

The Requirements of Computerized Management Information Systems and Their Role in Improving the Quality of Administrative Decisions in the Palestinian Ministry of Education and Higher Education

Mazen J. Al Shobaki¹, Samy S. Abu Naser²

*Department of Information Technology, Faculty of Engineering and Information Technology,
Al-Azhar University, Gaza, Palestine*

*Email:*¹mazen.alshobaki@gmail.com, ²abunaser@alazhar.edu.ps

ABSTRACT

The purpose of this study is to identify the requirements of computerized Management Information Systems and their role in improving the quality of administrative decisions in the Palestinian Ministry of Education and Higher Education. The authors used the descriptive analytical method and the questionnaire method to collect the data. (247) questionnaires were distributed on the study sample and (175) questionnaires were collected back with a recovery rate of (70.8).

The study showed a number of results, the most important of which are: There exist a role for computerized management information system requirements in improving the quality of administrative decisions in the Ministry of Education and Higher Education. This result is due to the existence of the support and attention by the senior management in the Ministry of Education and Higher Education by 65.06%, the physical requirements available for the use of computerized Management Information Systems are available by (72.19%), and the software requirements for the use of computerized Management Information Systems are available at 67.74%. The results found that the human requirements available for the use of computerized Management Information Systems are available at (68.33%). The results showed that the organizational requirements that assist in the use of information systems are available at (64.19%). There are no statistically significant differences between respondents' responses to the role of computerized management information system requirements in improving the quality of administrative decisions in the Ministry of Education and Higher Education attributable to the variables (Gender, academic qualification, age, career level), while there are statistically significant differences in the role of computerized management information system requirements in improving the quality of administrative decisions in the Ministry of Education and Higher Education due to variable years of service.

The study concluded that the Ministry of Education and Higher Education is able to cope with the external environmental changes rapidly and the limited time available for the collection and analysis of information. This means that administrative information systems should be used by increasing the approval of senior management on Management Information Systems in making their decisions, and to involve the employees in making any change and keep abreast of technical developments and try to use external bodies to advise in the field of computerized information systems, and work to increase coordination between the different departments of the ministry.

Keywords: *computerized Management Information Systems, quality of administrative decisions, Ministry of Education and Higher Education, Palestine.*

1. INTRODUCTION

The issue of decision-making is one of the most important and most influential elements in the lives of individuals and the life of administrative organizations and even in the life of countries, in addition to the importance of this subject, especially in terms of scientific and practical, so highlights the importance of decision-making at the level of administrative organizations. Management is the essence of the work of the administrative leadership, which is the starting point for all the activities and actions taken within the organization, but in relation to and interaction with their external environments, and the cessation of decision making of any kind leads to disruption of work and stop activities and actions and lead to the decay of the Organization and its demise (Al-Ajami, 2010).

Where computerized information systems play an important role in the success of many organizations if information has been used for some time in the decision-making process, the

importance of information has increased in the last decades of this century as a result of international competition, automation of administrative and productive processes and large size of economic organizations. It is self-evident that economic organizations have been most affected by the use of information technology. This technology has proven to be able to reduce the costs of production and services by automating all phases of production and administrative processes, thus saving labor, raw materials and energy, a link between market requirements and design, production and distribution activities in an integrated system (Kassem, 2004). Information systems have changed the management structure and functions, the methods of planning and implementing core business activities, and the roles of information systems in modern organizations have changed. These systems are no longer just computer tools for data recording, processing, information production and reporting, but today integrated work and management systems with workflows at all levels and dimensions (Yassin, 2006).

Effective administrative decisions are those decisions that are based on adequate information of quality and accuracy. This quality is available only with information systems that management relies upon when making decisions and decisions are of great importance to the lives of individuals and peoples. The larger the size of the organization on the other hand, the administrative decision is to choose the best alternative among several alternatives, which represents the best solution to the problem of concern, as scientists and informatics experts have agreed that these systems are directed specifically to support the managerial decision-making (Yassin, 2006).

2. THE GENERAL FRAMEWORK OF THE STUDY

2.1 Research problem

The Ministry of Higher Education has sought to provide education to all members of the society and to improve its quality and calibration at various levels to adapt to the requirements of the ICT era and the rapid and progressive developments. In order to be able to make sound and quick decisions and complete these tasks easily and efficiently, In the Ministry of Education they have always sought to use all that helps them to carry out their administrative tasks effectively (Abu Naser & Al Shobaki, 2016), (Al Shobaki & Abu Naser, 2016), (Al Shobaki & Abu Naser, 2017), (Al Shobaki, et all. 2016), (Al Shobaki et all. 2010), (Al Shobaki, 2017).

There is a need to continue and enhance the development and upgrading of Management Information Systems according to modern technological developments (Abu Sabt, 2005), the need to expand the use of information systems and their role in the planning of operations and administrative decisions (Ahmed, 2007), since there is a close link between Management Information Systems and the quality of decision-making (Jaradat et al., 2009).

2.2 Research Questions

Q1: Is there a role for computerized Management Information Systems requirements in improving the quality of administrative decisions in the Palestinian Ministry of Education and Higher Education?

A number of sub-questions arise from this question:

Q1-1: Is there a role for the material requirements available in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip?

Q1-2: Is there a role for the available software requirements in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip?

Q1-3: Is there a role for the human requirements available in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip?

Q1-4: Is there a role for the regulatory requirements available in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip?

Q1-5: Is there a role to support and interest of senior management in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip?

2.3 Research Objectives

The study aims at highlighting that achieving two types of objectives: practical goals and scientific objectives:

1. Identify the current reality of computerized Management Information Systems and their role in improving the quality of administrative decisions.
2. Examining the role of physical requirements for the use of computerized Management Information Systems in improving the quality of administrative decisions in the Ministry of Education and Higher Education in the Gaza Strip.
3. Identify the role of the available software requirements for the use of computerized Management Information Systems in improving the quality of administrative decisions in the Ministry of Education and Higher Education in the Gaza Strip.
4. Examine the role of human requirements for the use of computerized Management Information Systems in improving the quality of administrative decisions in the Ministry of Education and Higher Education in the Gaza Strip.
5. To disclose the role of the regulatory requirements available for the use of computerized Management Information Systems in improving the quality of administrative decisions in the Ministry of Education and Higher Education in the Gaza Strip.
6. Studying the support and interest of senior management in the use of computerized information systems in the Ministry of Education and Higher Education in the Gaza Strip.
7. Demonstrating the differences in the respondents' views on the requirements of computerized Management Information Systems and their role in improving the quality of administrative decisions in the Palestinian Ministry of Education and Higher Education.

2.4 Research Importance

- Scientific importance:

1. Presentation of a comprehensive and integrated study of administrative information systems and their relationship to the quality of administrative decisions in the Ministry of Education and Higher Education.
2. The importance of this study lies in the fact that it relates to the quality of administrative decisions as one of the important topics that depend on administrative information systems in the decisions issued by the Ministry of Education and Higher Education in the Gaza Strip.
3. Develop a conceptual framework that explains the many points and elements related to the study variables (Management Information Systems, quality of administrative decisions) to become a theoretical reference that can be used.
4. Enriching the Arab and local library and scientific research centers. This study provides a database that will help researchers in this field and encourage

them to conduct further studies and researches in this field.

Practical importance:

1. This study is applied to an institution that has an important and vital role in the Palestinian society and to the relationship of the future industry to the Palestinian society, as it works to draw the attention of the Ministry of Education and Higher Education to the importance of administrative information systems.
2. This study is a qualitative study in Palestine to the knowledge of the researcher, which deals with field study linking administrative information systems and the quality of administrative decisions in the Ministry of Education and Higher Education, which opens the door to other studies to address the same subject in other organizations and institutions.
3. It highlights the nature of administrative information systems in the Ministry of Education and Higher Education and its importance in obtaining administrative decisions that are characterized by efficiency, which raises the level of performance of work in the ministry.
4. The Ministry of Education and Higher Education drew the attention of the Ministry of Education and Higher Education to the importance of Management Information Systems and the importance of their use and to clarify the strengths and weaknesses resulting from their use.
5. This study represents a serious and effective contribution to identifying the success of Management Information Systems in reaching efficient and accurate management decisions in the Ministry of Education and Higher Education, which is an important subject for decision makers and policymakers.

2.5 Research hypotheses

In order to provide an appropriate answer to the questions posed, and the study seeks to test the validity of the following assumptions:

H1: There is no statistically significant role at the level of significance ($0.05 \geq \alpha$) for computerized management information system adaptations in improving the quality of administrative decisions in the Ministry of Education - Gaza Strip.

It is divided into several hypotheses:

H1-1: There is no statistically significant role at the level of ($0.05 \geq \alpha$) significance of the physical variables available in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip.

H1-2: There is no statistically significant role at the level of ($0.05 \geq \alpha$) significance of the available software available in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip.

H1-3: There is no significant statistical role at the level of ($0.05 \geq \alpha$) of the available human tolerances in improving the quality of the administrative decisions in the Ministry of Education in Gaza Strip.

H1-4: There is no statistically significant role at the level of ($0.05 \geq \alpha$) of the organizational variables available in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip.

H1-5: There is no significant statistical role at the level of ($0.05 \geq \alpha$) significance to support the attention of senior management in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip.

2.6 Research Limits and Scope

1. **Subject (Academic) limitations:** The objective of the research is limited to the study of the efficiency of information technology and its role in the management of human resources electronically in the Palestinian universities in the Gaza Strip
2. **Human Limitations:** The study was conducted on the administrative and academic staff with administrative post in Palestinian universities in Gaza Strip.
3. **Place Limitations:** the study was conducted on the Palestinian universities in Gaza Strip, two of which are public universities and one governmental university.
4. **Time Limitations:** the study was conducted, preliminary data was collected, and statistical analysis was performed during the year (2017).

2.7 Research Terminology

- **Management information systems:** (AL-Salmi and others, 2012). AL-Abadi and Al-Ardhi (2012) defined it as a group of human and mechanical capabilities that Working with each other under a set of rules and disciplines and collect, store, retrieve, broadcast and make the most of the information available to the organization to raise the efficiency of its administrative work.
- **Administrative Decision:** Administrative decision-making is an intellectual and objective work that seeks to choose the most appropriate alternative to solve a particular problem among a range of alternatives available to the decision-maker (Alian, 2010). (Awwad, 2012) defined it as the outcome of the decision-making process, that is, the stage of ending the selection process and stability on one alternative, the decision and issued by the official who has the power, ability, desire and information. (Mahmoud 2012) defined the administrative decision as the disclosure by the administration in the form determined by law of its binding management of its public authority under the laws and regulations with a view to establishing a legal status, where possible and legally permissible. (Abdullah, 2012) defined administrative decisions as "selecting an alternative from a set of alternatives to implement policy objectives and turning them into reality", (Awwad, 2012) defined them as the outcome of the decision-making process, the decision issued by the official who has the power, ability, desire and information.

- **Quality of a Decision:** Is a decision measured by objectivity and achievement of goals so that these decisions are characterized by rationality to achieve efficiency and effectiveness in performance (Abdullah, 2012).
- **Ministry of Education and Higher Education:** The Ministry is responsible for supervising and developing Palestinian education at all levels in the public education and higher education sectors, and seeks to provide educational opportunities to upgrade it in line with modern developments (www.mohe.gov.ps).

