International Journal of Advanced Research and Development
ISSN: 2455-4030, Impact Factor: RJIF 5.24
www.advancedjournal.com
Volume 1; Issue 10; October 2016; Page No. 33-47

Decision support systems and its role in developing the universities strategic management: Islamic university in Gaza as a case study

Mazen J Al Shobaki, Samy S Abu Naser

Faculty of Engineering & Information Technology, Al- University, Gaza, Gaza-Strip, Palestine

Abstract

This paper aims to identify the decision support systems and their role on the strategic management development in the Universities- Case Study: Islamic University of Gaza. The descriptive approach was used where a questionnaire was developed and distributed to a stratified random sample. (230) questionnaires were distributed and (204) were returned with response rate (88.7%).

The most important findings of the study: The presence of a statistically significant positive correlation between the decision support systems and strategic management in the Islamic University in Gaza, and this shows that there is a role for decision support systems in strategic management development. The senior management is convinced of the importance of strategic management of the organization, and this conviction paid to clearly understand the process of the development of strategic management and thus led to a commitment to this process to improve its performance. There is an impact on the strategic management of the capabilities available for the use of decision support systems, and the type of decision support systems used, while there is little effect of top management support for the use of decision support systems. Also, the results showed that there were no statistically significant differences between the averages of the respondents answers attributed to personal data.

The research also concluded a series of recommendations: The Islamic University of Gaza need to develop its infrastructure of decision support systems when it develops the strategic management. It should increase its interest in organizational potential through the necessity of a separate unit for decision support systems. As well as increased interest in the physical and technical capabilities available to decision support systems through continuity in keeping pace with technological means and techniques, continued support of senior management in the organization of strategic management for its positive role on decision support systems, that senior management will continue in the organization in creating a culture of strategic management, and it should encourage employees to participate in the strategic management process.

Keywords: Decision support systems, Strategic, Strategic Management, Palestinian universities, Islamic University of Gaza

Introduction

Business organizations face many challenges as a result of the changes, scientific, the rapid and persistent technical developments. In front of those hectic challenges, the traditional management operations and means become incapable of making the organization able to compete, but the strategic cases in light of the dramatic changes in the information, communications, technology, and in light of the rapid changes in the work of the organizations environment, thus the use of information systems and decision support systems took strategic dimension affecting their ability to achieve competitive advantage.

The importance of the strategic management of the keenness of both organizations to improve and develop their performance to reach the superior performance, and considering that the universities are the main gate from which the contemporary societies go through to the progress in science and technology, and there are many challenges facing the universities, making it imperative upon be operated in accordance with the scientific and clear methodology, and does not waste the time, effort, and money randomly, so as to help it increase its effectiveness and efficiency, as reflected in the quality of services provided.

The researchers have found their stray in the strategic management approach which represents an approach that is characterized by modernity, leadership, and its operations and means, and the ability to increase the competitiveness of the organization and improve its performance (AL-Dory, 2005) [23]. This method adopted by most of the business organizations in developed countries and some emerging countries the path of growth and has had a significant impact on the superiority and excellence.

It is true that some organizations may succeed as a result of chance in the short term without serious practice of strategic management, but in the long, what remains are the organizations that practiced it seriously (Abu Naem, 1993) [4]. Since the improvement of university performance is a global interest in all countries and added to that any society that manages its institutions and vital programs not only effectively and efficiently but fairly and innovatively are one of the most important characteristic of any community (Al-Khatib, 2001; Abu Naser & Sulisel, 2000; Abu Naser *et al*., 2016; Naser *et al*. 2016) [25, 7, 5, 6, 8, 10, 11, 15, 16, 55, 58]. Universities are facing a large number of internal and external complex situations, so we think that universities resort to planning before implementing of administrative operations and designing its structures that commensurate with the circumstances surrounding them, and since they have an increased interest in strategic management as an effective tool in helping organizations to invest in internal power

factors and avoid external threats, which makes it imperative for these organizations to use contemporary management techniques (Abu Naser *et al*., 2016; Abu Naser *et al*. 2010) [5, 6, 8, 10, 11, 15, 16, 9].

This method adopted by most of the business organizations in developed countries and emerging countries in the way of growth and it has the greatest effect on their superiority and excellence (Naser *et al*., 2015; Naser *et al*. 2012; Al Shobaki and Abu Naser, 2016) [56, 57, 15, 16]. Based on that, the researchers are carrying out the study of the decision support systems and their role in the strategic management development in Universities - Islamic University of Gaza as a case study.

Study Problem

Higher Education is facing fluctuations and great challenges, and because of the times in which we live by the speed of change and renewal in accordance with the knowledge of the structure of the additions and changes thereto, the university today and on continuous basis need to review the management structures and objectives so that they can diagnose problems and prepare the proper strategic planning feature.

Palestinian universities are facing many difficulties and problems: the presence of deficiencies in the use of technology in various administrative and educational activities, the weakness of the circulation of information and communication to decision makers accurately, quickly, and in time (AL-Attar, 2006) [20], the weakness of institutional work and the low level of authority, lack of attention to human resource development (Abdul El-Ilah, 2006) [1], poor practices and internal management processes, and lack of clarity of plans and policies, and the weakness of the continuous operations, weakness of monitoring the results and the need to improve performance through the adoption of modern management models (Banat, 2002) [39], weakness of the ability of employees in the Palestinian universities in Gaza Strip on the effective employment of technology information in the decision-making process (Al-Masry, 2007) [28].

Based on the above, we can formulate the problem of the study through the following main question: what is the role of decision support systems in strategic management in the development of Palestinian universities?

Previous studies

1. Study of (Abu Naser and Al Shobaki, 2016) [5, 6, 8, 10, 11, 15, 16], which aimed to identify the use of decision support systems as an entry point for operations of re-engineering in the Palestinian universities in Gaza Strip. The researchers used the method of questionnaire to collect data, and the researchers used a sample stratified random way, were (350) questionnaire distributed on the research sample and (312) questionnaires were collected back (89.1%). The study results showed that the most important ones are: there exists statistically significant impact at the level of significance ($\alpha \leq 0.05$) for physical requirements, human requirements. Technical requirements and regulatory requirements. The results showed also, the presence of statistically significant differences between the averages of the study sample estimates on the use of decision support systems as an entry point for operations of re-engineering in the Palestinian universities in Gaza Strip due to the variable sex in favor of males requirements. Furthermore, the results showed the existence of differences to the variable name of the university and each area of study for the benefit of the Islamic University then Al-Azhar University and then Al-Aqsa University.
2. Study of (Abu Naser and Al Shobaki, 2016) [5, 6, 8, 10, 11, 15, 16], which aimed to promote the use of decision support systems and Re-engineering of Operations and Business - Applied Study of the Palestinian universities in Gaza. This study was applied on Palestinian University in Gaza strip, Palestine. The overall findings of the current study suggest that no statistically significant impact on top management support to promote the use of decision support systems in the Re-engineering of Operations and Business at the universities in the Gaza Strip, the results highlighted that there is a statistically significant effect on the impact of decision support user systems type to promote the use of decision support systems in Re-engineering of Operations and Business at Palestinian universities in the Gaza Strip, and that there are statistically significant differences between the mean study sample estimates of the impact of the decision support systems Re-engineering of Operations and Business in Palestinian universities in Gaza due to the variable Gender in favor of males, and the existence of differences for the age variable relative to the field of "senior management support for the use of decision support systems" by the respondents, aged (45-55 years) and (55) years and over, and the presence of differences for the variable level of education relative to the field of "senior management support for the use of decision support" by the respondents, who hold master's degrees, and the existence of differences to the variable name of the university systems and that each area of study for the benefit of the Islamic University, Al-Azhar University and Al-Aqsa University, and the existence of differences for the variable years for service to the field of "senior management support for the use of decision support systems" by the respondents, who have service between (15-20) years and 21 years and over.
3. Study of (Abu Taim, 2015) [13], which aimed to recognize the decision support systems and their relationship to the effective administrative decisions in the universities in Gaza. The results of the study showed that the physical resources are adequate with business requirements, Palestinian universities have clear organizational structures and they support the decision support systems, ease of procedures and communication between the different departments, and there were statistically significant differences on the reality of decision support in the Palestinian universities in the Gaza Strip Systems due to the variable gender in favor of males.
4. Study of (Al-Khatib, 2001) [25], which aimed to recognize the strategic leadership skills and their relationship to crisis management. It's a field study which was conducted on the Palestinian local authorities in the provinces of Gaza. The research found a set of results the most important of them: there exists a high degree of approval by the members of the study population on the areas of strategic leadership skills (self, artistic, intellectual, and

administrative), the presence of a high degree of approval of paragraphs (crisis management) by members of the study population with a relative weight of (73.24%), and the existence of a positive relationship between the availability of strategic leadership skills (self, artistic, intellectual, and administrative) and crisis management in the local bodies in Gaza Governorates.

