strategy paragraphs equals 3.92, that the relative arithmetic mean equals 78.40%, the test value is 12.99, and that the probability value (Sig) is equal to 0.000 and this means that there is a large degree of agreement by the sample members on the paragraphs of the axis Overall strategy.

The paragraph "There is a clear and written university strategic plan" received the highest approval score in the axis with a rate of 81.54%, while the paragraph "The implementation of the university's strategic plan is periodically followed up" got the lowest approval score of 74.77%.

The second axis: decision support systems

The T-test was used to find out whether the average response score had reached the average approval score of 3 or not, as in the following table:

Table 5: the arithmetic mean, standard deviation, and t-test value for all decision support systems' items

#	Item	SMA	Standard Deviation	Relative Arithmetic Mean	T-Test Value	Probability Value (Sig)	Arrangement
1.	Senior management is aware of the concept of strategy, which ensures progress and development.	4.00	0.89	80.00	*8.98	0.000	7
2.	Senior management exercises the principle of delegation in decision-making.	3.88	0.89	77.54	*7.92	0.000	16
3.	The senior management provides the material and human requirements to achieve the objectives.	3.77	0.91	75.38	*6.78	0.000	25
4.	Senior management encourages employees to introduce performance improvement initiatives.	4.18	0.75	83.69	*12.77	0.000	2
5.	Senior management provides encouraging incentives to attract distinguished human cadres.	3.75	0.73	75.08	*8.33	0.000	26
6.	Senior management forms work teams from multiple organizational levels.	3.71	0.98	74.15	*5.82	0.000	30
7.	The senior management is concerned with the principle of innovation and continuous improvement.	3.82	0.93	76.31	*7.04	0.000	21
8.	The administrative policies of the university are clear and understandable.	3.85	0.85	76.92	*8.01	0.000	17
9.	The administrative policies in the university direct the decision-making	3.85	0.89	76.92	*7.68	0.000	17

	process towards improving performance.						
10	The university administration explains its objectives to all subordinates.	3.80	0.77	76.00	*8.33	0.000	23
11	Administrative procedures achieve the maximum possible use of available resources.	3.78	0.89	75.69	*7.09	0.000	24
12	Administrative procedures are flexible enough to meet all situations or change objectives.	3.71	0.91	74.15	*6.24	0.000	29
13	The organizational structure helps in coordinating, communicating and exchanging information with other departments and departments within the university.	4.02	0.84	80.31	*9.76	0.000	6
14	The organizational structure helps to communicate, coordinate and exchange information with parties outside the university, such as the Ministry of Higher Education and research centers.	3.91	0.86	78.15	*8.50	0.000	14
15	The organizational structure of the university suits the nature of its activities.	3.91	0.70	78.15	*10.44	0.000	14
16	The organizational structure of the university adopts the principle of delegation of powers.	3.97	0.85	79.38	*9.22	0.000	8
17	There is a job description that clearly defines the authorities and responsibilities.	3.92	1.02	78.46	*7.29	0.000	13
18	Effective administrative communication contributes to generating managerial ideas, knowledge and experiences to achieve goals.	3.82	0.90	76.31	*7.31	0.000	21
19	An internal network is available that is sufficient to implement the strategy project.	3.97	1.00	79.38	*7.82	0.000	8
20	The university uses the Internet in its internal and external communications among its employees.	4.33	0.84	86.56	*12.70	0.000	1
21	There is a network that helps to speed up the completion of work.	3.95	0.82	79.08	*9.40	0.000	12
22	The available communication system facilitates the performance of electronic services for the beneficiaries.	4.11	0.64	82.15	*13.95	0.000	3
23	The use of information technology leads to the ability to coordinate operations in different colleges, departments and departments.	4.03	0.87	80.62	*9.60	0.000	4
24	The use of information technology at the university is characterized by a role in the ability to re-design administrative processes.	3.85	0.87	76.92	*7.84	0.000	17
25	The university improves its processes and procedures to ensure quality performance.	4.03	0.95	80.62	*8.73	0.000	4

26	The technology used provides the information needed in making decisions.	3.85	0.97	76.92	*7.02	0.000	17
27	The university provides security and privacy protection programs.	3.97	1.07	79.38	*7.27	0.000	8
28	The university is characterized by keeping pace with technological developments in the surrounding environment.	3.72	1.08	74.46	*5.38	0.000	28
29	The university coordinates its internal operations using information technology	3.75	1.03	75.08	*5.89	0.000	26
30	The university engages its employees in training courses related to information technology	3.97	0.97	79.38	*8.07	0.000	8
Decision Support Systems In General		3.90	0.44	78.10	*16.55	0.000	

* The mean is statistically significant at a significance level of 0.05.

It is evident from the previous table (5) that the arithmetic mean of all the paragraphs of decision support systems is equal to 3.90, that the relative arithmetic mean is equal to 78.10%, the test value is 16.55, and that the probability value (Sig) is equal to 0.000 and this means that there is agreement to a large degree by the sample members Paragraphs center of decision support systems in general. The paragraph "The University uses the Internet in its internal and external communications between its employees" obtained the highest approval score on the axis with a rate of 86.56%, while the paragraph "The higher management forms work teams from multiple organizational levels" got the lowest approval score of 74.15%.