2.8 Previous studies

- Study of (Abu Naser & Al Shobaki, 2017) aimed to identify the reality of computerized Management Information Systems in the Palestinian Ministry of Education and Higher Education. The study showed a number of results, the most important of which are: there are no statistically significant differences between the responses of the sample members on the relationship of the Management Information Systems to the quality of the administrative decisions in the Ministry of Education and Higher Education, due to the variables (gender, scientific qualification, age, career level). Statistics on the relationship of Management Information Systems to the quality of administrative decisions in the Ministry of Education and Higher Education due to variable years of service. The study concluded that: Emphasize that in order for the Ministry of Education and Higher Education to be able to cope with the rapidly changing external environmental changes and the limited time available for the collection and analysis of information, this means that administrative information systems should be used. The need to work on increasing coordination between the various departments of the ministry because of its great impact on the success of the ministry in achieving its objectives. The importance of involving employees in making any changes and taking their suggestions about the system. The need for management to use external information to provide advice in the area of Management Information Systems as required.
- Study of (Abu Naser & Al Shobaki, 2016) aimed at identify the impact of the management requirements on operating of computerized Management Information Systems to improve performance, and discuss the perceptions of respondents to develop the performance of employees in the Gaza Electricity Distribution Company, the researchers used the stratified sample method, (360) questionnaires were distributed on the study sample, (306) questionnaires were received with a percentage of (85%). The most important findings of the study: computerized MI have a positive impact on the development of performance in the Gaza Electricity Distribution Company systems. The is statistical significance impact between "the physical, software supplies, human and organizational" requirements for the management and operation of computerized

Management Information Systems and performance development in the Gaza Electricity Distribution Company. The research also concluded a series of recommendations: the need to strengthen the company's management interest in the use of computerized Management Information Systems in all its components and elements of being an important variable which contributes to the effect on performance development. It's essential that we develop the infrastructure for information technology in general, and computerized Management Information Systems, in particular for the development of performance. Increased interest in providing the material of equipment and devices used in the computerized management information system requirements. Interest in providing technical inputs to the computerized Management Information Systems through keeping pace with technological means and modern techniques and work on the training of personnel to use those systems. And increased attention to human inputs of computerized Management Information Systems "specialists technicians and end-users" through a variety of disciplines working in the field of computerized Management Information Systems.

- Study of (Abu Naser & Al Shobaki, 2016) aimed at identify computerized Management Information Systems resources and their relationship to the development of performance in the Electricity Distribution Company in Gaza. This research used two dimensions. The first dimension is computerized Management Information Systems and the second dimension the Development of Performance. The control sample was (360). (360) questioners were distributed and (306) were retrieved back with a percentage of (85%). Several statistical tools were used for data analysis and hypotheses testing, including reliability correlation using Cronbach's alpha, "ANOVA", Simple Linear Regression and Step Wise Regression. The overall findings of the current study suggested the presence of a statistically significant relationship between resources (physical, software, and human and organizational) for the computerized Management Information Systems and the development of performance in the Electricity Distribution Company in Gaza. The study recommended the following: The need to strengthen the company's management interest in the potential of computerized Management Information Systems and using them in the computerization of all the company's activities. And the need to involve workers and users in the design of computerized Management Information Systems and assessment and development process. And strengthen the relationship between users and information systems personnel in the department responsible for the system. And it is essential that the company is developing the infrastructure for information technology in general, and computerized Management Information Systems, in particular for the development of performance. And

increase interest in providing resources (physical, software, and human and organizational) for the computerized Management Information Systems. The current study is unique by the virtue of its nature, scope and way of implied investigation, as it is the first study at Electricity Distribution Company in Gaza resources explores the status of Computerized Management Information Systems and their relationship to the development of performance in the Electricity Distribution Company in Gaza increasing interest in Computerized Management Information Systems through continuity, keeping pace with technological means and modern techniques.

- Study of (Faraj Allah, 2011) aimed at understanding the role accounting information plays in reducing the uncertainties surrounding the decision making process, preparing a list of criteria that assist management in making administrative decisions under these circumstances, and knowing the nature and strength of the relationship between the quality of information Accounting, circumstances and variables surrounding the decision-making process, and study the characteristics and requirements that must be considered in the accounting information to meet the administrative needs, through the application of the study on commercial banks operating in the Gaza Strip. The study concluded that the accounting information helps decision makers in the commercial banks operating in the Gaza Strip to reduce the uncertainty surrounding the decision making process and thus make rational decisions. And the availability of quality characteristics in the accounting information that is relied upon in making administrative decisions in the circumstances of uncertainty in the commercial banks operating in the Gaza Strip. And the lack of commercial banks to use the scientific method in a large and sufficient in the process of making administrative decisions under uncertain conditions, especially quantitative methods and operations research.
- Study of (Bahloul, 2011) aimed at identifying the role of the technology of marketing information systems in the decision-making process in banks operating in Palestine. The banks have the technology and programs that help to make decisions. In addition, the components of the marketing information systems (records, internal, marketing intelligence, and marketing research, marketing decision support systems) have an important impact on the decision-making process. The study concluded that there is a statistically significant relationship between the marketing information system and its components on the one hand and the decision making process on the other.
- Study of (Al-Buhaisi, 2011), which aims to identify the characteristics of the information systems and their impact in determining the strategic competition option in the upper and middle administrations of the commercial banks operating in the Gaza Strip. The study has reached a number of results, the most important of which are: The banks operating in the Gaza Strip apply IT systems and units in all units and departments, and are keen to make maximum use of ICT systems and applications, and to utilize the skills and expertise available to them and to invest human resources in the field of development. It showed that the information systems used are working on the efficiency of coordination between branches and increase the revenues of banks. The study proved that information systems play a significant role in achieving the competitive advantage of banks operating in the Gaza Strip. The study showed that banks are aware of the importance of the security and confidentiality of customers to maintain the funds of depositors.
- Study of (Al-Dweik, 2010), aimed at determining the implications of the use of computerized health information systems on the decision-making processes of the European Gaza Hospital. The study reached the following results: The number of administrative and medical respondents who use computerized health information systems in their work (94.5%). This is an indicator of the high rate of use of computerized health information systems in the European Gaza Hospital. The study showed that the computerized health information system currently used in the European Gaza Hospital has a good impact on the fields of medical work And administrative decisions as well The study also showed that there are obstacles that limit the effectiveness of health information systems, the most important of which are: weak financial allocations, lack of adequate training, lack of vision towards the need for comprehensive planning of e-health applications.
- Study of (Al-Qurshi, 2010), which aimed to identify the impact of computerized Management Information Systems on the performance of workers in Wi-mobile company in Yemen. The study reached a number of results, the most important of which are: To a high degree. And that respondents' perceptions of job performance were high. And the impact of the main requirements for the management and operation of computerized information systems (physical, software, and human) in the performance of the job. The study showed statistically significant differences between respondents' perceptions of information systems operating requirements, due to the demographic variables (gender, qualification, experience, level of career). The study showed statistically significant differences between respondents' perceptions of job performance, due to the demographic variables (gender, qualification, experience, level of career).
- Study of (Al-Halabi, 2010), aimed at measuring the appropriateness of computerized Management Information Systems and their impact on decentralization in the Ministry of Finance in the Gaza Strip. The study found that the requirements of computerized Management Information Systems (physical, software, human and organizational) were highly efficient from the point of view of the

respondents. The study also found no statistically significant relationship on "the impact of computerized Management Information Systems on decentralization. Ministry of Finance in the Gaza Strip "due to demographic variables (sex, age, experience, job qualification, scientific level).

- Study of (Ramadan, 2009) which aims to know the impact of decision support systems on the development of performance in the Ministry of Education - Gaza Governorates. The study reached a number of results, the most important of which are: the impact of decision support systems on performance development, in the presence of awareness and awareness among senior management, The availability of material and technical resources for the use of decision support systems in the Ministry of Education is medium, with good human potential, and provides a good organizational level for the use of decision support systems. The study also shows the diversity of information systems that support decisions well with few types. The study also found that there were no statistically significant differences between the responses of respondents in the Gaza Strip to the impact of decision support systems on performance development due to age variables, job title, and experience.
- Study of (Jaradat, and others, 2009), which aims at shedding light on the reality of the use of MIS in the quality of the administrative decision-making process in the Housing Bank for Trade and Finance, and also in order to discover the problems and difficulties that affect the decision-making process, and the role of MIS in the quality of decision making in the bank. The study found a number of results, the most important of which is the emphasis on the close link between administrative information systems and the quality of administrative decision making, and the great impact of MIS on the quality of administrative decision making in terms of temporal dimension, content and content. The efficiency and effectiveness of the administrative information systems in the Housing Bank for Trade and Finance through the presence of the Department of Systems.
- Study of (Al-Omari, 2009) aimed at identifying the impact of Computerized Information Systems on the performance of workers in the Palestinian Telecommunications Company. The study reached several results, the most important of which are: , On the performance of workers in the communications company, there are statistically significant differences between the respondents' perceptions of the subject of the study due to the demographic variables (scientific level, years of experience, place of work, job level), a good level of material inputs and a good level of inputs Human and There is a good level of supplies software and the existence of a good level of regulatory requirements.
- Study of (Ahmed, 2007) which aims to explain and analyze the role of accounting information systems in

the production of accounting information efficiently and effectively, to meet the administrative needs necessary to rationalize administrative decisions in the companies contributing to the Gaza Strip. The study found a number of results, the most important of which is the presence of some aspects of the decline in the development of accounting manuals to identify ways of proving and processing operations, as well as the lack of interest in developing the skills of accounting staff, which requires the attention of the administration to provide the necessary elements to operate the accounting system efficiently and effectively. The effective use of accounting information systems in the planning and translation of objectives, and the development of corporate policies. And the lack of monitoring criteria and indicators to identify the problem and make the necessary decisions effectively. Which requires the need to pay attention to the provision of information necessary for planning, control and decision-making.

- Study of (Arafat, 2007), which aimed at assessing the administrative requirements for the optimal use of decision support systems in the ministries of the Palestinian Authority - Gaza from the point of view of the directors (Ministries of Education and Health). The study reached a number of results, the most important of which is that there is a good level of awareness of the importance of decision support systems. There is a need to improve cognition in the areas of management under study. The relevance of the human resources system in government sector institutions to facilitating the use of decision support systems. The appropriateness of the organizational structure to facilitate the use of decision support systems.
- Study of (Ajayi and others, 2007), which aimed to examine the use of management information systems in decision-making at the universities of southwestern Nigeria in planning long-term and short-term budgeting in the universities of southwestern Nigeria. The study found several results, the most important of which is that administrative information systems were not used adequately in the decision making process in planning and preparing budgets in the long and short term. There were no statistically significant differences between the federal and government universities regarding the use of management information systems Long term and short. The study recommended that information systems units should be adequately funded and maintained to ensure a free flow of information and appropriate use of information systems. Administrative decisions in order to plan and prepare budgets in the long term and also short.
- Study of (Al-Saudi, 2006), which aimed to identify the impact of Computerized Information Systems on the performance of employees in the Social Security Institution. The study reached a number of results, the most important of which is that the perceptions of the respondents regarding the requirements of operating the

information system were high. And that respondents' perceptions of job performance were medium. And an impact on key requirements for the management and operation of the computerized information system in performance. (Physical, human, organizational) in functional performance. The study showed that there are statistically significant differences in the respondents' perceptions of the requirements of operating the information system, due to the demographic variables (gender, age, academic qualification, experience, career level).

- Study of (AL-Mahasneh, 2005), which aims to analyze the impact of the efficiency of administrative information systems on the effectiveness of decision making in the Jordanian Customs Department. The study reached a number of results, the most important of which is that the administrative information systems used by the Customs Department are of high quality and efficiency. As well as the effectiveness of the decision-making process is good and high. The study proved that there is an important impact of the efficiency of administrative information systems (in all its components: physical, financial, technical, human and administrative) in the effectiveness of the decision-making process (problem identification, alternatives development, alternatives evaluation, implementation of alternatives, monitoring and follow-up).
- Study of (Abu Sabt, 2005) which aimed to assess the role of these systems in the decision-making process of decision makers in Palestinian universities in the Gaza Strip. The study reached a number of results, the most important of which is that the current information systems do not rise to expert systems where they do not provide solutions to problems. And not to provide external statistical information and lack of direct contact with the centers of statistics inside or outside the country. And that they have competence and managerial and technical expertise that are very commensurate with the work assigned to them. And that the devices used in universities are modern and highly efficient in Palestinian universities. And that there is a positive relationship between the quality of information and the use of information systems in the decision-making process. And that the programs used help to the flexible exchange of information among users of the system and the presence of modern techniques in the systems used, including technical. And that there is a strong relationship between the organizational level and the quality of decisions.
- Study of (Mnasreiyah, 2004), which aims to identify the basis of the MIS concept and highlight the importance of using modern techniques and quantitative models in administrative decision making, and analyzing and evaluating the current information system in the Algerian Aluminum Company and its relation to decision making. The study reached a number of results, the most important of which is that the decision-makers in the company have an acceptable level of education

sufficient to accept and absorb the idea of introducing computerized information systems based on the computer. The administrative decisions taken at the company are highly effective as the majority of decision makers are keen to have all the information about the problems before making a decision, since the decisions of the company are made quickly and the implementation of these decisions is done on average. And that the company follows with its employees a democratic way in the process of making any decisions concerning the company. The system faced difficulty in accepting the employees of the company for fear that some kind of unemployment would prevail because of the system and there was no optimal use of the system. The most important determinant of more effective management decision-making is the provision of adequate, timely and adequate information. And that the management information systems adopted at the company in question contribute greatly to increase the accuracy of information in the company and provide information, most of which are necessary for decision making at a relatively quick time, and make the information more quantifiable.