5. Study of (Abu Hasna, 2014) [3], which aimed to identify the degree of leadership exercise in colleges of education in the Palestinian universities for strategic planning skills and its relationship to improve corporate performance from the viewpoint of faculty members. The study found a set of results the most important of them: there are statistical significant differences to the point of owning the leaders of the college of Education in the Palestinian universities for strategic planning skills attributed to the university and for the benefit of the Islamic University. There is no statistically significant differences to the point of owning the leaders of colleges of education in the Palestinian universities for the skills of strategic planning due to the variable of academic rank in favor of assistant professor, as well as the field of possessing the skill of strategy implementation, where there exist statistically significant differences in favor of Associate Professor, as well as the field of possessing the skill of the external environment analysis, where it was found differences in favor of the master degree holders. There were no statistically significant differences to the point of owning the leaders of colleges of education in the Palestinian universities for strategic planning skills due to the variable of years of service, for the benefit of those who served ten years or more. Furthermore, there were no statistically significant differences to the point of the leaders exercise of colleges of education in the Palestinian universities to improve institutional performance attributed to years of service, for the benefit of those years of service is less than ten years.
6. Study of (Al-Sabah, 2013) [32], which aimed to identify obstacles to the application of strategic plans in the municipalities of the Gaza Strip from the perspective of senior management and executive departments. The study found a set of results, the most important of them is the effect of the attitude of senior management about the importance of strategic plans that have a statistically significant impact on the constraints applied in the municipalities of the Gaza Strip, the effect of participation in implementing the strategic plans have a statistically significant impact on the constraints applied in the municipalities of the Gaza Strip, the effect of the availability of resources, material, and human potential have a significant impact on the obstacles to the application of strategic plans in the Gaza Strip, and the effect of the implementation and enforcement mechanisms (the prevailing administrative systems, programs, budgets, and procedures) have impact statistically significant on obstacles to the application of the strategic plans in the Gaza Strip.
7. Study of (Awad, 2013) [38], which aimed to detect the availability of strategic planning indicators in non-profit organizations in the Bekaa in Lebanon and its relationship with some variables (such as function variables, experience, educational qualification). The study found the following results: the availability of strategic planning indicators in non-profit organizations in the Bekaa in Lebanon from the standpoint of employees is moderate, and the presence of statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the degree of availability of strategic planning indicators in non-profit organizations in the Bekaa in Lebanon according to the research variables.
8. Study of (Ashour, 2012) [36], which aimed to recognize the availability of the vision of strategic development of the Palestinian banking sector services through studding the mechanisms for developing the strategic plan of the bank, and show the impact of the strategic vision and its implications for the future of the bank's success. The study found a set of results, the most important of them: there is a consensus on the importance of the role played by the strategic vision in the development of the Palestinian banking sector services, there is a need for the strategic vision to be applicable in addition to the need for control over the implementation followed by the importance of the strategic vision required conditions and variables response (internal and external), followed by the need for competencies able to conceptualize strategic vision, then comes the importance of transforming this vision into plans, policies and procedures that can be applied.
9. Study of (Dandira, 2011) [42], which aimed to identify the role of the perpetrators of the strategic plans and the extent of their participation in the process of formulating strategic plans, and make necessary recommendations for managers to help them achieve their goals better. The study found a set of results the most important of them: senior management only formulate strategic plans and implementing them, and implementers faces a great difficulties when implementing the strategic plans due to lack of participation in their formulation.
10. Study of (Chin, 2010) [40], which aimed to clarify that the success of strategic management is not only based on the views of planning when developing the strategy, but it depends on factors taken into account when the applying the strategy from the standpoint of strategic planning. The study found a set of results the most important for the implementation of the strategy by individuals in the organizations is the behavior of these individuals is not determined by the plan, but sets based on the thinking and perspectives. Successful strategy requires a broad connection between the administrative levels of the organization and this requires the exchange of personnel of views of the organization. The formulation of strategic plans is not separated from their application.
11. Study of (Al-Qahtani, 2010) [31] that aimed to study the strategic management to improve the competitiveness of companies according to the criteria of strategic performance and total quality management. The results of the study indicated that the degree of administrative leadership in the Saudi banks skills have been positive and are available in high degree. The study recommended that the leadership skills contribute to the success and excellence of the organizations, so the organizations required to be careful when selecting of administrative leaders which is the axis that are surrounded by other elements of organizations excellence in the performance,

and perhaps the appropriate mechanism of selecting leaders in accordance with the tests being developed for the nature of the position to be filled. The researcher recommends endeavor of business organizations towards attracting qualified human resources, retaining and training them to assume leadership positions in the future and to work on generating an environment geared towards excellence.

12. Study of (Al-Hayali and AL-Jerjeri, 2012) [24], which aimed to recognize the tremendous development in the field of information technology. The results of the study indicate the need to provide all the application of decision support system because of its importance in the decisions made by the managers in the field of continuous improvement to the work process requirements in the organization.
13. Study of (Altıok, 2010), which aimed to identify the relationship between vision and mission viable and the impact of strategic management to solve the crisis. The study found the most important results of that vision and mission are applicable as the basis for strategies. The presence of the vision and mission viable strengthens the organization in its environment, or in the case of crisis. If the vision and mission formed properly, they will enhance the company's position through motivations, while more importantly, they will form the culture of the organization to make them stronger in facing crisis. When the vision and mission of the organization are supported through the organization, the organization reach its goals much faster, and spectators are more secure than their counterparts who did not realize that yet. All of this will make the organization very powerful in the periods of crisis and in uncertainty situations.
14. Study of (Kalakh, 2009) [50], which aimed to recognize the intellectual foundations of administrative planning in the field of higher education, to identify the most important elements, extracting the most important criteria and indicators for effective management planning in the field of higher education in accordance with contemporary management trends, and evaluating the reality of administrative planning for higher education operations in the Gaza Strip in light of the criteria and indicators referred to. The study found the most important results are the existence of differences for variable (university or college) between the Al-Aqsa University and the Islamic University for the benefit of the Islamic University. Assessing the institution must be based on a strategy of the institution done by deanship of Quality Assurance Planning. The development of strategic planning affects higher educational institutions directly on the development of the institutional performance. The existence of a link between organizational culture for workers and the evolution of the organizational structure and institutional capacity on the one hand, and between strategic planning in terms of the impact on each other. Poor participation in the internal and external environment analysis has led to the lack of inclusiveness in the schematic construction of higher education institutions in the Gaza Strip.
15. Study of (AL-Dajny, 2006) [22], which aimed to recognize the reality of strategic planning at the Islamic University of Gaza through the analysis of the strategic plan in light of the quality standards established by the National Commission for Accreditation and Quality Assurance of institutions of higher education in Palestine. The study found the most important results are the clarity of the general concept of strategic planning in the university administration has high degree of (79.98%), and the degree of inclination rose much too high for the concept, which connects strategic planning and quality by (88.8%), the proportion (70.89%) of the study community engaged in strategic planning and considered that the quality of strategic planning is a required step and important to achieve the overall quality of the university's policies and performance, the presence of weakness in the formulation of some aspects of the vision, mission and objectives in terms of (public visibility and weak foreseen for the future, the universality of some of the goals, the inaccuracy of expression in some aspects of the study).

Theoretical framework

Decision-making represents the core of the work of administrative leadership, the starting point for all activities and actions that take place within the organization, those that relate to its interaction with the external environment. Administrative decision becomes increasingly important whenever focused on one side of the vital aspects that affect the performance of the organization (Kanaan, 1996) [51].