Test Hypotheses of the Study

Ho₁: There is a statistically significant relationship at ($\alpha \leq 0.05$) between strategy and the use of decision support systems in universities.

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

Table 6: Correlation coefficient between strategy and decision support systems in universities

The Premise	Pearson Laboratories For The Link	Probability Value (Sig).
Ho₁: There is a statistically significant relationship at ($\alpha \leq 0.05$) between strategy and the use of decision support systems in universities.	.684	*0.000

* Correlation is statistically significant at a level of significance ($\alpha \leq 0.05$).

The previous table 6 shows that the correlation coefficient is equal to .684, and that the probability value (Sig.) is equal to 0.000, which is less than the significance level 0.05 α , and this indicates the existence of a statistically significant positive relationship between the strategy and decision support systems in universities.

Ho₂: There is a statistically significant effect at the level of ($\alpha \leq 0.05$) of the strategy on the use of decision support systems in universities.

To test this hypothesis, the "simple linear regression" test was used, and the following table illustrates that.

Table 7: Simple Linear Regression Analysis

Independent Variable	Regression Coefficient	T-Test Value	The Probability Value Sig.	Correlation Coefficient	The Coefficient Of Determination
Constant amount	1.834	6.527	0.000	0.684	0.468
The Strategy	0.528	7.444	0.000		

From the results shown in the previous table 7, it was found that:

- The existence of a statistically significant effect at the level of significance ($0.05 \geq \alpha$) of the strategy on the use of decision support systems in universities, where it was found that the probability value 0.000, which is less than the level of significance 0.05.
- Correlation coefficient = 0.684, and the modified coefficient of determination = 0.468, which means that 46.8% of the change in the use of decision support systems in universities was explained by the linear relationship and the remaining percentage may be due to other factors that affect the use of decision support systems in universities.

H03: There are statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the mean of respondents' responses about the strategy and the use of decision support systems in universities due to personal and organizational data (Age Group, Academic Degree, Years of Service, Job Title).

To test this hypothesis, a "single-contrast" test was used. The results are shown in the following table.

Table 8: Results of the "unilateral variance" test - Personal and organizational data

Personal And Organizational Data	Name Of The Test	Test Value	Probability Value (Sig)
Age Group	Monochromatic contrast	2.085	0.133
Degree	Monochromatic contrast	0.711	0.495
Years Of Service	Monochromatic contrast	0.784	0.508
Job Title	Monochromatic contrast	2.193	0.042

From the results shown in the previous table 8, it was found that the probability value (Sig.) Is less than the significance level of 0.05 for the job title variable, and thus it can be concluded that there are statistically significant differences between the respondents' answers averages attributed to the job title, while the rest of the variables have been found to be the value The probability (Sig.) Is greater than the significance level 0.05, so it can be concluded that there are no statistically significant differences between the mean of the respondents' answers attributable to (age group, academic degree, Years Of Service).

Results

The Analysis Of Field Research Results Related To Hypothesis Testing Revealed The Following:

1. The results confirmed the existence of a direct, statistically significant relationship between the strategy and decision support systems in universities.
2. The results indicated that there was a statistically significant effect at the level of significance ($0.05 \geq \alpha$) of the strategy on the use of decision support systems in universities.
3. The results indicated that there are statistically significant differences between the mean of the respondents' answers due to the job title. As for the rest of the variables, it was found that the probability value (Sig.) Is greater than the significance level 0.05. Thus, it can be concluded that there are no statistically significant differences between the averages of the respondents' answers. Attributed to (age group, degree, Years Of Service).

Recommendations

Based on the previously presented results of the study and the field study, which revealed the strategy and its impact on the use of decision support systems in universities, the researcher suggested a set of recommendations, the most important of which are:

1. Recommendations related to strategy as an independent variable

- Demonstrate the importance of developing an appropriate strategy for universities, following up on their implementation and evaluating them in order to achieve the universities' mission and goals, and linking the strategy to the university's mission, vision and goals in a complete, systematic and clear manner.
- Urging universities to involve their employees when developing their strategic plan, by communicating with all colleges and departments in them and holding brainstorming sessions, workshops and periodic meetings with all departments.
- Demonstrate the importance of universities developing the information technology infrastructure in line with recent developments, as it is a major factor in strategic operations on the one hand, and a basis for any modern university to develop its performance, and work to develop the capabilities and skills of workers in the field of information technology

2. Recommendations related to decision support systems as a dependent variable

- The need for higher management of universities to pay attention to decision support systems, and to make intensive and continuous efforts to support and enhance efforts aimed at enriching and enhancing the role of decision support systems in universities.
- Universities should actively contribute to increasing interest in providing material and technical capabilities and making them available to all users, while continuing to keep pace with modern technological means and techniques.
- Increasing interest in human potentials by developing and developing human resources, developing their capabilities, skills and knowledge, and attracting competencies with creative capabilities.
- Increasing interest in the organizational capabilities available through an independent unit for decision support systems that directly reports to the higher management in Palestinian universities, and allowing the organizational structure to easily flow information between colleges, departments and departments.
- Focusing on training as a major component of decision support systems, allocating a special budget for training on the systems to be applied, and linking the training system to the employees' needs for training accurately, in order to improve and develop their skills, which increases the quality and efficiency of their performance.

Limitations of The Study: The application of this study was limited to the Islamic University in Gaza, and thus this limits the generalization of results to all Palestinian universities.

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