- Study of (Al-Fozan, 2003) aimed at identifying the impact of information systems on the performance of employees at the Customs Department in Riyadh, as well as identifying the obstacles affecting the use of modern information systems in the department. The study reached a number of results, the most important of which are the existence of many advantages for the use of modern information systems in the work of the Customs Authority, including accuracy, improving performance, reducing operating costs. The existence of administrative, financial and regulatory constraints facing the use of modern information systems, including: administrative inflexibility, lack of competence and experience of the workers in the interest of modern information systems. The existence of operational and technical obstacles contributes to the difficulty of using modern information systems, the most important: the disadvantages of the systems used and not keep pace with the rapid developments in the field of computer, frequent hardware failures, and lack of interest management.

2.9 Comment on previous studies

The previous study on the role of information systems shows that there is a difference in the environments in which these studies were applied, and different in the nature of the activities of these organizations. It was found that there is a diversity of variables used and a variety of statistical methods used to obtain and analyze these data Studies vary in this subject, despite the multiplicity of research and studies, but there are obvious shortcomings in the studies that dealt with this subject specifically to the knowledge of the researchers, with some agreement, whether in the method used in the research, or the community that was conducted studying.

2.10 The agreements between this study and previous studies were as follows:

Most of the Arab studies dealt with the management, accounting and human resources systems in terms of their assessment, the reality of their use, their importance, their relationship with decision-making and the impact of their use on performance and productivity. The previous Arab studies were closer to this study, where foreign studies have taken the experimental approach to provide high material and technical capabilities available.

The study was agreed in terms of objective with several previous studies such as (Abu Naser & Al Shobaki, 2016), (Mnasreiyah, 2004), (AL-Mahasneh, 2005), (Al-Hazaime, 009), Abu Sabat, 2005), (Jaradat and others, 2009), and (Ajayi and others, 2007) study. In terms of community, they agreed with (Ramadan, 2009), and (Arafat, 2007).

It has agreed with some studies in terms of methodology such as (Al-Omari, 2009), (Faraj Allah, 2011), (Ramadan, 2009), and (Ajayi and others, 2007).

It was agreed with some studies in terms of sample method such as (Faraj Allah, 2011) and (Mnasreiyah, 2004). In terms of the study tool, it was agreed with some studies such as (AL-Mahasneh, 2005), (Al-Halabi, 2010), and (Al-Dweik, 2010).

2.11 The differences were as follows:

There is a difference in the environments in which these studies were conducted, the different nature of the organizations applied to them, the methodology used, the variety of variables they addressed, and the different objectives. This study differed with some previous studies in terms of the methodology followed (Ramadan, 2009) (Al-Mahsneh, 2005) and (Al-Fozan, 2003), which differed in terms of society (Abu Naser & Al Shobaki, 2016), (Al-Omari, 2009) (Al-Dweik, 2010) and the study (Mnasreiyah, 2004) and the study of (Abu Sabt, 2005).

3. THE THEORETICAL FRAMEWORK OF THE STUDY

3.1 Computerized information systems

Many authors have identified computerized MIS in various forms (Abed Rabbo, 2013) defines management information systems as a set of interlocking or interacting elements that collect, process, store, transmit and distribute data and information to beneficiaries for the purpose of supporting decision-making and ensuring organizational control.

(Gupta and others, 1997: 460) defined it as an integrated system that combines physical and human resources to provide information that supports planning and control functions, to help managers in the organization reach effective decisions. (AL-Abadi and Al-Ardhi, 2012) defines MIS as a group of human resources and mechanisms that work with each other under a set of rules and disciplines and collect, store, retrieve, transmit and make the best use of the information available to the Organization to improve the efficiency of administrative work (Zoubi et al., 2012: 99) defined MIS is a set of interlocking or interacting elements that collect, process, store, transmit and distribute data and

information to beneficiaries for the purpose of supporting decision-making and ensuring control over the organization. (Al-Shibli and Al-Nsour, 2009) defined it as a formal method used to provide accurate and timely information to management, which is needed to facilitate the decision-making process.

3.2 Computerized Information System Components:

(AL-Abadi and Al-Ardhi, 2012) stated that the MIS components are:

1. Procedure: All procedures and instructions to follow for the completion of all computer operations. It is the requirements of the information system to determine methods of collecting, cataloging, indexing, organizing and storing information, against the method of numbering, identifying files and communication channels in ways of transferring information, Types of reports and other outputs.
2. Personnel: Any system, regardless of the degree of mechanization and the mechanism in which individuals must play a key role in it as the supervisor and control of all elements of the system.
3. Data Base
4. Software
5. Hardware and equipment

3.3 Benefits of Computerized Information Systems:

The advantages of management information systems have varied from the point of view of writers and researchers, according to their field of work and specialization, and those who have put their fingerprints on this aspect (Abed Rabbo, 2013), which shows that management information systems offer many benefits to decision-makers.

- Provide information to different administrative levels to assist them in decision making.
- Provide information to all employees to assist them in performing their career activities.
- Assist in the evaluation of the Organization's activities and conduct the oversight process.
- Assist managers in predicting the future for all FAO activities.
- Identify horizontal and vertical communication channels between different administrative units to facilitate data retrieval.
- Save data to make it available to users.

3.4 Computerized Information System Functions:

(Al-Shibli and Al-Nsour, 2009) showed that the functions performed by computerized information systems are:

- Identification of information needs.
- Collect the required data from their various sources.
- Process data and set up information for viewing and use.

- Send information to decision-making centers, and to different administrative levels.
- Save and record information.
- Identify the required information, and follow up the change in it until it becomes usable continuously.

3.5 Objectives of Computerized Information Systems of the Ministry of Education and Higher Education:

The most important objectives of the MIS are to provide management and other beneficiaries with information and data, so that MIS helps the Department coordinate its efforts and achieve the objectives of the organization through (AL-Abadi and Al-Ardhi, 2012) :

- Assisting managers in carrying out their tasks and tasks of planning, organization, direction and control, based on the success and completion of the information provided by the information systems to all managers, which are appropriate, adequate, accurate and timed.
- Providing many different reports on the status of the current establishment with all their activities and administrative levels at a lower cost and effort while maintaining the appropriate degree of accuracy.
- Work on screening and extract useful information provided to the manager so that he can rely on them to make good decisions.
- Helps to complete mathematical and statistical operations very quickly and accurately.
- Provide managers with a variety of alternatives and ways to complete the work so that the results and implications of taking each of the alternatives to the available decisions appear as if they have already been taken.
- It works to exclude a large part of the uncertainty and certainty of the circumstances surrounding the decision-making, which makes it easy to be guided by the adoption of rational decision with high efficiency and is especially easy after it relied on the few who have experience and knowledge.

3.6 Quality of administrative decisions

(Abu Sabt, 2005) and (Atawneh, 2012: 57) show that the quality of decisions taken by administrative levels depends on the availability of information available to decision makers. The quality of decisions is usually judged by two inputs. The most obvious and practical entry points. If the results of the decision are acceptable, the decision is considered valid, taking into account the period of time during which the decision is evaluated. Some decisions may lead to undesirable results in the long term, the second approach is to assess decisions determining the best decision taken in the light of the circumstances that were available in decision making. This approach is characterized by taking into account the skills of the decision makers that are evaluated in the case of the subject matter of the decision,

the availability of information and resources, and the points to be taken into consideration until an optimal decision is obtained she:

- A clear and precise understanding of the multiple objectives that fit the problem of the decision.
- A specific, comprehensive and precise definition of the problem, its various aspects and the subject matter of the decision.
- Full knowledge of possible alternatives, and a reliable way of estimating the consequences of choosing each alternative.
- Determine the relationship between the results of each alternative and the desired objectives.
- Full freedom to choose between alternatives that best solve the problem.

3.7 The importance of making administrative decisions:

The decision-making process is a basic process in management, so decision-making is almost the only process that distinguishes a manager from a manager. Or a successful manager on a failed manager. On the other hand, decision-making permeates each manager's activities and functions. The manager makes a decision in the administrative processes (planning, organization, recruitment, leadership and supervision). Appoints an employee or promote or direct workers and solve their problems.

The view of (Al-Alaq, 2008), was that decision-making was the core of the director's job. While planning, organization, direction, and oversight were key functions of the Department, each clearly related to decisions to implement the plan.

When management exercises the planning function, it makes specific decisions at each stage of the development of the plan, when setting the goal, formulating policies and programs, identifying appropriate resources and selecting the best ways to operate them. And when the Department determines the proper organization of its activities, it makes decisions on the organizational structure - its type and size, the basis for the division of departments and divisions, the individuals it needs to perform the various functions, the scope of appropriate supervision, lines of authority, responsibility and communication; It takes a range of decisions when directing subordinates, coordinating their efforts, motivating and motivating them to perform well and solve their problems

3.8 Factors affecting the decision-making process:

(Awwad, 2012) that decision-making is influenced by a number of factors, including the problem itself, including the environment in which the decision is taken, in addition to the personal factors related to the decision maker and the classification of factors affecting decision-making, she:

1. Factors related to the problem

The problem has effects on the decision-making process in terms of the type of problem and its implications, the stakeholders, and is affected by the relationship with other problems experienced by the organization.

2. Environmental factors:

The environment surrounding all of its variables affects the decision-making process. The stable environment differs from the dynamic environment, and the time conditions in terms of its wideness or narrowness have a clear effect on the decision taken as well as the degree of certainty or uncertainty and data and information available in that environment, whether internal or external, Are all environmental factors affecting the decision.

3. Factors related to the personality of the decision-maker

There are many factors in the personality of the decision-maker. There are factors related to the psychological aspects (such as perception, values, attitudes and motivations) and other factors related to the physiological aspects (such as physical abilities, mental abilities and decision-making age). (Al-Ajami, 2010), explained that the factors influencing the decision-making process are:

- **Humanitarian factors:** The humanitarian factors that help rationalize the decision-maker's behavior and direction to choose the best alternative in the decision-making manager and the capabilities associated with the decision-making process and the assistant managers who identify the problem and dimensions and aspects and propose solutions appropriate to them and the advisers of the Director who conduct research, Their various views to the manager, subordinates and others who will implement the decision, or to implement the decision or those who are concerned about the decision or who is affected or the decision,
- **Organizational factors:** The type of administrative organization, the multiple administrative levels, the complexity of the time, the time available to solve it, and the administrative communication required to obtain the information and data required for a decision.
- **Environmental Factors** In addition to the humanitarian and organizational factors influencing decision-making, there are a number of factors or constraints that affect the decision's effectiveness and derive from environmental conditions surrounding the decision. The most important of these factors is the nature of the political and economic system in the country and the compatibility of the decision with the public interest and the prevailing laws and regulations. Technological progress and its associated fundamental changes in all areas of life.
- **Pressure of decision-makers:** The pressures on the decision-maker can be divided and influence his decisions to:

1. **Internal pressure:** The pressures of the presidents, the lack of information and

data systems, the lack of material and human resources, in addition to the lack of time of the director and the need to make the decision under certain circumstances where opportunities are not sufficient to obtain adequate information on alternatives and study.

2. **External pressure:** It is the pressure of public opinion, the pressures stemming from the social relations of the director outside the scope of work, and the pressures of the media and regulatory bodies, all factors that influence the direction of the decisions of the official and may limit its effectiveness.

3.9 Steps of the decision-making process:

(Megginson and Others, 1989) and (Mohammed, 2001) explained that the steps of the decision-making process are as follows:

- Defining the problem.
- Determination of decision criteria.
- Determine weights for standards.
- Identification of alternatives.
- Analysis of alternatives.
- Choose one of the alternatives.
- Execute the selected alternative

3.10 Methods to improve administrative decisions and increase their effectiveness:

(Alian, 2010) has listed a number of ways in which administrative decisions can be improved, including:

- Fully understand the administrative problem, which helps to find suitable alternatives.
- Involvement of decision makers, which helped to increase their understanding of and support for the decision, and not to oppose it.
- Avoid personal emotions and passions during decision-making, thereby increasing objectivity.
- Delegate the authority to make regular and routine decisions to the directors of departments, divisions and divisions, which helps managers to take full time to make important and sensitive decisions.
- Follow up changes and developments that occur in the internal and external environment of the institution.
- Finding creative and innovative solutions to problems, and not relying as much as possible on solutions that are ready or adopted in previous decisions, unless necessary.
- Adoption of the principle of flexibility in decision-making, i.e., the possibility of amending the decision taken when things arise.