Planning is considered the initial step in the administrative process, where the administration determines what it want to do and what needs to be done, where, how, and what are the resources it needs to complete the work. This can be accomplished by setting the goals and policies it needs to complete the work, setting goals and policies to be achieved in the future, designing program, detailing the steps and procedures and rules in a specific time frame and in an enhanced graphic framework in light of expectations of the future and the influencing factors that may occur (Al-Alnoafh and Madadha, 2013) [18]. Planning is the step before implementation, which determine what to be achieved, the time period necessary to do so, then put the plan which would achieve this, after carrying out prediction to identify conditions and future changes that may occur in the coming period that are likely to affect the progress of implementation of the plan, so as to work on facing them (Okaily, 2013) [59].

Therefore, organizations are turning to the use of decision support systems to get the information needed to support decision-making processes at the highest administrative level which are less expensive process and save a lot of time. Computerized decision support interact with the decision-maker through the information provided to gain achieve efficient decisions.

Decision support systems represent a relatively new way of thinking using computers for administrative purposes. Thus they are systems based on computer that have been designed in order to improve productivity and increase efficiency through supporting decision-makers, policy makers, and apply these systems in long-term planning, strategic planning (AL-Kurdi, and AL-Abed, 2003) [26]. Decision-support systems differ from other types of information systems with the potential of high-analysis, where it is the design of these systems that include within them many of the data analysis models and based decision support systems on the use of programs characterized as easy as to encourage the direct use

of the system (AL-Kurdi, and AL-abed, 2003) [26]. Many decision support systems have been using other tools. It contains also other applications to make decisions that are consistent with the position or status with a high degree in addition to the use of optimization models to address business conditions, genuine and creativity in the effective interaction in the use of tabular data, databases and hence decision-support systems play a broad role in the decision-making semi-structured through a set of procedures and various forms, but keep hope pinned on how and when to use them efficiently (Al -Omari, and the Samurai, 2008) [30], Decision support system specializes in supporting decision makers by providing the necessary data and models to solve unstructured and semi-structured problems. In light of the above, we can show some of the key features that distinguish decision support systems from other computer based information systems (Al-Moghraby, 2002) [29].

The dimensions of decision support systems

1. Senior management support for the use of decision support systems: the increase in the size of the organization, the complexity of its management, and the development of means of decision-making at the present time led to increase the interest of managers at different organizational levels and functional access to accurate and appropriate information in a timely manner, in order to perform tasks of planning, control and decision-making efficiently and effectively (Abu Rahma, 2005) [12].

Senior management support should be clear for all through its willingness to take concrete actions including: drafting quality's policy, building an organizational structure for quality, involvement of all employees, dissemination of information about the quality, change management processes, organize a day for quality (Zaher, 2005). Senior management can now identify their information needs and get it in a way to serve its purposes and for this reason, decision support systems is the most important development in information technology, because of its importance and sensitive role in linking the process of decision-making of senior management with the process of using the computer (AL-Salmi, 2003) [33], where the effectiveness of the system depends on the support of the senior management of the organization being served by the capacity of the system, whether at the level of the input data, or the level of output from the policies, and without support at any level the system does not give the required results (Al-Moghraby, 2002) [29].

2. Capabilities available for the use of decision support systems: the application of modern management techniques requires unconventional physical and human capabilities and require proper configuration of its components, and the development of internal and external environment for administrative organizations for the nature and privacy in dealing with individuals, providing favorable conditions for the success of the application, which is reflected directly on the performance over achieving the desired balance and harmony between the changes and the behavior of individuals, relations between the working groups, the methods and systems performance (Al-Daffy, 2006) [21].

Physical capabilities include all physical devices and materials used in the operation of the information they include computers, peripherals, and multimedia (AL-Kurdi, and AL-abed, 2003) [26]. Where the amount of funding required will depend on the type of problems with which the system deals with, but certainly it is as much financial support the efficiency of the system will be, and in light of its dependence on expensive high-tech equipment, humans, high dynamic to keep pace with change, and constant update on all system components (Al -moghraby, 2002) [29].

To make organizational success in education institutions and knowledge like any other institutions would requires change in management concepts for the labor force, and the relationship between management and employees (Foley, 2003) [47], where increasing importance of the human element in the formation of a competitive advantage for the university, as responsible for the innovation in performance of the university, become a component of the competitive advantages of the university administration, then become a human resources the most important assets of the university, the basic wealth of competitive and permanent advantage, which would entail check the university significant increases in efficiency and effectiveness of their performance without a corresponding necessarily comparable increases in the financial and physical investments. The university should manages the smart minds successfully and effectively, create an atmosphere that stresses the importance of change, development, stimulate innovation, and deliberately to human resource development (Ahmed, 2005) [14]. The most important of technical possibilities available for the use of decision support systems are computer system and communications, where these technologies provide necessary information and statements affects the work of the institution in terms of: increasing efficiency, saving time and effort, accuracy, speed of delivery process, reduce costs, simplify procedures, increase productivity management, in addition to the reported importance of traditional information technology of computers and software, telecommunications, and the internet to help in decision-making processes (AL-Salmi, 2003) [33]. Organizational capabilities include latent powers of the administrative position, administrative communication, authority and administrative decentralization, and scope of empowerment (Al-Masry, 2007) [28]. Decision-making process continuous on daily basis, and includes all the administrative stages from planning to the organization, direction, and control, no decision is taken without planning, whether for long or short-run, and so on for the rest of the jobs. In our daily lives in administrative work or other take a number of decisions automatically, or as a result of prior studies in the case of right or wrong (Mashreqy, 1997) [53].

3. Types of decision support systems: there are seven types of decision support systems which are related to a range of general operations that can be performed by decision support systems have been classified (AL-Salmi, 2003) [33] as follows: (systems that incorporate files, data analysis systems, information systems analysis, model accounting systems, models of representative systems, optimization modeling systems, suggestion modeling systems).

Strategic management

Universities want to improve and develop their performance to reach the performance excellence. Reality of universities suggests that the success of universities in achieving this level varies depending on the efficiency into their management, and from here is our universities exercise a method of strategic management is earnest urgent necessity and inevitability if they want to increase their competitiveness and improve their performance, but it is also the only way to survival and continuity, especially after the increasing trend towards more openness and globalization, and from here it becomes the application of universities to the process of strategic management and scientific sense an urgent need inevitable and that the importance of the university, especially as it is the cornerstone of comprehensive development. Managers have been using too often the term strategic planning, strategic management as they are one term. This is not accurate, strategic planning is the essence of strategic management and this view is supported by (Fayyad and *et al*., 2010) [46] where they said that strategic planning is a key function of strategic management, and the rest of the functions of strategic management from the implementation and evaluation of the strategic plan waivers where other administrative levels of the organization. Strategic management as mentioned by (Shurabb, 2011) is a more comprehensive than strategic planning, which is one of its functions, in addition to the application and evaluation, where strategic management is a necessity, not a luxury because they lead to the lifting of a tool organizations present and future and that if it was applied well and this is what all organizations using strategic management style agrees with (AL-Arif, 2005) [19]. It is true that some organizations as a result of accident may succeed in the short term without serious practice of strategic management, but in the long run cannot remain and only organizations that practiced serious strategic management style helps the organization to achieve a range of benefits (Mia, and *et al*., 2007):

Determining the road map for the organization determines its location within the geographic business in the future. It contributes in increasing the organization's ability to cope with the intense local and international competition. It grants the organization the possibility to have a sustainable competitive advantage. It enables the organization to use resources effectively. It provides opportunities for participation by all levels of management in the process which leads to reduced resistance that may occur when you do change; in addition to that it provides the homogeneity of thought and administrative practices of the organization managers. The ability to develop strategic creative thinking among managers and making them event makers rather than recipients (AL-Akkad, 2005) [17].

Reaching to one and agreed meaning of the definition of strategic management is difficult issue. David defines it as formulating, implementing and evaluating decisions and actions that will enable the organization to put into effect its objectives (Al-Madi, 2003) [27]. Strategies are important decisions taken by the strategists of managers and their advisers in the strategic management in order to achieve the organization's goals and take on three levels: the level of organization, the unity of the business, and jobs (Yassin, 1998) [63].

Strategic management is a necessity, not a luxury because they lead to the lifting of the organizations performance in the present and future if applied well and that's what brings it all global companies using strategic management style (AL-Arif, 2005) [19]. That helps the organization adoption of strategic management style to achieve a range of benefits including:

1. Determine the road map for the organization determines its location within the geographic business in the future.
2. Contribute to increasing the organization's ability to cope with the intense local and international competition.
3. Grant the organization the possibility to have a sustainable competitive advantage.
4. Enable the organization to use resources effectively.
5. Provides opportunities for participation by all levels of management in the process which leads to reduced resistance that may occur when you do change, in addition to that it provides the homogeneity of thought and administrative practices of the organization managers.
6. The ability to develop strategic creative thinking among managers and makes them event makers rather than recipients (kinis, 2003), (Abu Bakar, 2000) [2], (AL-Akkad, 2005) [17].