- Creating a computerized administrative information system, which helps to provide managers with the information they need to make the right decisions.

(Qadada et al., 2010) states that one of the ways to improve administrative decisions and increase their effectiveness is:

- To benefit from the mistakes of the past and not to fall into it secondly
- In the decision-making and non-urgency only in emergency situations
- Taking into account the degree of influence of the decision on its implementing personnel, they are not machines managed as desired.

4. FIELD STUDY

4.1 Methodology of the study:

In order to achieve the objectives of the study, the researchers used the analytical descriptive method, in which he tries to describe the phenomenon of the subject of the study, analyzing its data, the relationship between its components and the opinions that are raised around it, the processes it contains and the effects it produces.

Table 1: shows the distribution of the study population by ministry and directorates

Statement		The Study Community From The Head Of Department And Above
Distribution of the study population by ministry and directorates	Ministry of Education and Higher Education - Gaza Strip	100
	Directorate of Education West Gaza	21
	Directorate of Education Central Gaza	21
	Directorate of Education East Gaza	21
	Directorate of Education North Gaza	21
	Directorate of Education East Khan Younis	21
	Directorate of Education West Khan Younis	21
	Directorate of Education Rafah	21
	Total	247
Distribution of the study society (ministry) by level of employment	Ministry agents	3
	Director general	15
	Deputy General Manager	11
	Director of the Department	26
	Head of the Department	45
Total	100	
Distribution of the study community (Directorate) by level of employment	Director of Education	1
	Technical Deputy	1
	Administrative Deputy	1
	Head of the Department	18
Total	21	

Source: Ministry of Education and Higher Education – Gaza

The researchers used two main sources of information:

1. **Secondary sources:** The two researchers dealt with the theoretical framework of the study to the secondary data sources, which are documented in the books, references and related news, periodicals, articles, reports, researches and previous studies that deal with the subject of study and research and reading in various internet sites.
2. **Primary Sources:** Analyzing the Analytical Aspects of the Study Subject The authors sought to collect the initial data through the questionnaire as a main tool for the study, specially designed for this purpose.

4.2 Society and Study Sample:

The study population consisted of the administrators of the Ministry of Education and Higher Education - Gaza Strip from the head of department and above. The researchers used the comprehensive census method. 217 questionnaires were distributed to the total study population. 175 questionnaires were retrieved, (70.8) of the total study population.

The questionnaire is intended to "measure the measurement of what is being measured" (Al-Jarjawi, 2010).

4.3 Validity of the Study Tool:

It is also intended to include the survey of all the elements that must be included in the analysis on the one hand and the clarity of their paragraphs and vocabulary on the other. The veracity of the questionnaire was confirmed in two ways:

1. Validity from the point of view of the arbitrators:

The questionnaire was presented to (5) specialized arbitrators in order to ensure the accuracy of the language of the questionnaire, the clarity of the instructions of the questionnaire, the affiliation of the paragraphs to the dimensions of the questionnaire and the validity of this tool to measure the objectives associated with this study. The arbitrators looked.

2. Internal Validity:

Table 2: correlation coefficient between each paragraph of the "support and interest of senior management" and the total score of the field

No.	Paragraph	Pearson Coefficient Of Correlation	Probability Value (Sig.)
1.	Senior management is highly convinced of the importance of administrative information systems	.791	*0.000
2.	The Ministry has a clear and easy-to-use management information system	.888	*0.000
3.	The administrative information system available in the Ministry achieves the required operations with precision and proficiency	.860	*0.000
4.	All employees are entitled to use the MIS used by the Ministry	.802	*0.000
5.	The senior management of the Ministry depends on the results of the MIS	.827	*0.000
6.	The available administrative information system achieves adequate coordination among the various departments and departments of the Ministry	.867	*0.000
7.	Management uses external entities to provide advice in the area of MIS as required	.742	*0.000

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

Table (3) shows the correlation coefficient between each of the paragraphs of the "Organizational requirements available

The consistency of the internal consistency of each paragraph of the questionnaire with the field in which this paragraph belongs is true. The researchers calculated the internal consistency of the questionnaire by calculating the correlation coefficients between each paragraph of the question domains and the total score of the field itself.

Table (2) shows the correlation coefficient between each of the paragraphs of the "support and interest of senior management" and the total score of the field, which shows that the correlation coefficients shown are significant at ($\alpha \leq 0.05$). Thus, the field is considered the truth of what is being measured.

for the use of computerized management information systems" and the total score of the field, indicating that the correlation coefficients shown are significant at ($0.05 \geq \alpha$).

Table 3: The correlation coefficient between each of the paragraphs of the "Organizational Requirements for the Use of Computerized Information Systems" and the Total Degree of Field

No.	Paragraph	Pearson Coefficient Of Correlation	Probability Value (Sig.)
1.	The information available matches the needs of the job.	.532	*0.002
2.	The organizational structure allows easy flow of information between departments.	.802	*0.000
3.	Senior management is involved in making any changes.	.889	*0.000
4.	Relationship between departments and other departments is determined through written regulations.	.572	*0.001
5.	The data and information in the Ministry are characterized by their quantity and ease of handling.	.819	*0.000
6.	The regulations and procedures of the Ministry are transparent and clear.	.877	*0.000
7.	The organizational structure of the Ministry is flexible	.808	*0.000

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

Table (4) shows the correlation coefficient between each of the paragraphs of the "Physical requirements available for

the use of computerized management information systems" and the total score of the field, indicating that the correlation coefficients shown are significant at $(0.05 \geq \alpha)$.

Table 4: The correlation coefficient between each paragraph of the "Physical requirements available for the use of computerized management information systems" and the total score of the field

No.	Paragraph	Pearson Coefficient Of Correlation	Probability Value (Sig.)
1.	The appropriate computers are available for the required work.	.749	*0.000
2.	Data entry is available to suit the needs of the ministry.	.902	*0.000
3.	The means of producing information and the work needs of the Ministry are appropriate.	.855	*0.000
4.	The network is compatible with the ministry's business needs.	.843	*0.000
5.	Maintenance is done quickly when hardware or computer network malfunctions occur.	.638	*0.000
6.	Senior management provides the requirements for operating information systems.	.781	*0.000
7.	The senior management is keen to keep up with the latest developments in the field of information systems.	.819	*0.000

* The correlation was statistically significant at the mean level $(\alpha \leq 0.05)$

Table (5) shows the correlation coefficient between each paragraph of the "Software Requirements for the Use of Information Systems" field and the total field score, which

shows that the correlation coefficients shown are significant at $(0.05 \geq \alpha)$. Thus, the field is considered the truth of what is being measured.

Table 5: The correlation coefficient between each paragraph of the "Software Requirements for the Use of Information Systems" and the Total Degree of Field

No.	Paragraph	Pearson Coefficient Of Correlation	Probability Value (Sig.)
1.	The software used is compatible with the work requirements of the ministry.	.873	*0.000
2.	The software is updated to suit the need of work in the circuit.	.744	*0.000
3.	The programs used are compatible with the devices used.	.886	*0.000
4.	The effectiveness of the programs is evaluated by the employees on an ongoing basis.	.823	*0.000
5.	All necessary instructions are available to run the programs, which helps in doing the work as required.	.820	*0.000
6.	The system provides sufficient storage space for information.	.927	*0.000
7.	The current system gives feedback.	.845	*0.000

* The correlation was statistically significant at the mean level $(\alpha \leq 0.05)$

Table (6) shows the correlation coefficient between each paragraph of the "human requirements available for the use of computerized management information systems" and the total score of the field, indicating that the correlation

coefficients shown are significant at $(0.05 \geq \alpha)$. Thus, the field is considered the truth of what is being measured.

Table 6: The correlation coefficient between each paragraph of the field "Human requirements available for the use of MIS" and the total score of the field

No.	Paragraph	Pearson Coefficient Of Correlation	Probability Value (Sig.)
1.	The staff of the IT department answer my questions.	.676	*0.000
2.	The person responsible for the information system is contacted directly.	.823	*0.000
3.	Employees in the current system perform their duties on time.	.771	*0.000

4.	Employees in the IT department understand the different needs of the information system.	.817	*0.000
5.	The qualifications of employees in the information system are commensurate with the nature of the work entrusted to them.	.850	*0.000
6.	Employees are involved in diagnosing the strengths and weaknesses of information systems.	.899	*0.000

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

Table (7) shows the correlation coefficient between each paragraph of the "quality of administrative decisions in the Ministry of Education" and the total score of the field, which

shows that the correlation coefficients shown are significant at ($0.05 \geq \alpha$). Thus, the field is considered the truth of what is being measured.

Table 7: correlation coefficient between each of the paragraphs of the "quality of administrative decisions in the Ministry of Education and Higher Education" and the total score of the field

No.	Paragraph	Pearson Coefficient Of Correlation	Probability Value (Sig.)
1.	There is a harmony between the quality of the administrative decisions and the general policy of the ministry.	.901	*0.000
2.	The administrative decisions taken are the objectives of the Ministry.	.915	*0.000
3.	Administrative decisions taken include all aspects of the ministry's work.	.707	*0.000
4.	The decision is less risky.	.908	*0.000
5.	There is complementarity and coherence between decisions.	.863	*0.000
6.	The information available is flexible, leading to quick decision making.	.866	*0.000
7.	A large number of alternatives are available.	.855	*0.000
8.	Positive alternatives are classified according to their importance.	.883	*0.000
9.	The decisions taken shall be based on an information network covering all departments and departments of the Ministry.	.706	*0.000
10.	Check the decisions taken by the administrative excellence factor of the ministry.	.851	*0.000
11.	Decisions have the persuasion factor and satisfaction of the implementing staff.	.802	*0.000

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

1. Structure Validity

Structural Validity is a measure of the validity of a tool that measures the extent to which the objectives of the tool are

achieved and shows the extent to which each area of study is related to the overall score of the questionnaire.

Table (8) shows that all correlation coefficients in all areas of the questionnaire are statistically significant at ($\alpha \leq 0.05$).

Table 8: correlation coefficient between the degree of each of the areas of the questionnaire and the total score of the questionnaire

The Field	Pearson Coefficient Of Correlation	Probability Value (Sig.)
Support and attention of senior management..	.885	*0.000
Regulatory requirements for the use of computerized management information systems.	.882	*0.000
Physical requirements available for the use of computerized management information systems.	.886	*0.000
Software requirements for the use of computerized management information systems.	.904	*0.000
Human requirements for the use of computerized management information systems.	.842	*0.000
The reality of administrative information systems in the Ministry of Education.	.988	*0.000

Quality of administrative decisions in the Ministry of Education.	.923	*0.000
---	------	--------

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

4.4 Reliability:

The questionnaire is intended to "give the questionnaire the same results if it is applied several times in a row" (Al-Jarjawi, 2010). It also means "to what degree the meter gives close readings each time it is used, or its degree of consistency, consistency and continuity Repeated use at different times. "The

researchers have verified the validity of the questionnaire by:

1. Stability using the formula Alpha Kronbach:

The stability of the study instrument was determined by calculating the correlation coefficients of the axes of the questionnaire using the Alpha Cronbach equation, As shown in the following table:

Table 9: Alpha Kronbach coefficient to measure the stability of the questionnaire

The Field	Number Of Paragraphs	Alpha Cronbach Coefficient
Support and attention of senior management.	7	0.878
Regulatory requirements for the use of computerized management information systems.	7	0.904
Physical requirements available for the use of computerized management information systems.	7	0.933
Software requirements for the use of computerized management information systems.	7	0.921
Human requirements for the use of computerized management information systems.	6	0.874
The reality of administrative information systems in the Ministry of Education and Higher Education.	34	0.970
Quality of administrative decisions in the Ministry of Education and Higher Education.	11	0.949
All Areas Together	45	0.979

It is clear from the results shown in Table (9) that the value of the alpha-cronbach coefficient is high for each field, ranging from (0.874, 0.970) to all the paragraphs of the questionnaire (0.979). This means that the stability coefficient is high.

Statistical methods used

The questionnaire was entered and analyzed through the Statistical Package for the Social Sciences (SPSS).

Normality Distribution Test:

The Kolmogorov-Smirnov Test was used to test whether or not the data followed natural distribution and the results were as shown in Table 10.

Table 10: Shows the results of the normal distribution test

The Field	Probability Value (Sig.)
Support and attention of senior management.	0.906
Regulatory requirements for the use of computerized management information systems.	0.998
Physical requirements available for the use of computerized management information systems.	0.258
Software requirements for the use of computerized management information systems.	0.833
Human requirements for the use of computerized management information systems.	0.543
The reality of administrative information systems in the Ministry of Education and Higher Education.	0.918
Quality of administrative decisions in the Ministry of Education and Higher Education.	0.927
All areas of resolution together	0.935

It is clear from the results shown in Table (10) that the probability value (Sig) for all fields of study is greater than the level of significance ($\alpha \leq 0.05$). Therefore, the distribution of data

for these fields follows the natural distribution, where scientific tests will be used to answer the hypotheses of the study. The following statistical tools were used:

1. Frequencies & Percentages: To describe the study sample.
2. Arithmetic mean and relative arithmetic mean.
3. The Cronbach's Alpha test, to determine the stability of the resolution paragraphs.
4. Kolmogorov-Smirnov Test (Kolmogorov-Smirnov Test) to determine if the data follow normal distribution.
5. Pearson Correlation Coefficient: To measure the degree of correlation: This test examines the relationship between two variables. It has been used to calculate internal consistency and structural honesty of the questionnaire, and the relationship between variables.
6. Test T in the case of a single T-Test to determine whether the average response score has reached the intermediate approval level of 3 or more or less. It was used to confirm the mean significance of each paragraph of the questionnaire.

7. T-Test (Independent Samples T-Test) to see if there are statistically significant differences between two sets of independent data.
8. One Way Analysis of Variance (ANOVA) is used to determine whether there are statistically significant differences between three or more sets of data.

5. DATA ANALYSIS AND TESTING OF STUDY HYPOTHESES

Including a presentation to analyze the data and test the hypotheses of the study, by answering the questions of the study and review the main results of the questionnaire, which was reached through the analysis of paragraphs, and to find out the general information that included sex, age, qualification, years of service, career level), so Statistical analyzes of the collected data were conducted from the study questionnaire. The Statistical Package for Social Studies (SPSS) was used to obtain the results of the study to be presented and analyzed.

Statistical description of the study sample according to the general information

The characteristics of the study sample are presented according to general information

Table 11: Distribution of the sample of the study according to general information

Personal Data		Category	The Number	Percentage %
Gender		Male	150	85.7
		Female	25	14.3
Age		Less than 30 years	18	10.3
		30 to less than 40 years	65	37.1
		From 40 to less than 45 years	37	21.1
		45 years and over	55	31.4
Qualification		Diploma	10	5.7
		Bachelor	102	58.3
		M.A.	55	31.4
		Ph.D.	8	4.6
Number of years of service		Less than 10 years	52	29.7
		From 10 to under 15 years	53	30.3
		15 years and above	70	40.0
Career Level	Directorates	Head of the Department	91	83.5
		Administrative Deputy	7	6.4
		Technical Deputy	8	7.3
		Director of Education	3	2.8
	Ministry	Head of the Department	37	56.1

	Director of the Department	18	27.3
	General Manager / Deputy General Manager	10	15.2
	Deputy Minister	1	1.5
Total		66	100.0

It is clear from the table (11) that 85.7% of the study sample is male, while 14.3% is female. This percentage shows that the percentage of males is higher than that of females. This is in accordance with the distribution of the Palestinian labor force and in the ministry according to the statistics of the ministry (Statistical Yearbook 2013), also shows that (9.7%) of the study sample aged less than 30 years, (37.9%) between the ages of 30 to less than 40 years, (20.7%) between the ages of 40 to less than 45 years, while (31.7%) aged 45 years and over. It is noted that the age group of 30-40 years is the highest percentage (37.9%). The researchers attribute this to that the target sample is from the head of department and above, and that the largest number of the sample as explained above are heads of departments and this is logical since they obtained these grades as a result of their qualification where they receive the degree head of department and above after completion of the first undergraduate degree and after a number of years of service making these administrative levels in the class of 30-40. The age group of 45 years and more come in second place and this is acceptable, but from 30 years or less represented (9.7%) which is normal and logical as the members of this category are recent graduates and it is difficult to appointment or assume senior positions, while the fourth was 40-45 years old. (5.7%) of the sample of the study have a diploma as their scientific qualification, (58.3%) have a bachelor degree, (31.4%) have a master degree, and (4.6%) have a Ph.D. It is clear from the results that the majority of the samples in the ministry are holders of the bachelor's degree, and that there are a good number of higher education graduates, as evidenced by the fact that the ministry is keen to have its employees scientific qualifications correspond to the requirements of the position. Many of the employees of the bachelor's degree have held senior positions based on the length of their service in the ministry. The diploma, as it is

clear, has a low percentage, which indicates that their period of service in the ministry was long.

(29.0%) of the study sample had less than 10 years of service, (33.3%) their service ranged from 10 to less than 15 years, while 40.0% worked for 15 years or more. It is noted that the highest percentage of service years of 15 years and above, and this emphasizes the need for the majority of managers with a number of years of service more than 15 years, and this period makes managers have the ability and experience in dealing with the challenges facing them and the ability to resolve, and the ability to make critical decisions with confidence and stability.

In addition, 83.5% of the employees in the directorates have a professional level, a head of department (6.4%), an administrative deputy (7.3%) and a technical deputy (2.8%). The number of heads of departments is greater than that of deputies and directors of education, at the level of the directorates of the Ministry of Education and Higher Education. This is logical according to the structure of the work.

It is also clear that 56.1% of the employees in the ministry have a career level head of department (27.3%), director of department (15.2%), general manager / deputy general manager (1.5%) and deputy minister. The number of heads of departments is larger than the number of department managers, and the number of department managers is larger than that of general managers. Therefore, the number of department heads is greater than that of division heads. The heads of the departments are larger than the senior positions such as department directors, general managers or ministry agents at the ministry level, which is logical according to the structure of the work.

Analysis of paragraphs of the questionnaire

The T test was used to determine whether the average response was 3 or not. The results are shown in Table (12).

Table 12: The arithmetic average and the probability value (Sig) for all paragraphs of the reality of the MIS in the Ministry of Education

Paragraph	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)
The reality of administrative information systems in the Ministry of Education	3.37	67.47	6.56	*0.000

* The arithmetic average is statistically significant at the level of ($\alpha \leq 0.05$)

Table (12) shows the arithmetical mean of all paragraphs of the reality of administrative information systems in the Ministry of Education equal to (3.37) (the total score of 5), i.e., the relative arithmetic average is 67.47%, the test value is 6.56 and the probability value (0.000). Therefore, all the paragraphs are statistically significant at the mean level, ITEE, 6 (6) pp. 7-35, DEC 2017

indicating that the average response rate has exceeded the average approval level, which means that there is a high degree of approval by the respondents on all the paragraphs in general. Indicating that there is a good and positive impact of the role of MIS on the quality of administrative decisions, as a result of the fact that the employees of the Ministry of Education and Higher Education of the study society use the

system in the decision-making process. Most of the work performed by the employees in the ministry is clearly dependent on administrative information systems, this shows that the efficiency of these systems is one of the most important and influential reasons for the quality of administrative decisions. (Al-Omari, 2009), (Mnasreiyah, 2004), (Al-Dweik, 2010), (Al-Omari, 2009) and (Al-Omari, 2009), (Al-Buhaisi, 2011), and (Bahloul, 2011).

▪ **Analysis of the areas of "support and attention of senior management"**

The T test was used to determine whether the average response rate had reached the intermediate approval level of 3 or not. The results are shown in Table (13).

Table 13: The arithmetic mean and the probability value (Sig) for each of the paragraphs of the "support and interest of senior management"

No.	Paragraph	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	Senior management is highly convinced of the importance of administrative information systems	3.53	70.62	5.69	*0.000	1
2.	The Ministry has a clear and easy-to-use management information system	3.44	68.89	5.56	*0.000	2
3.	The administrative information system available in the Ministry achieves the required operations with precision and proficiency	3.33	66.62	4.16	*0.000	3
4.	All employees are entitled to use the MIS used by the Ministry	3.08	61.67	0.99	0.163	6
5.	The senior management of the Ministry depends on the results of the MIS	3.22	64.34	2.59	*0.005	5
6.	The available administrative information system achieves adequate coordination among the various departments and departments of the Ministry	3.29	65.79	3.76	*0.000	4
7.	Management uses external entities to provide advice in the area of MIS as required	2.85	57.08	-1.77	*0.040	7
All paragraphs of the field together		3.25	65.06	4.03	*0.000	

* The arithmetic average is statistically significant at the level of ($\alpha \leq 0.05$)

From Table 13, the following can be drawn:

The arithmetic average of paragraph (1) equals (3.53) (the total score of 5), ie, the relative arithmetic mean (70.62%), the test value (5.69), and the probability value (sig) is 0.000, therefore this paragraph is statistically significant at the level ($\alpha \leq 0.05$), indicating that the average response rate for this paragraph has exceeded the average approval level of 3, which means that there is considerable agreement by the respondents on this paragraph. From the above, the researchers see that the senior management in the Ministry of Education and Higher Education has great conviction in the importance of administrative information systems. This is in line with the study of (Ramadan, 2009), (Arafat, 2007) and (Bahloul, 2011).

The arithmetic average of paragraph (7) is equal to (2.85), ie, the relative arithmetic mean (57.08%), the test value (-1.77), and the probability value (.sig) is equal to 0.040, therefore this paragraph is statistically significant at the level ($\alpha \leq 0.05$), indicating that the average response rate for this paragraph has fallen below the average approval level of 3, which means that there is little agreement by the sample members on this paragraph. From the above, the researchers found that the administration's use of external counseling

services was low. It is expected that this will entail high costs and amounts of money under the siege and economic crisis that the ministry is going through.

In general, the arithmetic mean is equal to (3.25), the relative arithmetic average is 65.06%, the test value is 4.03), and the probability value (.Sig) is 0.000. Therefore, the field of "senior management support" is statistically significant at the level ($\alpha \leq 0.05$), indicating that the average response rate for this field is significantly different from the average approval level of 3, which means that there is considerable agreement by the sample members on the paragraphs of this field.

The researchers believe that the senior management in the Ministry of Education and Higher Education supports and is interested in administrative information systems. The researchers attribute this to the fact that the senior management of the ministry consists of academically qualified staff and experienced people who can understand, understand and understand the importance of management information systems, The results are consistent with some studies such as (Ramadan, 2009), which showed the support and interest of senior management in the use of decision support systems, by providing the necessary requirements for using the system, and encouraging employees. In the

study of (Arafat 2007), there is a good level of understanding among senior management of the importance of decision support systems, while this result is different from (Ajayi and others, 2007), which found that senior management should work to support (Al-Fozan, 2003), in the presence of obstacles to the use of MIS, due to the lack of management understanding of these systems, and the study (Ahmed, 2007), which showed that it is necessary to take care of senior management To provide the necessary components to operate the accounting system efficiently and effectively. These studies indicate that there are societies that have

followed, followed and applied these developments, and other societies that have not given such studies an importance and understanding of the extent to which they need to be applied in their communities.

▪ **Analysis of the "Regulatory requirements for the use of computerized management information systems"**

The T test was used to determine whether the average response was 3 or not. The results are shown in Table (14).

Table 14: The arithmetic average and the probability value (Sig) for each of the paragraphs of the "Organizational requirements for the use of computerized management information systems"

No.	Paragraph	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	The information available matches the needs of the job.	3.39	67.89	4.82	*0.000	1
2.	The organizational structure allows easy flow of information between departments.	3.38	67.64	4.73	*0.000	2
3.	Senior management is involved in making any changes.	2.94	58.73	-0.70	0.243	7
4.	Relationship between departments and other departments is determined through written regulations.	3.25	65.00	2.94	*0.002	4
5.	The data and information in the Ministry are characterized by their quantity and ease of handling.	3.27	65.38	2.96	*0.002	3
6.	The regulations and procedures of the Ministry are transparent and clear.	3.15	63.03	1.72	*0.044	5
7.	The organizational structure of the Ministry is flexible	3.07	61.38	0.79	0.214	6
All paragraphs of the field together		3.21	64.19	3.06	*0.001	

* The arithmetic average is statistically significant at the level of ($\alpha \leq 0.05$)

From Table 14, the following can be drawn:

The arithmetic average of paragraph (1) is equal to (3.39) (the total score of 5), ie, the relative arithmetic mean (67.89%), the test value (4.82), and the probability value (sig) is 0.000, therefore this paragraph is statistically significant at the level ($\alpha \leq 0.05$), indicating that the average response rate for this paragraph has exceeded the average approval level of 3, which means that there is considerable agreement by the respondents on this paragraph. From the above, the researchers believe that the process of updating and continuous monitoring of data and information, and attention to administrative information systems by senior management, make the information commensurate with the needs of the job, and this is consistent with the study (Al-Omari, 2009) and the study (Ramadan, 2009).