It is worth mentioning that the feedback in the strategic management process does not start from where it ends another activity but rather a continuous process flow of information through the different process of strategic management stages because any change in the key component of strategic management components necessarily entail a change in some or all of the model (Al-Madi, 2003) [27], (Yassin, 1998) [63].

Objectives of the study

In light of the research problem, the main objective of the study is the identification of decision support systems and their role in the development of strategic management in the Islamic University in Gaza, and ensuing from it the following objectives:

- Examine the role of decision support systems in strategic management in the development of universities.
- Identify the extent of infrastructure to provide decision support systems under study in the university.
- Indicate the role of physical resources, human, technical, and organizational available to decision support systems and their role in the strategic management in the development of universities.
- Identify to what extent is there variation in decision support systems and strategic management in universities according to the personal data of respondents (age, educational qualification, and years of service).
- Conclude recommendations that will help the development of strategic management in universities on a scientific basis.

The importance of studying

1. Studies is one of the relatively limited in application to the universities, this study derives its importance from being carried out on an important and vital sector of the Palestinian people, and for the efforts of this sector which exerted in the development of Palestinian society in various fields.
2. The study complement previous studies in the field of

decision support systems in general as an input for the development of strategic management, which is one of the relatively important in the current era topics, and affect the success of the organization and continuity in their work from the perspective of the researchers.

3. The importance of the study of the urgent need to raise the Palestinian higher education institutions and to improve the performance of their services and the development in a manner which is consistent with the requirements of this era.
4. This search may be a source of modest to enrich the Arabic library and providing them with the task of studying the link field of decision support systems in the field of strategic management.

Terminology of study

a) Decision support systems: (Sultan, 2007) [61] defined as one of the types of information systems based on the computer where these systems facilitate the process of interaction between the human element and information technology for the production of appropriate information to users' needs. (Al-Omari, and the Samurai, 2008) [30] defined it as a system capable of supporting the data analysis and offer special models of specific topics, and it is directed towards the strategic and long-term planning, and it can be used at irregular intervals.

b) Strategic Management: is a set of administrative decisions and actions that determine the long-term performance of the organization, which includes the following four stages (environmental scanning, strategy formulation, application and implementation of the strategy, and evaluation, monitoring, control). (Wheelen & Hunger, 2012) [62], defined it also as the process of art and science of formulation and application of different career decisions, which enables the organization to achieve its goals (David, 2011, P: 6) [43].

The limits of the study

- **Place limitation**: The study was conducted at the Islamic University of Gaza.
- **Human limit**: The study was conducted on employees in the Islamic University in Gaza.
- **Time limitation**: the study have been conducted, preliminary data collected, and statistical analyzes performed during the year (2016).
- **Subject limitation**: the study of decision support systems and their role in the strategic management in the development of universities, Islamic University of Gaza as case study.

The method and procedures: The researchers used the descriptive and analytical approach, which tries to describe and assess the reality of "decision-support and their role in the development of strategic management in the universities" in the hope of reaching general meaningful that will increases the stock of knowledge on the subject. The study also relied on data collection from the reality on the ground through the tool of the study which was prepared for this purpose.

Community and sample of the study: The study population consists of staff working in the Islamic University of Gaza. The researchers used random sampling method, where (230) questionnaires were distributed on the study population, (204) questionnaire were obtained with a rate of (88.7%). The following table illustrates the distribution of the study sample according to the personal data of individuals:

Table 1: The distribution of the study sample according to personal data (N= 204)

Personal Data		The Number	Percentage %
Age	Less than 25 years	21	10.3
	25 less than 35 years	58	28.4
	35 years - less than 45 years	60	29.4
	45 less than 55 years	48	23.5
	55 years and over	17	8.3
Qualification	High school or less	3	1.5
	Intermediate Diploma	37	18.1
	BA	96	47.1
	M.A.	34	16.7
	Doctorate	34	16.7
Years of service	Less than 5 years	46	22.5
	5 years-less than 10 years	44	21.6
	10 years -less than 15 years	59	28.9
	15 years - 20 years	26	12.7
	21 years and over	29	14.2

It is evident from Table (1) that (68.1%) of the study sample their age is less than (45) years and the researchers believe that this is due to the keenness of the Islamic University of Gaza to supplement the university with young scientific and administrative competencies, as can be seen from the table that (80.5%) of the study sample of the bachelor's degree or higher, where it is necessary to get a first university degree at least to assume a management position in the Islamic University of Gaza, and this indicates the keenness of the Islamic University of Gaza to choose qualified persons who is scientifically able to keep up with management development, and technological development; furthermore, it can be seen from the table that (73%) of the study sample the number of years of service are ranging from 10 years to less than (15) years, and the researchers attribute that to the fact that the Islamic University in Gaza is recent in its origination.

The study tool

A questionnaire on "decision support systems and their role in the strategic management development in the universities" was prepared. We adopted in collecting data on the sources and references to the literature and studies that focused on decision support systems, such as the study of (Abu Taim, 2015) [13], the study of (Al-Hayali and AL- Jerjeri, 2012) [24], the study of (Abu Hasna, 2014) [3], the study of (Al-Sabah, 2013) [32], and the study of (Al-Qahtani, 2010) [31]. Then a closed questionnaire was prepared and developed for the purpose of the current study, which utilized a Likert scale quintet to measure responses respondents to the questionnaire according to Table (2):

Table 2: Likert Five-Point Scales

Response	OK very much	OK substantially	OK moderately	OK a low degree	OK very low degree
Grade	1	2	3	4	5

Validity of the study tool: Questionnaire validity means "to measure what a questionnaire designed to measure" (Gergawi, 2010) [48], also meant by truth, " the survey must include all the elements in the analysis a one hand, and clarity of its clauses and paragraphs on the other hand, so that they are understandable for each one using them "(Ebedat *et al*, 2001) [44], where the researchers ascertain the veracity of the adoption of the questionnaire ratified the scale:

Questionnaire validity

The researchers ascertain the validity of the questionnaire in two ways:

i) Experts Validity: the researchers presented the questionnaire to a group of specialists of the field to give their opinions on it. The researchers took the comments of the specialist and performed the necessary modification needed, and thus questionnaire was finalized**.**

ii) Instrument Validity

- **First: Content Validity**: mean the consistency of each paragraph of the questionnaire with the domain this paragraph belong to, the researchers have calculated the content validity of the questionnaire through the correlation coefficients between each paragraph of the areas of the questionnaire with the total score of the field itself **.**
- **Second, Construct Validity:** a structural tool that measures the extent to which the goals that you want the tool to fulfill, and shows the relevance of each area of the research with total degree of paragraphs of the questionnaire**.**

Questionnaire Reliability

The questionnaire gives the same result if it is re-distributed more than once under the same circumstances and conditions, or in other words that the questionnaire reliability means stability in the results of the questionnaire and not to change significantly as if they were re-distributed to respondents several times during certain periods of time (Gergawi, 2010) [48]. Among the most famous tests used to measure the stability is alpha Cronbach's coefficient. It was found that the value of the questionnaire as a whole (0.946), and this value is high and reassuring to the extent of the stability study tool, where many specialists believe that the touchstone for judging the adequacy of alpha Cronbach's coefficient is 0.5, which indicates the stability of the results, which could result in the study tool when applied (Juoda, 2008) [49].

As the validity and reliability test results of the measurement tool (questionnaire) is valid what it was developed to measure, and it is steady very much, which qualifies as a measuring tool is suitable and effective for this study can be applied with confidence.

Normality Distribution Test

Kolmogorov-Smirnov (KS) test was used to test whether the data follow a normal distribution or not, it was found that the test value equal to (0.983) and the p-value (Sig.) equal to (0.289) which is greater than the significance level of 0.05 and thus the data distribution follows a normal distribution, where parametric tests were used to analyze the data and test hypotheses.

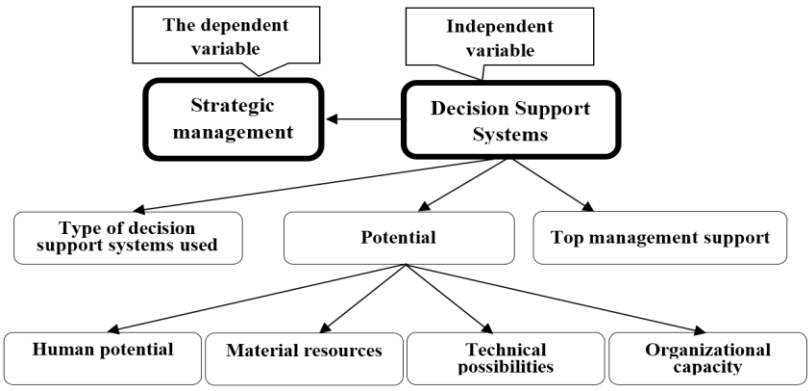
Statistical tools used

The questionnaire was analyzed through statistical analysis software Statistical Package for the Social Sciences (SPSS), where it was used the following statistical tests:

1. Percentages and duplicates: to describe the study sample.
2. SMA, the arithmetic average relative and standard deviation.
3. Alpha Cronbach's testing to determine the stability of the questionnaire.
4. Pearson correlation coefficient to measure the degree of correlation, where it is used to calculate the internal consistency, structural validity and the first hypothesis test.
5. Kolmgeorov - Smirnov (K-S) test to test whether the data follow a normal distribution or not.
6. T-test in one sample case to see whether the average of the responses has reached a degree of medium approval which is 3 or more.
7. Linear Stepwise Regression- Model to test the second hypothesis.
8. One Way Analysis of Variance(ANOVA) to see if there was a statistically significant difference between the three groups or more of data, it has been used to test the third hypothesis.

Model and hypotheses

The current study adopted destination general view and circumstantial, as shown in the study model, which included the independent variable is a decision-support systems and the dependent variable represents a strategic management in universities, as shown in Figure (1).



***Source*:** prepared by the researchers 2016**.**

Fig 1: Study Model

H1: There are statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the decision support systems and strategic management in the Islamic University of Gaza.

H2: There is a statistically significant role at the level of significance ($\alpha \leq 0.05$) for decision support systems on the development of strategic management in the Islamic University of Gaza.

H3: There are statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the mean responses of the respondents about the decision support systems and their role in the development of strategic management in universities attributed to personal data (age, educational qualification, years of service).

Data analysis and test hypotheses

Analysis of the study axes

The first axis: Decision Support Systems

T test was used to see if the average of the responses has reached a medium degree of approval (3) or not, as in the following table:

Table 3: The arithmetic mean, standard deviation and the value of the test to all areas of decision support systems

No.	Axis	SMA	standard deviation	SMA relative	The value of the test	Probability value (Sig)	Ranking
1.	Senior management support for the use of decision support systems	3.91	0.55	78.17	23.38	*0.000	3
2.	Capabilities available for the use of decision support systems	4.18	0.48	83.54	34.87	*0.000	1
3.	Type of decision support systems used	4.06	0.59	81.29	25.92	*0.000	2
	Decision support systems in general	4.07	0.45	81.46	33.76	*0.000	

* SMA statistically significant at the 0.05 level.

It is evident from the Table 3 above the followings

1. The arithmetic average of the first field of "senior management support for the use of decision support systems" is equal to 3.91 (total degree of 5), the relative arithmetic average is 78.17%, the test value is 23.38, potential (Sig) value is equal to 0.000 and this means that there is a large degree of approval by the members sample. Thus, it is clear that senior management supports the existence of decision support systems, and senior management rely on decision support systems in decision-making, as it encourages senior management personnel on the use of decision support systems, senior management provides hardware and software necessary for the use of decision support systems. Also, senior management is interested in decision support systems as part of the overall organizational development process and senior management is interested in diagnosing problems that hinder the performance of decision support systems, where senior management is working to overcome the obstacles that hinder the development of decision support systems. Senior management provides the necessary staff to carry out the process of decision support systems. This is consistent with a study (Dandira, 2011) [42], which concluded that senior management only formulate strategic plans, and other implementing then. The study of (Al-Qahtani, 2010) [31] which indicated that the degree of administrative leadership in the Saudi banks skills was positive and highly available. The study (AL-Dajny, 2006) [22] which concluded that the clarity of the general concept of strategic planning at the university administration degree is high. This result disagrees with the result of the study of (AL-Sabah, 2013) [32], which concluded the impact of senior management towards the importance of strategic plans is a statistically significant impact on the obstacles of applying it in the municipalities of the Gaza Strip.
2. Arithmetic average of the second field of "Capabilities available for the use of decision support systems" is equal to 4.18, the relative arithmetic average is 83.54%, test value is 34.87, potential (Sig) value equal to 0.000 and this means that there is a consent with a high degree by the respondents. It is already clear that the university provide a suitable means of data entry, and means of output (such as printers) which suitable with business requirements, modern computer network available in the university fit with business needs, there is an official technical department for decision support systems, members who operates the technical department have a high degree of competence in information technology, handles the technical section of the relevant problems and questions faced by staff in the use of software and the network, technical section members understands staff requirements from these systems, software used in university helps employees in the decision-making process, modern software used are easy to learn and fit with business requirements, assessing the effectiveness of programs by users help in the performance progresses, software used are compatible with the devices that are being used, the available information from the used decision support systems fit the with business needs, the use of decision support systems facilitates administrative communications between department. This is consistent with a study (Abu Taim, 2015) [13], which confirmed that the material resources fit with business requirements, Palestinian universities have the organizational structure, clearly supports the decision support systems, and ease of procedures and communication between the different departments. As well as consistent with a study of (AL-Sabah, 2013) [32], which concluded that the affect of availability of material resources and human resources have statistically significant impact on obstacles to apply strategic plans in the Gaza Strip. The study (Al-Hayali and AL-Jerjeri, 2012) [24], which stressed on providing all needed for the application of decision support system.
3. SMA is the third field of “Type of decision support systems used " equals to 4.06, arithmetic average 81.29%, test value is 25.92 and potential (Sig) value equal to 0.000, and this means that there is a high consent by the respondents. It is already clear that the software used accomplish repetitive work processes, ability of programs used to retrieve information quickly, ability of software used to prepare special reports, software used to submit

periodic reports covering aspects of the work, and the programs used are modern. This is consistent with the study of (AL-Sabah, 2013) [32], which concluded that implementation and execution mechanisms (the prevailing administrative systems, programs, budgets, and procedures) have statistically significant impact on obstacles of applying strategic plans in the Gaza Strip. It is consistent with the study of (Abu Taim, 2015) [13], which affirmed the Palestinian universities have the organizational structure and clearly supports the decision support systems, and ease of procedures and communication between the different departments. The study of (Al-Hayali and AL-Jerjeri, 2012) [24], which emphasized the need to provide all requirements of the application of decision support system because of its importance in the process of decisions made by the managers in the field of continuous improvement of the work of the organization. While this result is inconsistent with the study of (Fatah al-Rahman, 2004) [45] in the presence of integrated information systems in government institutions.

The second axis: Strategic Management

T test was used to see if the average of the responses has reached a degree of medium approval (3) or not, as in the following table:

Table 4: Arithmetic mean, standard deviation and the value of the test for Strategic Planning

Axis	SMA	standard deviation	SMA relative	The value of the test	Probability value (Sig)
Strategic management in general	4.00	0.47	80.03	30.56	*0.000

* SMA statistically significant at the 0.05 level.

As seen from the above table 4 that the SMA is equal to 4.00, the relative arithmetic average is equal to 80.03%, the test value is 30.56, that the probability (Sig) value is equal to 0.000 and this means that there is a large degree of approval by the respondents on the paragraphs of the axis of strategic management in general.

It is already clear that the leadership is aware of the concept of strategic management ensuring progress and development. Leadership exercises principle of subsidiarity in decision-making, working on an analysis of the strengths, weaknesses, opportunities and threats facing the university, the Strategic Plan of the University is clear, written in a clear way, administrative policies in the university are understandable, administrative policies located in the university guide the process of making decision-making towards the development of performance, administrative policies in the university lead to complexity in the procedure of work, there is an ongoing plan for the development of university personnel, organizational structure of the university helps to achieve the goals, organizational structure in the university helps to speed the administrative contact, the use of information technology increased of the ability to coordinate operations at faculties, various departments, and divisions. Information and data in the University is characterized by its abundance and easily dealt with leading to the performance of the business quickly and accurately, and use of information technology in the university led to the ability to re-design its administrative operations.