The arithmetic average of paragraph (3) equals (2.94), ie, the relative arithmetic mean (58.73%), the test value (-0.70), and the probability value (.sig) is 0.243. Therefore, this paragraph is not statistically significant at ($\alpha \leq 0.05$), indicating that the average response rate of this paragraph is not significantly different from the average approval level of

3, which means that there is a moderate approval by the sample members of this paragraph.

In general, the arithmetic mean is equal to 3.21, the relative arithmetic mean is 64.19%, the test value is 3.06 and the probability value is 0.000. Therefore, the area of "regulatory requirements for the use of computerized management information systems" is statistically significant at ($\alpha \leq 0.05$), indicating that the average response rate for this field is significantly different from the average approval level of 3, which means that there is considerable agreement by the sample members on the paragraphs of this field.

From the above, it is clear that there is an interest and involvement of senior management in MIS, and ease of use of MIS, which helped to contribute to the rapid provision of information appropriate to all levels of management commensurate with the nature of each level. The results of this study were also summarized in the study (Ramadan, 2009), which showed that the organizational potential that helps in the use of decision support systems in the Ministry of Education is good, in terms of (Ghanim, 2004), which became the organizational level of the Department of Computerized Information Systems in the municipalities suitable for the beneficiaries of the system, and study

(Arafat, 2007) and that (Al-Omari, 2009), which found that the administrative requirements of computerized management information systems were good and that there was a significant impact and correlation between administrative and organizational requirements and decision making, (Abu Sabt, 2005) (Al-Fozan, 2003), which found that there is a strong relationship between the organizational level and the quality of decisions, and the study (Al-Saudi,

2006). There are administrative and regulatory obstacles facing the use of modern information systems.

▪ **Analysis of the "Physical Requirements for the Use of Computerized Information Systems"**

The T test was used to determine whether the mean response was averaged 3. The results are shown in Table (15).

Table 15: The arithmetic average and the probability value (Sig) for each of the paragraphs of the "Physical requirements available for the use of computerized management information systems"

No.	Paragraph	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	The appropriate computers are available for the required work.	3.84	76.86	9.99	*0.000	1
2.	Data entry is available to suit the needs of the ministry.	3.73	74.58	9.09	*0.000	2
3.	The means of producing information and the work needs of the Ministry are appropriate.	3.61	72.22	7.63	*0.000	3
4.	The network is compatible with the ministry's business needs.	3.59	71.86	7.79	*0.000	4
5.	Maintenance is done quickly when hardware or computer network malfunctions occur.	3.52	70.34	6.50	*0.000	5
6.	Senior management provides the requirements for operating information systems.	3.49	69.79	6.30	*0.000	7
7.	The senior management is keen to keep up with the latest developments in the field of information systems.	3.50	69.93	6.12	*0.000	6
All paragraphs of the field together		3.61	72.19	9.14	*0.000	

* The arithmetic average is statistically significant at the level of ($\alpha \leq 0.05$)

From Table (15) the following can be drawn:

The arithmetic average of paragraph (1) equals (3.84) (the total score of 5), ie, the relative arithmetic mean (76.86%), the test value (9.99), and the probability value (0.00) indicating that the average response rate for this paragraph has exceeded the average approval level of 3, which means that there is considerable agreement by the respondents on this paragraph. From the above, the researchers believe that computers are available in the required form, and that this is consistent with the study of Ramadan (2009), (Abu Sabt, 2005).

The arithmetic average of paragraph (6) equals (3.49), ie, the relative arithmetic average is 69.79%, the test value is 6.30, and the probability value (.Sig) is 0.000. Therefore, this is a statistical function at the level of ($\alpha \leq 0.05$) indicates that the average response to this paragraph has exceeded the average approval level of 3, which means that there is considerable agreement by the respondents on this paragraph.

In general, the arithmetic average is 3.61, the relative arithmetic average is 72.19%, the test value is 9.14 and the probability value is 0.000. Therefore, the field of "material requirements for the use of computerized management information systems" D is statistically significant at ($\alpha \leq 0.05$), indicating that the average response rate for this area is significantly different from the average approval level (3).

This means that there is considerable agreement by the respondents on the paragraphs of this field.

The two researchers believe that the available physical requirements are good and appropriate, as the Ministry of Education and Higher Education has worked to provide education for all and improve its quality, indicating that the senior management supports and cares to provide all the necessary and necessary needs of equipment and devices, (Al-Omari, 2009), which concluded that the material inputs of computerized management information systems were good, and (Al-Saudi, 2006), which concluded that respondents' perceptions of physical inputs were good and well available, and study (AL-Mahas, 2005), which found the impact of material inputs on the management and operation of computerized information systems, and (Abu Sabt, 2005), which concluded that the techniques and devices used in universities (Ramadan, 2009), which found that the available resources for the use of decision support systems are available well and effectively. These findings differed with (Ghoneim, 2004) study, which concluded that the equipment used in the current system cannot be considered The latest technology is used in the market, where there is a weakness in potential Yeh, which has a negative impact on the system can cover all aspects of work, study (Al-Fozan, 2003), where this study has found that

there are physical obstacles facing the use of management information systems as required.

▪ **Analysis of the "Software Requirements for the Use of Information Systems"**

The T test was used to determine whether the average response rate had reached the intermediate approval level of 3 or not. The results are shown in Table (16).

Table 16: The arithmetic mean and the probability value (Sig) for each of the paragraphs of the "Software Requirements for the Use of Information Systems"

No.	Paragraph	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	The software used is compatible with the work requirements of the ministry.	3.49	69.72	6.63	*0.000	3
2.	The software is updated to suit the need of work in the circuit.	3.52	70.34	6.93	*0.000	2
3.	The programs used are compatible with the devices used.	3.54	70.83	7.10	*0.000	1
4.	The effectiveness of the programs is evaluated by the employees on an ongoing basis.	3.15	62.92	1.70	*0.046	7
5.	All necessary instructions are available to run the programs, which helps in doing the work as required.	3.34	66.90	4.65	*0.000	5
6.	The system provides sufficient storage space for information.	3.47	69.31	5.69	*0.000	4
7.	The current system gives feedback.	3.20	64.03	2.45	*0.008	6
All paragraphs of the field together		3.39	67.74	6.02	*0.000	

* The arithmetic average is statistically significant at the level of ($\alpha \leq 0.05$)

From Table (16) we can draw the following:

The arithmetic average of paragraph (3) equals (3.54) (the total score of 5), ie, the relative arithmetic mean (70.83%), test value 7.10) and the probability value (.sig) is 0.000. Therefore this paragraph is statistically significant at level ($\alpha \leq 0.05$), indicating that the average response rate for this paragraph exceeded the average approval level of 3, which means that there is considerable agreement by the sample members on this paragraph. It is noted that the programs used with the devices are consistent with Al-Omari (2009). The arithmetic average of paragraph (4) equals 3.15, ie, the relative arithmetic average is 62.92%, the test value is 1.70, and the probability value is 0.46. Therefore, this paragraph is statistically significant at level ($\alpha \leq 0.05$) indicates that the average response level for this paragraph has exceeded the average approval level of 3, which means that there is considerable agreement by the sample members on this paragraph. It is noted that the effectiveness of the programs used in decision making is continuously evaluated by the employees, Helps to reach quality in decisions and this is consistent with the study (Ramadan, 2009).

In general, the arithmetic mean is 3.39, the relative arithmetic average is 67.74, the test value is 6.02), and the probability value (.Sig) is 0.000. Therefore, the field of "software requirements for the use of information systems" is considered to be statistically significant at level ($\alpha \leq 0.05$) indicating that the average response rate for this field is significantly different from the average approval score of 3, which means that there is considerable agreement by the sample members on the paragraphs of this area.

The researchers noted that the MIS programs used in the Ministry are modern and suitable to the requirements of the work, and are compatible with the devices used, and all the necessary instructions are available to operate the system. This is due to the role of senior management in the ministry with its attention to the software requirements and work on developing them. (Al-Omari, 2009), which showed that the sample members agreed that the MIS requirements were good, and (Ghoneim, 2004), which found a positive relationship between infrastructure and decision making, (2005), which found that there is a significant impact of technical inputs on the effectiveness of decision-making, and (Abu Sabt, 2005), which found the existence of modern techniques in the systems used, including the technical ones. (Al-Fozan, 2003), which found the existence of technical obstacles to the application of management information systems, and study (Ahmed, 2007), which reached the need to pay attention to the development of programs used in the operation of the accounting system, may be due to this agreement between This study and the other studies mentioned above are similar to the environment in which studies were conducted Previous.

▪ **Analysis of the "Human requirements for the use of computerized management information systems"**

The T test was used to determine whether the average response rate had reached the intermediate approval level of 3 or not. The results are shown in Table (17).

Table 17: The arithmetic average and the probability value (Sig) for each paragraph of the "Human requirements for the use of computerized management information systems"

No.	Paragraph	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	The staff of the IT department answer my questions.	3.50	70.07	6.42	*0.000	2
2.	The person responsible for the information system is contacted directly.	3.44	68.83	5.32	*0.000	3
3.	Employees in the current system perform their duties on time.	3.43	68.69	7.04	*0.000	4
4.	Employees in the IT department understand the different needs of the information system.	3.39	67.86	5.55	*0.000	5
5.	The qualifications of employees in the information system are commensurate with the nature of the work entrusted to them.	3.53	70.69	6.63	*0.000	1
6.	Employees are involved in diagnosing the strengths and weaknesses of information systems.	3.19	63.75	2.40	*0.009	6
All paragraphs of the field together		3.42	68.33	7.01	*0.000	

* The arithmetic average is statistically significant at the level of ($\alpha \leq 0.05$)

From Table (17) the following can be drawn:

The arithmetic average of paragraph (5) equals (3.53) (the total score of 5), ie, the relative arithmetic mean (70.69%), the test value (6.63), and the probability value (sig) is 0.000. Therefore this paragraph is statistically significant at level ($\alpha \leq 0.05$), indicating that the average response rate for this paragraph has exceeded the average approval level of 3, which means that there is considerable agreement by the respondents on this paragraph. It is worth noting that the qualifications of the employees of the information system are consistent with the nature of the work entrusted to them. This is logical because the nature of the work entrusted to them requires specialized people to accomplish what they are assigned to the best. This is in line with (Abu Sabt, 2005), (Halabi, 2010).

The arithmetic average of paragraph (6) equals (3.19), ie, the relative arithmetic mean (63.75%), the test value is 2.40, and the probability value (.Sig) is 0.009. Therefore, this paragraph is statistically significant at level ($\alpha \leq 0.05$). Indicates that the average response to this paragraph has exceeded the average approval level of 3, which means that there is considerable agreement by the respondents on this paragraph. It is already noted that staff participate in the diagnosis of strengths and weaknesses in information systems.

In general, the arithmetic mean is 3.42, the relative arithmetic average is 68.33%, the test value is 7.01, and the probability value is 0.000. Therefore, the field of "human requirements for the use of computerized management

Table 18: The arithmetic mean and the probability value (Sig) for each of the paragraphs of the "quality of administrative decisions"

No.	Paragraph	SMA	Relative arithmetic mean	Test value	Probability Value (Sig.)	Ranking
-----	-----------	-----	--------------------------	------------	--------------------------	---------

information systems" is statistically significant at ($\alpha \leq 0.05$), indicating that the average response rate for this field is significantly different from the average approval level of 3, which means that there is considerable agreement by the sample members on the paragraphs of this field.

It is worth noting that there is a technical department with the necessary competence to perform the tasks assigned to them. The members of this department understand the needs of others from this system, and this may be due to the good relationship between technical officials and users of these systems.