This is consistent with study of (Abu Hasna, 2014) [3], which concluded that having the staff members of the leaders of the colleges of education in the Palestinian universities for the skills of strategic planning due to the variable of academic rank, except the area possess the skill of implementation of the strategy, the study of (Al-Sabah, 2013) [32], which confirmed that the position of senior management about the importance of strategic plans have statistically significant impact on obstacles of applying it in the municipalities of the Gaza Strip. The study of (Awad, 2013) [38] showed that the degree, of availability of strategic planning indicators in non-profit organizations in the Bekaa in Lebanon from the standpoint of employees, is moderate. As well as study of (Ashour, 2012) [36], which confirmed that there is a consensus on the importance of the role played by the strategic vision in the development of the Palestinian banking sector services. Meanwhile, study of (Dandira, 2011) [42] confirmed that the top management only formulate strategic plans and is implemented by others, implementer faces great difficulties when implementing strategic plans, due to the lack of participation in the its formulation. The study of (Chin, 2010) [40], which confirmed that the successful strategy needs a broad connection between the administrative levels of the organization; this requires the exchange of personnel of views of the organization. The formulation of strategic plans is separate from the application. As well as the study of (Kalakh, 2009) [50] confirmed that the development of strategic planning affects higher education institutions directly on the development of the institutional performance. While on the clarity of the general concept of strategic planning in the university administration is high of (79.98%) (Al-Dajny, 2006) [22].

Test of study hypotheses

H1: There are statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the decision support systems and strategic management in the Islamic University of Gaza.

To test this hypothesis "Pearson correlation coefficient" was used, to see if there was a relationship between decision-support systems and strategic management at the Islamic University of Gaza.

Table 5: Correlation coefficient between decision-support systems and strategic management in the Islamic University in Gaza

Hypothesis	Pearson correlation coefficient	Probability value (Sig.)
There are statistically significant differences at the significance level ($\alpha \leq 0.05$) between the top management support for the use of decision support and strategic management systems.	.497	*0.000
There are statistically significant differences at the significance level ($\alpha \leq 0.05$) between the capabilities available for the use of decision support systems and strategic management.	.638	*0.000

There are statistically significant differences at the significance level ($\alpha \leq 0.05$) between the decision support systems type used and strategic management.	.540	*0.000
There are statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the decision support systems and strategic management.	.651	*0.000

* Link statistically significant at the level 0.05.

The previous table shows that the correlation coefficient is equal to 0.651, the probability (Sig.) value is equal to 0.000 which is less than the significance level ($\alpha \leq 0.05$) and this indicates the presence of a statistically significant proportional differences between decision support systems and strategic management in the Islamic University in Gaza in general.

It is already clear that, for the axis of decision support systems, senior management supports the existence of decision support systems, senior management rely decision support systems in decision-making, as it encourages senior management personnel on the use of decision support systems, senior management provide hardware and software necessary for the use of decision support systems, senior management care for decision support as part of the overall organizational development process systems, in senior management interested in diagnosing problems that hinder the performance of decision support systems where senior management is working to overcome the obstacles that hinder the development of decision support systems, and senior management provide the necessary staff to carry out the process of decision support systems. The university also provides a suitable means to the needs of business data entry, provides means of output (such as printers) that fit with business requirements, modern computer network in the university fit with business needs, there is an official technical department for decision support systems, technical department members, who operates it have specialized degrees with high efficiency in information technology, handles the technical section of the relevant problems, answer questions faced by workers in the use of software and the network, understands the workers in the technical section of competent workers from these programs systems requirements, and software used university helps employees in the decision-making process, software used are modern, easy to learn, and commensurate with the work requirements, the effectiveness of programs are assessed by users which helps in the performance progresses, software used are compatible with the devices that are being used, available information to decision support systems used fit with business needs, and decision support systems used facilitates the administrative communications between departments. The software used to accomplish repetitive work processes, has the ability to retrieve information quickly, has the ability to prepare special reports, submit periodic reports covering aspects of the work, and the programs used are recent.

For the axis of strategic management leadership, it is aware of the concept of strategic management, ensuring progress and development, exercise leadership principle of subsidiarity in decision-making, as is work on analyzing points of strengths, weaknesses, opportunities and threats facing the university. Strategic plan for the University is clear and written in a clear and understandable way. University administrative policies guide the process decision-making towards the development of performance. University administrative policies leading to complexity of the procedure of work, There is an ongoing plan for the development of university personnel. Organizational structure of the university helps to achieve its goals, helps to speed the administrative contact, and increased use of information technology of the ability to coordinate operations at colleges and various departments and divisions, information and data are characterized by in the University as available, easily dealt with leading to the performance of the business quickly and accurately. The use of information technology in the university led to the ability to redesign administrative operations.

Studies of both (Kasasbeh, 2004) [52] and (Attaran, 2004) [37] that information is the basic and central linchpin of the operations, so the information technology and communication is one of the means of achievement.

From the above, this means that there is a role for decision support systems in developing strategic management in the Islamic University, and this is consistent with the study of (Kasasbeh, 2004) [52] which reached to the operations associated with the rules of shared database and software teamwork, expert systems, and integration capabilities and geographic capabilities. As well as the study of (Chiplundar & Chattopadhyay, 2003) [41] reached to an analysis of the competitive business environment with the help of information technology, taking into account the various interactions between multiple business processes, and that this is consistent with the study of (Abu Taim, 2015) [13], which confirmed that the material resources fit with business requirements, Palestinian universities have organizational structure and clearly supports the decision support systems and ease of procedures and communication between the different departments. The study of (AL-Sabah, 2013) [32] confirmed that the availability of material resources and human resources have statistically significant impact on obstacles of the application of strategic plans in the Gaza Strip. and the effect of the implementation and enforcement mechanisms (the prevailing administrative systems, programs, budgets, and procedures) have impact statistically significant on obstacles to the application of the strategic plans in the Gaza Strip. The study (Al-Hayali and AL-Jerjeri, 2012) [24], which stressed on providing all needed for the application of decision support system. As well as the study of (Kalakh, 2009) [50] confirmed that the development of strategic planning affects the development of performance of higher education institutions directly.

As well as a study (2000, Arora & Kumar), which showed that the improvement of the integration project is necessary to improve the system's performance and that advances in information technology make integration possible even in very complex systems.

H2: There is a statistically significant role at the level of significance ($\alpha \leq 0.05$) for decision support systems on the development of strategic management in the Islamic University of Gaza.

To test this hypothesis, "progressive linear regression" test was used to see if there is a role for decision-support systems on the development of strategic management in the Islamic University of Gaza.

Table 6: Linear regression progressive analysis

Independent variables	Regression coefficients	Test the value of T	Probability value Sig.
Fixed amount	1.423	6.898	0.000
The capabilities available for the use of decision support systems	0.430	6.797	0.000
Type of decision support systems used	0.195	3.797	0.000
The correlation coefficient = 0.670		Average coefficient of determination = 0.443	

From the results shown in the previous table (6), we found that

- Variables affecting the dependent variable "strategic management" are: the potential for the use of decision support systems, type of decision support systems used. While the variable "top management support for the use of decision support systems," shows that the effect is weak.
- Correlation coefficient is equal 0.670, the average coefficient of determination is equal 0.443, that means 44.3% of strategic management (the dependent variable) was explained by the linear relationship and the remaining 55.7% may be due to other factors affecting the strategic management.

It is already clear the existence of the role of the capabilities available for the use of decision support systems, the type of decision support system used on strategic management systems, while the influence of top management support systems for the use of decision support is weak, where the senior management provide the necessary staff to carry out the process of decision support systems. The university provide a suitable means of data entry, and means of output (such as printers) which suitable with business requirements, modern computer network available in the university fit with business needs, there is an official technical department for decision support systems, members who operates the technical department have a high degree of competence in information technology, handles the technical section of the relevant problems and questions faced by staff in the use of software and the network, technical section members understands staff requirements from these systems, software used in university helps employees in the decision-making process, modern software used are easy to learn and fit with business requirements, assessing the effectiveness of programs by users help in the performance progresses, software used are compatible with the devices that are being used, the available information from the used decision support systems fit the with business needs, the use of decision support systems facilitates administrative communications between department. that the software used accomplish repetitive work processes, ability of programs used to retrieve information quickly, ability of software used to prepare special reports, software used to submit periodic reports covering aspects of the work, and the programs used are modern.

This is consistent with a study (Abu Taim, 2015) [13], which confirmed that the material resources fit with business requirements, and that Palestinian universities have the organizational structure and clearly supports the decision support systems, and ease of procedures and communication between the different departments, as well as with the study of (AL-Sabah, 2013) [32], which it concluded that it affects the position of senior management about the importance of strategic plans have statistically significant impact on obstacles of applying it in the municipalities of the Gaza Strip. Participating implementers in the strategic plans have a statistically significant impact on the constraints applied in the municipalities of the Gaza Strip. And it affects the availability of resources and material and human potential of a significant impact on the obstacles to the application of strategic plans in the Gaza Strip. Mechanisms of execution and implementation (the prevailing administrative systems, programs, budgets, and procedures) have statistically significant impact on the obstacles to the application of strategic plans in the Gaza Strip.

Also it agrees with the study of (Dandira, 2011) [42], which showed that only senior management formulate strategic plans, and the implementer execute it and implementing it faces great difficulties when implementing strategic plans, due to lack of participation in its formulation. The study of (Al-Hayali and AL-Jerjeri, 2012) [24], which stressed the need to provide all the requirements of the application of decision support system because of its importance in the process of the decisions made by the managers in the field of continuous improvement of the work of the organization.

H3: There were statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the mean responses of the respondents about the decision support systems and their role in the development of strategic management in universities attributed to personal data (age, educational qualification, years of service).

To test this hypothesis, "variance" test was used to see if there are statistical significant differences and this test can be used to compare 3 averages or more.

Table 7: Results of "variance" test - personal data

Personal data	Test name	The value of the test	Probability value (.Sig)
Age	Variance	2.039	0.090
Qualification	Variance	2.006	0.095
Years of service	Variance	1.880	0.115

From the results shown in table (7), the probability of (Sig.) value is greater than the significance level $0.05 \geq \alpha$ for all variables and thus it can be concluded that there are no significant differences between the averages of the answers of respondents attributed to personal data.

Researchers attribute that to the university personnel have wide expertise and experience and have the ability to weigh things they are familiar with the reality of things, and this varies with the study (Abu Hasna, 2014) [3] which concluded that the existence of differences in favor of the master's degree holder.

Conclusion

Based on field study carried out by the researchers, the study concluded set of results through the data collected through the questionnaire, and after the presentation, interpretation of

the results, linking them to previous studies, and thus extracting the most important findings of the study.

1. The existence of a statistically significant positive correlation between decision support systems and strategic management at the Islamic University in Gaza and this shows that there is a role for decision support systems in strategic management development.
2. Results revealed that senior management is convinced of the importance of strategic management of the Organization. This conviction helped in the understanding of the process of the development of strategic management and thus led to a commitment to this process to improve its performance.
3. The results confirmed that there is an impact on the strategic management of the possibilities available for the use of decision support systems and the type of decision support systems used, while there is little effect of senior management support for the use of decision support systems.
4. The results showed that there are no statistically significant differences between the averages of the answers of the respondents attributed to personal data.
5. The results revealed that there are statistical significant differences between the (physical, human, technical, and organizational) available for the use of decision support systems and its positive role in strategic management at the Islamic University of Gaza.
6. The results highlighted that there are statistical significant differences between the type of decision support system being used and strategic management at the Islamic University of Gaza.

Recommendations

Based on the results of the study, the research recommends the following:

1. The Islamic University of Gaza need to develop the infrastructure of decision support systems when it develops the strategic management.
2. The Islamic University of Gaza should increase the interest in organizational potential through establishing a separate unit for decision support systems.
3. The Islamic University of Gaza should increase the interest in the physical and technical possibilities available to decision support systems through keeping pace with technological means and techniques.
4. Continuing support of senior management in the organization of strategic management for its positive role on decision support systems.
5. Senior management in the organization should continue in creating a culture of strategic management and encourage employees to participate in the strategic management process.
6. The university contributes effectively in facing strategic management obstacles, by providing the necessary financial and physical resources and should place them at the top of their priorities as they have a great impact on the strategic management processes and decision support systems.
7. The university should involve their employees in developing its strategic plan, through communication, brainstorming sessions, workshops and regular meetings with all managements.
8. The university should continue to develop its organizational structure so as to help the development and implementation of its strategic and operational plans.

References

1. Abdul El-Ilah, Samir. the reality of organizational culture in the Palestinian universities in Gaza, its impact on the organizational development of the university level, Master Thesis (unpublished), the Islamic University, Gaza, Palestine. 2006.
2. Abu Bakar, Mustafa Mahmoud. strategic thinking and the preparation of the strategic plan, the University House, Cairo, Egypt. 2000.
3. Abu Hasna, Ahmad. the degree of use and the international relief agency strategic planning principals in the face of educational wastage in their schools, Master Thesis (unpublished), College of Education, the Islamic University, Gaza, Palestine. 2014.
4. Abu Naem, Abdul Hameid. strategic management (preparing strategic director), second edition, Dar Arab culture Almtbdian, Cairo, Egypt. 1993.
5. Abu Naser SS, Al Shobaki MJ, Abu Amuna YM. KMM Factors Affecting High Performance in Universities Case study on Al-Quds Open University in Gaza-Strip. International Journal of Information Technology and Electrical Engineering. 2016; 5(5):46-54.
6. Abu Naser SS, Al Shobaki MJ, Abu Amuna YM. Promoting Knowledge Management Components in the Palestinian Higher Education Institutions - A Comparative Study, International Letters of Social and Humanistic Sciences. Sci Press Ltd., 2016; 73:42-53.
7. Abu Naser SS, Sulisel O. The effect of using computer aided instruction on performance of 10th grade biology in Gaza. J Coll Edu. 2000; 4:9-37.
8. Abu Naser SS, Al Shobaki MJ, Abu Amuna YM."Measuring knowledge management maturity at HEI to enhance performance-an empirical study at Al-Azhar University in Palestine. International Journal of Commerce and Management Research. 2016; 2(5):55-62.
9. Abu Naser S, Al-Dahdooh R, Mushtaha A, El-Naffar M. Knowledge Management in ESMDA: Expert System for Medical Diagnostic Assistance. ICGST-AIML Journal. 2010; 10(1):31-40.
10. Abu Naser, Samy S, Al Shobaki, Mazen J. 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), 2016, 505-512.
11. Abu Naser, Samy S, Al Shobaki, Mazen J. 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, 2016, 4.
12. Abu Rahma, Amal. human resources information systems and their impact on the effectiveness of the performance of employees in the affairs ministries of the Palestinian National Authority in the Gaza Strip, Master Thesis (unpublished), the Islamic University of Gaza. 2005.
13. Abu Taim, Mohammad Omar Suleiman. to support the decisions and their relationship to effective decision

Aladarih- field research on the administrative staff at universities Palestinian-Gaza governorates systems, Master Thesis (unpublished), Faculty of Economics and Administrative Sciences, Al-Azhar University in Gaza, Gaza, Palestine. 2015.