These results were agreed with some studies such as (AL-Mahasneh, 2005), which showed the importance of the human element and its role in the success of the role of MIS, and the need to involve the staff in the evaluation and development of the system in order to integrate the administrative side with the theoretical, and study (Al-Omari, 2009), (Abu Sabt, 2005), which showed that the employees in the current system are highly specialized and have a level of technical and administrative expertise commensurate with their tasks and receive periodic training to develop their abilities.

▪ **Analysis of paragraphs "Quality of administrative decisions in the Ministry of Education"**

The T test was used to determine whether the average response rate had reached the intermediate approval level of 3 or not. The results are shown in Table (18).

1.	There is a harmony between the quality of the administrative decisions and the general policy of the ministry.	3.11	62.22	1.32	0.095	8
2.	The administrative decisions taken are the objectives of the Ministry.	3.28	65.52	3.48	*0.000	3
3.	Administrative decisions taken include all aspects of the ministry's work.	3.34	66.81	4.38	*0.000	1
4.	The decision is less risky.	3.17	63.31	2.30	*0.011	4
5.	There is complementarity and coherence between decisions.	3.13	62.52	1.49	0.070	6
6.	The information available is flexible, leading to quick decision making.	3.13	62.50	1.65	*0.051	7
7.	A large number of alternatives are available.	2.97	59.30	-0.43	0.333	11
8.	Positive alternatives are classified according to their importance.	3.08	61.54	0.95	0.173	9
9.	The decisions taken shall be based on an information network covering all departments and departments of the Ministry.	3.33	66.67	4.10	*0.000	2
10.	Check the decisions taken by the administrative excellence factor of the ministry.	3.16	63.19	1.89	*0.031	5
11.	Decisions have the persuasion factor and satisfaction of the implementing staff.	2.99	59.72	-0.16	0.435	10
All paragraphs of the field together		3.15	63.09	2.36	*0.010	

* The arithmetic average is statistically significant at the level of ($\alpha \leq 0.05$)

From Table (18) the following can be drawn:

The arithmetic average of paragraph (3) equals (3.34) (the total score of 5) ie the relative arithmetic mean (66.81%), the test value of 4.38 and the probability value of Sig (0.000). Therefore this paragraph is statistically significant at level at ($\alpha \leq 0.05$), indicating that the average response to this paragraph has exceeded the average approval level of 3, which means that there is considerable agreement by the respondents on this paragraph.

The arithmetic average of paragraph (7) equals 2.97 (ie, the relative arithmetic average is 59.30%, the test value is -0.43) and the probability value (.sig) is 0.333. Therefore, this paragraph is considered statistically significant at the level of ($\alpha \leq 0.05$), indicating that the average response rate for this paragraph is not different from the average approval level of 3, which means that there is a moderate agreement by the sample members on this paragraph.

In general, the arithmetic mean is equal to 3.15, the relative arithmetic average is 63.09%, the test value is 2.36, and the probability value is 0.010. Thus, the quality of administrative decisions in the Ministry of Education is statistically significant at ($\alpha \leq 0.05$), indicating that the average response rate for this field is significantly different from the average approval level of 3, which means that there is considerable approval by individuals The sample on the paragraphs of this field.

It is noted that the consensus is due to the use of computerized management information systems and their important role in improving the quality of decisions. Most of the work of the Ministry's staff is based on management

information systems, which in itself is evidence that management information systems play an important role in achieving Quality in decision, the use of these systems in turn leads to the completion of the work quickly and accurately and reliably and all this works to increase the quality of the decisions in terms of quality.

These findings were consistent with some studies (AL-Mahasneh, 2005), which found an important impact on the efficiency of MIS in the effectiveness of decision-making and (Al-Fozan, 2003) (Mnasreiyah, 2004) that the management decisions taken in the company are highly effective. The study differed with some studies (Al-Saudi, 2006), which found that MIS affects performance moderately.

Test the hypotheses of the study

H1 test: There is no statistically significant role at the level of significance ($0.05 \geq \alpha$) for computerized management information system adaptations in improving the quality of administrative decisions in the Ministry of Education - Gaza Strip.

Table 19 shows that the correlation coefficient is 7.44 and that the probability value (Sig) is equal to 0.000 and is less than the significance level ($0.05 \geq \alpha$). This indicates a statistically significant relationship between the uses of MIS in improving Quality of administrative decisions in the Ministry of Education - Gaza Strip.

The researchers attribute this to the fact that the application and use of administrative information systems in the Ministry of Education is one of the main factors to achieve quality in administrative decisions, these systems are the most influential on the quality of decisions.

These findings were agreed upon by (Abu Sabt, 2005), (Ramadan, 2009), and (Hazima, 2009), which showed that

information systems and techniques have an effective role in decision-making in government institutions, and (Jaradat and others, 2009), which emphasized the close link between

management information systems and quality management decision making process, and (Al-Dweik 2010).

Table 19: The correlation coefficient between the use of MIS and the improvement of the quality of administrative decisions

Hypotheses	Pearson Coefficient Of Correlation	Probability Value (Sig.)
There is no statistically significant role at the level of ($\alpha \leq 0.05$) for computerized management information systems (MIS) in improving the quality of administrative decisions in the Ministry of Education - Gaza Strip.	.744	*0.000

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

It is divided into several hypotheses:

H1-1 test: There is no statistically significant role at the level of ($0.05 \geq \alpha$) significance of the physical variables available in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip.

Table (20) shows that the correlation coefficient is (.759), and that the probability value (Sig) is 0.000 and is less than the significance ($\alpha \leq 0.05$). This indicates a statistically significant relationship between the physical requirements available in improving the quality Administrative Decisions in the Ministry of Education, Gaza Strip.

This may be due to the important role of physical requirements in the success of MIS, in terms of availability

Table 20: The correlation between the physical requirements available in improving the quality of administrative decisions

Hypotheses	Pearson Coefficient Of Correlation	Probability Value (Sig.)
There is no statistically significant role at the level of ($\alpha \leq 0.05$) for the physical dispositions available in improving the quality of administrative decisions in the Ministry of Education and the Gaza Strip.	.759	*0.000

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

Second sub-hypothesis test: There is no statistically significant role at the level of ($\alpha \leq 0.05$) significance of the available software available in improving the quality of administrative decisions in the Ministry of Education and the Gaza Strip.

Table 21 shows that the correlation coefficient is 702 and that the probability value (Sig) is 0.000, which is less than the significance level ($\alpha \leq 0.05$). This indicates a statistically significant relationship between the available software requirements in improving the quality Administrative Decisions in the Ministry of Education, Gaza Strip.

Table 21: The correlation coefficient between the available software requirements in improving the quality of administrative decisions

Hypotheses	Pearson Coefficient Of Correlation	Probability Value (Sig.)
------------	------------------------------------	--------------------------

of hardware and equipment necessary to accomplish the required work, availability of input and output devices commensurate with business needs, and the modernity and harmony of the network With the needs of the work and the senior management's keenness to keep abreast of all the technical developments, all of which have a significant impact on the effectiveness of the MIS, and thus reflect on the quality management decisions. (Al-Mahasneh, 2005), (Al-Omari, 2009), and (Al-Qurshi, 2010), which showed that the perceptions of the respondents towards (Abu Sabt, 2005) Physical requirements came high.

This shows that there is a relationship between the software requirements in improving the quality of management decisions and shows the importance of the software requirements for the use of computerized management information systems. The availability of software requirements from constantly occurring programs and the compatibility of these programs with the devices used ultimately lead to quality decisions highly efficient.

(Al-Qumshi, 2010), and the study of (Al-Omari, 2009), Abu Sabt (2005) and Ghoneim (2004).

There is no statistically significant role at the level of ($\alpha \leq 0.05$) Significance of the available software available in improving the quality of administrative decisions in the Ministry of Education and the Gaza Strip.	.702	*0.000
--	------	--------

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

H1-3 Test: is no statistically significant role at the level of ($0.05 \geq \alpha$) for the human tolerances available in improving the quality of administrative decisions in the Ministry of Education and the Gaza Strip.

Table (22) shows that the correlation coefficient is 8.40, and that the probability value (Sig) is equal to 0.000 and is less than the significance level ($\alpha \leq 0.05$). This indicates a statistically significant relationship between the human requirements available in improving the quality

Administrative Decisions in the Ministry of Education, Gaza Strip.

The researchers agree that it is important to achieve the quality of management information systems in the administrative decisions to have a qualified and competent human staff with sufficient capacity and understanding to solve problems, queries and weaknesses. This study is consistent with a series of studies such as study (AL-Mahasneh, 2005) (Ghunaim, 2004), Arafat (2007), (Al-Omari, 2009), and (Al-Qurshi, 2010).

Table 22: correlation between available human requirements and improvement of the quality of administrative decisions

Hypotheses	Pearson Coefficient Of Correlation	Probability Value (Sig.)
There is no statistically significant role at the level of ($\alpha \leq 0.05$) for the available human tolerances in improving the quality of administrative decisions in the Ministry of Education and the Gaza Strip.	.840	*0.000

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

H1-4 test: There is no statistically significant role at the level of ($0.05 \geq \alpha$) of the organizational variables available in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip.

Table (23) shows that the correlation coefficient is (6.96) and that the probability value (Sig) is equal to 0.000 which is less than the significance level ($\alpha \leq 0.05$). This indicates a statistically significant relationship between the regulatory requirements available in improving the quality Administrative Decisions in the Ministry of Education, Gaza Strip. It is noted that there is a relationship between the regulatory requirements available to improve the quality of

management decisions in terms of the appropriate organizational climate for the use of computerized management information systems, the participation of senior management and support for the success of management information systems, and the organizational structure to facilitate information flow between administrations, And the existence of written regulations that define the relationship between departments and departments, will eventually lead to the quality of administrative decisions. This is consistent with (Abu Sabt, 2005), Ghunim (2004), (Al-Omari, 2009), and (AL-Mahasneh, 2005).

Table 23: The correlation between the regulatory requirements available in improving the quality of administrative decisions

Hypotheses	Pearson Coefficient Of Correlation	Probability Value (Sig.)
There is no statistically significant role at the level of ($\alpha \leq 0.05$) of the organizational variables available in improving the quality of administrative decisions in the Ministry of Education and the Gaza Strip.	.696	*0.000

* The correlation was statistically significant at the mean level ($\alpha \leq 0.05$)

H1-5 test: There is no significant statistical role at the level of ($0.05 \geq \alpha$) significance to support the attention of senior management in improving the quality of administrative decisions in the Ministry of Education in Gaza Strip.

Table (24) shows that the correlation coefficient is (.800), and that the probability value (Sig) is 0.000) which is less

than the significance level ($\alpha \leq 0.05$). This indicates a statistically significant role between the support and attention of senior management in improving Quality of administrative decisions in the Ministry of Education, Gaza Strip. The support and attention of the senior management of management information systems is important to achieve quality improvement in management decisions. The quality of decisions will only come about if senior management

feels the importance of the role played by the MIS and has developed it. These results were agreed upon with some studies such as (Arafat, 2007) and (Al-Qurshi, 2010), which emphasized the support of senior management for users by

encouraging them to use the system and understanding their different needs. (Al-Fozan, 2003) and (Al-Saudi, 2006).

Table 24: correlation coefficient between support and attention of senior management in improving the quality of administrative decisions

Hypotheses	Pearson Coefficient Of Correlation	Probability Value (Sig.)
There is no statistically significant role at the level of $(\alpha \leq 0.05)$ to support the attention of senior management in improving the quality of administrative decisions in the Ministry of Education and the Gaza Strip.	.800	*0.000

* The correlation was statistically significant at the mean level $(\alpha \leq 0.05)$

6. RESEARCH RESULTS AND RECOMMENDATIONS

6.1 Research Results

After the statistical analysis of the study tool, the following results were obtained:

1. Results were found to be supported by senior management at the Ministry of Education and Higher Education (65.06%).
2. The results showed that the physical requirements for the use of Management Information Systems in the Ministry of Education and Higher Education are available at 72.19%.
3. The results indicated that the available software requirements for the use of Management Information Systems in the Ministry of Education and Higher Education are available at 67.74%.
4. The results found that human requirements for the use of Management Information Systems were available at 68.33%.
5. The results showed that the regulatory requirements that assist in the use of Management Information Systems in the Ministry of Education and Higher Education are available at (64.19%).
6. The results showed a relationship between the support and attention of senior management to the use of Management Information Systems and the quality of administrative decisions, since the correlation coefficient equals 800
7. The study showed a relationship between the organizational requirements available for the use of Management Information Systems and the quality of administrative decisions in the Ministry of Education. The correlation coefficient equals 696.
8. The results showed a correlation between the physical requirements available for the use of administrative information systems and the quality of administrative decisions in the Ministry of Education. The coefficient of correlation is (.759)
9. The results highlighted a relationship between the software requirements available for the use of

Management Information Systems and the quality of administrative decisions in the Ministry of Education, the coefficient of correlation is (720).