14. Ahmed Shaker. total quality management and Excellence University, Fifth Educational Conference, the quality of university education, Bahrain. 2005.
15. Al Shobaki MJ. Abu Naser SS. 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, 2016; 2(10).
16. Al Shobaki MJ, Abu Naser SS. The Dimensions Of Organizational Excellence In The Palestinian Higher Education Institutions From The Perspective Of The Students. Global Journal Of Multidisciplinary Studies. 2016; 5(11).
17. AL-Akkad, Ayman al. lectures on strategic management, management development, Damascus, Syria Institute. 2005.
18. Al-Alnoafh Salamah, Madadha Ahmed. the principles of planning, organization and management of libraries, Oman, Dar Al Safa, Jordan. 2013.
19. Al-Arif Nadia. strategic management, management of the third millennium, University House, Alexandria, Egypt. 2005.
20. Al-Attar Ibrahim. the reality of total quality management in the Palestinian universities, and ways to develop it from the standpoint of the heads of academic departments at universities Gaza Strip, Master Thesis (unpublished), the Islamic University, Gaza, Palestine. 2006.
21. Al-Daffy, Muhammad. the applicability of electronic management in the Directorate General of Passports in Riyadh, Master Thesis (unpublished), Naif Arab University for Security Sciences, Riyadh. 2006.
22. Al-Dajny, Iyad. the reality of strategic planning at the Islamic University in light of the standards of quality, unpublished Master Thesis, Faculty of Education, the Islamic University, Gaza, Palestine. 2006.
23. Al-Dory, Zakaria Mutlaq. Strategic Management: Concepts and case studies, Dar Yazouri, Amman, Jordan. 2005.
24. Al-Hayali, Ahmed Moayad Attiya, AL-Jerjeri, Ahmad Hussein Hassan. the extent of contribution decisions to support the implementation of the continuous improvement of Nizat- survey of the views of a sample of employees of ready-made clothes factory in the city of Mosul system, College of Management and Economics, University of Mosul, Iraq Development, number (110), 2012; 34:217-236.
25. Al-Khatib Ahmad, the university administration (recent) studies, the first edition, Hamada Foundation for university studies, Irbid, Jordan. 2001.
26. Al-Kurdi, Manal Mohammed, AL-abed, Jalal Ibrahim. Introduction to Management Information Systems) the basic concepts and applications (Dar new university, Alexandria. 2003.
27. Al-Madi, Mohammad AL-Mohammadi. administrative policies, Cairo University Open Education Center, Egypt. 2003.
28. Al-masry Marwan. the development of administrative performance of the heads of academic departments Palestinian universities in the light of the principles of total quality management, unpublished Master Thesis, the Islamic University, Gaza, Palestine. 2007.
29. Al-moghraby, Abdel-Hamid. information systems Aladarih- foundations and principles, Mansoura University, Modern Library, Mansoura, Egypt. 2002.
30. Al-Omari, Ghassan, the Samurai, Salwa. strategic information systems) strategic entrance to the contemporary), Faculty of Administrative and Financial Sciences, the first edition, Isra University, Dar march. 2008.
31. Al-Qahtani, Faisal bin Mohammed bin Motlaq AL-Knfry. strategic management to improve the competitiveness of companies according to the criteria of strategic performance and total quality management, Master Thesis (unpublished), College of Business Administration, the British International University., Saudi Arabia. 2010.
32. Al-Sabah, reem. obstacles to the application of strategic plans in the municipalities of the Gaza Strip from the point of view of senior management and executive departments where, Master Thesis (unpublished), Faculty of Commerce, the Islamic University, Gaza, Palestine. 2013.
33. Al-Salmi, Alaa Abdul Razzaq. information management systems, the Arab Organization for Administrative Development publication, Cairo, Arab Republic of Egypt. 2003.
34. Altıok Pınar. Applicable vision, mission and the effects of strategic management on crisis resolve, Bussiness Administration Program, Beykent University, 7th International Strategic Management Conference, Procedia Social and Behavioral Sciences, Istanbul, Turkey. 2011, 61-71.
35. Arora Sant, Kumar Sameer. Reengineering: A focus on Enterprise Integration, Interfaces, EBSCO host Databases, Business Source Premier, 2000; 30(5), http://search. Epent.com..
36. Ashour Ahmed. the availability of strategic vision for the development of the banking sector services Empirical Study on banks operating in Palestine, Master Thesis (unpublished), Faculty of Commerce, the Islamic University, Gaza, Palestine. 2012.
37. Attaran, Mohsen. exploring the relationship between information technology and business process reengineering Information & Management journal. 2004, 41.
38. Awad Atef. strategic planning in nonprofit organizations, field study on non-profit organizations in the Lebanese Bekaa, the College of Business and Finance, International University for Science and Technology, Journal of the University of Damascus, economic and legal for Science. 2013, 29.
39. Banat, Maher. the study of organizational effectiveness

40. Palestinian universities in Gaza: Islamic University Study Case, Master Thesis (unpublished), Islamic University of Gaza, Palestine. 2002.
41. Chin, Kan Chao. Towards a Model of Strategic Management Incorporating Fuzzy, PhD, university of Hull, Taiwan. 2010.
42. Chiplundar, Chandrashekhar, Deshmukh SG, Chattopadhyay R. Application of Principles of Event Related Open Systems to Business Process Reengineering, (Pd.D.), Computer & Industrial Engineering, 2003; 45(3). EBSCO host Databases, Business Source Premier, http://search.epent.com.
43. Dandira, Martin. Involvement of Implementers: Missing Element in Strategy Formulation, Business Strategy Series, 2011; 1(12).
44. David R Fred, Strategic Management. Concepts and Cases,13th Edition by Pearson Education, Inc., publishing as Prentice Hall, New Jersey 2011.
45. Ebedat Thuqan, Addas Abdul Rahman, Abdul Haq Kayed. Scientific Research concept, tools and methods, Dar Al-Fikr for Publishing and Distribution, Amman, Jordan. 2001.
46. Fatah al-Rahman Ali. management information systems and their impact on improving the administrative performance of his master, the Naif Arab Academy for Security Sciences, Riyadh. 2004.
47. Fayyad, Mahmoud and Kdadh, Issa, and Alyan rebhy. management principles, Oman, Dar Al Safa, Jordan. 2010.
48. Foley, Abdel-Fattah. the relationship between the development of performance and information technology study and organizational performance impacts of information technology (working paper submitted by the Third Arab of the forum for the development of the relationship between legal and administrators), the Arab Organization publications for Administrative Development, Sharm El Sheikh, Egypt. 2003.
49. Gergawi Ziad. the methodological norms for the construction of the questionnaire, the second edition, Press son's surgeon, Palestine. 2010.
50. Juoda, Mahfouz. basic statistical analysis using SPSS, Dar Wael for publication, the first edition, Amman, Jordan. 2008.
51. Kalakh, Muhammad. Management Planning for Higher Education in the Gaza Strip, Evaluation Study, Master Thesis (unpublished), Faculty of Commerce, the Islamic University, Gaza, Palestine. 2009.
52. Kanaan, Nawaf. managerial decision-making, fourth edition, cultural library, Amman. 1996.
53. Kasasbeh, Muhammad. the role of information technology in business process re-engineering, a field study on the communications and information Technology Company in Jordan, Ph.D. thesis, Amman Arab University, Jordan. 2004.
54. Mashreqy Hassan Ali. decision management theory - Quantitative Approach in management, the first edition, Dar march Amman, Jordan. 1997.
55. Mia Ali, Zaher Bassam, Sulaitan Soma. strategic management and its impact in raising the performance of business organizations, Tishreen University Journal for Studies and Research Alalmah- a series of economic and legal sciences. 2007; 29(1).
56. Naser SSA, Mazen J Al Shobaki, Youssef M Abu Amuna. Measuring knowledge management maturity at HEI to enhance performance-an empirical study at Al-Azhar University in Palestine. International Journal of Commerce and Management Research. 2016; 2(5):55-62.
57. Naser SA, Zaqout I, Ghosh MA, Atallah R, Alajrami E. Predicting Student Performance Using Artificial Neural Network: in the Faculty of Engineering and Information Technology. International Journal of Hybrid Information Technology. 2015; 8(2):221-228.
58. Naser SSA. Predicting learners performance using artificial neural networks in linear programming intelligent tutoring system. International Journal of Artificial Intelligence & Applications. 2012; 3(2):65-73.
59. Naser SSA, Al Shobaki MJ, Abu Amuna YM. Knowledge Management Maturity in Universities and its Impact on Performance Excellence, "Comparative study. Journal of Scientific and Engineering Research. 2016; 3(4):4-14.
60. Okaily, Omar. contemporary administration, Oman, Dar Zahran, Jordan. 2013.
61. Shurabb, Saed. strategic planning and its relationship to competitive advantage, "a field study in the distribution of medicines in the Gaza Strip companies, Master Thesis (unpublished), Faculty of Economics and Administrative Sciences, Al-Azhar University, Gaza, Palestine. 2011.
62. Sultan Ibrahim. management information systems, administrative entrance, University House, Alexandria, Egypt. 2007.
63. Wheelen, Thomas, Hunger J David. Strategic Management and Business Policy (Toward Global Sustainability), 13th Edition, Pearson, Prentice Hall, New Jersey. 2012.
64. Yassin, Saad Ghalib. Strategic Management, Dar Yazouri scientific, Riyadh, Saudi Arabia. 1998.
65. Zaher Diauddin. educational systems management TQM, Dar Al-Sahab, Cairo, Egypt. 2005.