10. The results concluded that there is a relationship between the human requirements available for the use of Management Information Systems and the quality of administrative decisions. The correlation coefficient is .840.
11. The results showed that there is a relationship between the quality of administrative decisions and the use of administrative information systems in the Ministry of Education.

6.2 Research Recommendations

The following is a set of recommendations based on the results of the study, these recommendations are:

1. Emphasize that in order for the Ministry of Education and Higher Education to be able to cope with the rapidly changing external environmental changes and the limited time available for the collection and analysis of information, this means that administrative information systems should be used.
2. Increasing the interest and support of senior management to implement and use the Management Information Systems in the ministry effectively and provide all necessary to achieve this, for its important role in accomplishing the work accurately and proficiency and access to quality decisions.
3. To work on increasing coordination between the various departments and departments of the ministry because of its great impact on the success of the ministry in achieving its objectives.
4. Increase the attention to regulatory requirements through the participation of senior management working in the event of any change, and work to increase the transparency and clarity of the regulations and procedures in the ministry, and work to increase the flexibility of the organizational structure.
5. Engage employees when making changes, and take their suggestions about the system.

6. Increased attention to material and software requirements through the keenness of senior management to keep abreast of technological developments in the field of systems and provide them with all the requirements for operating the system, and provide all the necessary instructions to run the programs.
7. Increased attention to human requirements for the use of Management Information Systems by increasing the understanding of the department's employees and their participation in the development of Management Information Systems objectives and programs.
8. The Department uses external entities to provide advice in the area of Management Information Systems as required.
9. To increase the harmony between the quality of the administrative decisions and the general policy of the Ministry and to increase the attention to administrative information systems to reduce the degree of risk in decisions.

References

- [1] Abdullah, Rabeh (2012): "The Administrative Decision", Al-Hamed Publishing House and Publishing House, First Edition, Amman, Jordan.
- [2] Abed Rabbo, Raed (2013): "Principles of Management Information Systems", Al-Janadriyah for Publishing and Distribution, First Printing, Amman.
- [3] Abu Naser, S. S., & Al Shobaki, M. J. (2016). Computerized Management Information Systems Resources and their Relationship to the Development of Performance in the Electricity Distribution Company in Gaza. *European Academic Research*, 9(8), 6969-7002.
- [4] Abu Naser, S. S., & Al Shobaki, M. J. (2016). Enhancing the use of Decision Support Systems for Re-engineering of Operations and Business-Applied Study on the Palestinian Universities. *Journal of Multidisciplinary Engineering Science Studies (JMESS)*, 2(5), 505-512.
- [5] Abu Naser, S. S., & Al Shobaki, M. J. (2016). Requirements of using Decision Support Systems as an Entry Point for Operations of Re-engineering in the Universities (Applied study on the Palestinian universities in Gaza Strip). *World Wide Journal of Multidisciplinary Research and Development*, 2(4), 32-40.
- [6] Abu Naser, S. S., & Al Shobaki, M. J. (2016). The Impact of Management Requirements and Operations of Computerized Management Information Systems to Improve Performance (Practical Study on the employees of the company of Gaza Electricity Distribution). Paper presented at the First Scientific Conference for Community Development, 5-6 November, 2016.
- [7] Abu Sabt, Sabri Fayek Abdel-Jawad (2005): "Evaluation of the Role of Management Information Systems in Administrative Decision Making in Palestinian Universities in the Gaza Strip", Master Thesis (unpublished), Faculty of Business Administration, Islamic University, Gaza.
- [8] Ahmed, Bassam Mahmoud (2007): "The Role of Accounting Information Systems in Rationalizing Administrative Decisions in Palestinian Business Establishments", Master Thesis (unpublished), Islamic University, Gaza, Palestine.
- [9] Ajayi, and others, (2007), The Use of Management Information System in Decision Making in the South – West Nigerian Universities, master thesis, University of Ado-Ekiti, Nigeria.
- [10] Al Shobaki, M. J., & Abu Naser, S. S. (2016). Decision support systems and its role in developing the universities strategic management: Islamic university in Gaza as a case study. *International Journal of Advanced Research and Development*, 1(10), 33-47.
- [11] Al Shobaki, M. J., & Abu Naser, S. S. (2016). Performance development and its relationship to demographic variables among users of computerized management information systems in Gaza electricity Distribution Company. *International Journal of Humanities and Social Science Research*, 2(10), 21-30.
- [12] Al Shobaki, M. J., & Abu Naser, S. S. (2017). Usage Degree of the Capabilities of Decision Support System in Al-Aqsa University of Gaza. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(2), 33-48.
- [13] Al Shobaki, M. J., Abu Amuna, Y. M., & Abu Naser, S. S. (2016). The impact of top management support for strategic planning on crisis management: Case study on UNRWA-Gaza Strip. *International Journal of Academic Research and Development*, 1(10), 20-25.
- [14] Al Shobaki, M. J., Abu Amuna, Y. M., & Abu Naser, S. S. (2017). Strategic and Operational Planning As Approach for Crises Management Field Study on UNRWA. *International Journal of Information Technology and Electrical Engineering*, 5(6), 43-47.
- [15] Al Shobaki, M. J., Abu Naser, S. S., & Bedair, R. A. (2010). The Relationship between Decision-Support Systems and Re-Engineering in the Palestinian Universities in Gaza Strip. Al-azhar University Gaza, Palestine.
- [16] Al Shobaki, M. J. (2017). The impact of the administrative dimensions of the decision support systems in the re-engineering of the Palestinian universities in Gaza Strip from the standpoint of employees. *The Arab Journal For Quality Assurance In Higher Education* 10 (2017)
- [17] Al Shobaki, M. J. (2017). The Impact of the Use of Decision Support Systems in the Re-Engineering in the Palestinian Universities in Gaza Strip. Fifth International Conference Centre London, 18 to 20 April 2016.
- [18] AL-Abadi, Hashem and Al-Ardhi, Jalil (2012): "Information Management Systems Strategic Perspective", Amman, Dar Al-Safa Publishing and Distribution, First Edition.

- [19] Al-Ajami, Mohammed (2010). "Modern Trends in Administrative Leadership and Human Development", Dar Al Masirah Publishing, Distribution and Printing, Second Edition, Amman, Jordan.
- [20] Al-Alaq, Bashir (2008): "Modern Management of theories and Concepts", Al-Yazuri Publishing and Distribution, Amman.
- [21] Al-Buhaisi, Essam (2011): "Characteristics of Information Systems and their Effect on the Choice of Strategic Competition in the Higher and Middle Administrations - Applied Study on Commercial Banks Operating in the Gaza Strip".
- [22] Al-Dweik, Mesbah (2010): Computerized Health Information Systems and their Impact on Administrative and Medical Decisions - Applied Study on Gaza European Hospital, Master Thesis (unpublished), Faculty of Commerce, Islamic University, Gaza, Palestine.
- [23] Al-Fozan, Rashed (2003): "Modern Information Systems and their Impact on Employee Performance", Master Thesis, Naif Arab Academy for Security Sciences, Saudi Arabia
- [24] Al-Halabi, Dia (2010): "Computerized Information Systems and Their Impact on Decentralization - An Empirical Study on the Ministry of Finance in the Gaza Strip", Master Thesis (unpublished), Islamic University, Gaza, Palestine.
- [25] Alian, Rabhi (2010): "Administrative Operations", Amman, Dar Al-Safa for Publishing and Distribution, First Edition.
- [26] Al-Jarjawi, Ziad (2010): "Methodological Rules for Building the Questionnaire", Second Edition, Al-Jarrah Press, Palestine.
- [27] AL-Mahasneh, Mohamed (2005): "The Effect of Information Systems Effectiveness on the Effectiveness of Decision Making - A Field Study in the Jordanian Customs Department", Jordanian Journal of Business Administration, Volume 1, Issue 1.
- [28] Al-Mandil, Khalid (2003): "Centralization and Decentralization in Decision Making and its Relationship to Job Performance - Field Study on Reform Institutions in Riyadh City", Naif Arab University for Security Sciences.
- [29] Al-Omari, Ayman (2009): Effect of Computerized Information Systems on the Performance of Workers in the Palestinian Telecommunications Company, Master Thesis (unpublished), Islamic University, Gaza, Palestine.
- [30] Al-Qurshi, Najwan (2010): "The Impact of Computerized Information Systems on the Performance of Employees: A Field Study of a Sample of Workers of Wi-Fi Company", Master Thesis (unpublished), Aden University, Yemen.
- [31] Al-Salmi, Alaa, Al-Kilani, Osman, Al-Bayati, Hilal (2012): "Fundamentals of Management Information Systems", Dar Al-Maa'ah for Publishing and Distribution, Fourth Edition, Jordan.
- [32] Al-Saudi, Mousa (2006): "The Impact of Computerized Information Systems on the Performance of Employees in the Social Security Institution - Field Study", Journal of Administrative Sciences, Studies 33, No.1.
- [33] Al-Shibli, Haitham and Al-Nsour, Marwan (2009): "Contemporary Facilities Management", Dar Safa for Publishing and Distribution, First Printing, Amman, Jordan
- [34] Arafat, M.B., (2007), Evaluation of Managerial Requirements toward Utilization of Decision Support Systems (DSS) In Palestinian (PM) I the Gaza Strip, master thesis, Islamic University, Gaza, Palestine.
- [35] Awwad, Fathi (2012): "Business Management and Managerial Functions in Contemporary Institutions", Dar Safa for Printing, Publishing and Distribution, First Edition, Amman, Jordan.
- [36] Bahloul, Mohammed (2011)"The Role of Marketing Information System Technology in the Decision Making Process Case Study: The Banking Sector in Gaza Strip "Islamic University of Gaza.
- [37] Faraj Allah, Muhammad Mousi (2011): "The Role of Accounting Information in the Making of Administrative Decisions under Uncertainty Conditions: An Empirical Study on Banks Operating in Gaza", Master Thesis (unpublished), Islamic University, Gaza, Palestine.
- [38] Gupta, A K, Sharma, J K (1997) "Managements of Systems", Rajiv Beri for Macmillan India Limited, New Delhi.
- [39] Jaradat, Abdel Nasser, and others (2009): "The Role of Management Information Systems in the Quality of Administrative Decision Making - An Empirical Study in the Housing Bank for Trade and Finance", Tishreen University Journal of Research and Scientific Studies, Economic and Legal Sciences Series, Volume 31, No. 1.
- [40] Kassem, Abdul Razzaq (2004): "Analysis and Design of Accounting Information Systems", Dar Al Thaqafa Library for Publishing and Distribution, First Printing, Amman.
- [41] Mahmoud, Raafat (2012): "The Idea of Transformation in Administrative Decisions", University Thought House, First Edition, Alexandria, Egypt.
- [42] Megginson, Leon C., Mosley, Donald, Jr., Paul H. Pietri (1989)" Management- Concepts and Application", Harper and Row Publishers, Third Edition, New York.
- [43] Mnasreiyah, Ismail (2004): "The Role of Management Information Systems in Enhancing the Effectiveness of Administrative Decision Making Process - A Case Study of the Algerian Aluminum Company", Master Thesis (Unpublished), Mohamed Boudiaf University of Massila, Faculty of Business Sciences, Algeria.
- [44] Mohammed, Muwaffaq (2001): "Management Principles, Theory and Functions", Hamed Publishing and Distribution, First Edition, Amman, Jordan.
- [45] Ramadan, Fadwa Mohamed (2009): "The Impact of Using Decision Support Systems on Performance

Development An Empirical Study on the Ministry of Education and the Gaza Strip Governorates" Master Thesis (unpublished), Islamic University, Gaza, Palestine.

[46] www.mohe.gov.ps

[47] Yassin, Ghaleb (2006): "Decision Support Systems", Dar Al-Maaishah for Publishing and Distribution, First Edition, Amman, Jordan.