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The Importance of Management Information Systems in Decision-Making Process in Najran University

Mohamed Sultan Mahasneh
Department of Business Administration, Najran University, Saudi Arabia,

Abstract: *Management information systems is very important for organizations especially decision-making process. This study is to answer the question related to the Importance of Management Information Systems on Decision-Making Process in Najran University, by exploring the role of management information systems in providing the necessary information to make decisions, the role of management information systems in decision-making, exploring the relationship of management information systems with decision-making process , and the impact of management information systems on the decision-making process in Najran University. The research proposes a model to evaluate the impact of Management Information Systems on Decision-Making Process in Najran University. The model was tested by using survey data collected from 56 of 84 Deans, Vice Deasn, General Managers and Managers. Descriptive analysis and t-test show the importance of management information systems on decision-making Process. The results show that there is a strong relationship and impact of management information technology on Decision-Making Process.*
Keywords*: Management Information Systems, Decisions Making Process.*

I. Introduction

In an era of technological revolution and increase the size of the organizations and their need for a huge amount of information, it has become inevitably these organizations use the management information systems that depends on the computer, for data processing and the production of information provided by these systems, and use them in the decision-making process by the decision makers in the centers of decision in organizations. Good information needed by the organization to be used in the decision-making process must be characterized by honesty, modernity and Availability at the suitable time to decision makers. The decision-making process depends on the availability of efficient and effective management information systems produce the information that lead to take the appropriate and rational decisions. Based on the above, the present study describes the nature of the study of the problem through the following questions:
What is the importance of management information systems in decision-making in Najran University?

The sub-questions are as follows:

Is there a relationship between the quality of information provided by the management information systems and the effectiveness of decision-making in the organization under study?

Is there a relationship between the uses offered by the management information systems and the effectiveness of decision-making in the organization under study?

Do the development of management information systems contribute in increasing the effectiveness of decision-making in the organization under study?

(Abu Galedah, 2013) stated that the management information systems have a role in decision-making in the institutions ranging between medium and high percentage, and providing the necessary information to make decisions between a medium degree of approval and effective percentage. There is a connection between the use of management information systems and the effectiveness of decision-making in the institutions under study, and affect the development of management information systems to increase the effectiveness of decision-making in the institutions under study with a high percentage.
(Hassani, 2013) stated that there are statistically significant relationship and impact between the quality of information and the effectiveness of decision-making.

(Al-Murad, 2012) The availability of the characteristics of precision, timing, confidence, comprehensiveness, reliability in the management information system in the surveyed organizations, and this is what contributes to this organization to perform its activities efficiently and effectively. And it has been associated with the success of the management information system in which the nature of the available properties, as the timeliness of the information, accuracy and comprehensiveness and its potential reliability to take all decisions make him a successful system.

(Bakens, 2010) the use of a project management information system is in fact advantageous to project managers and that there is no adverse effect of project and information overload on the quality of information. Improvements on the impact on decision making through the quality of information from PMIS were observed in terms of improved quality of the decisions, reduced time in making decisions, better allocation of resources and monitoring of activities. This study found moderate and strong relationships between the quality of the information, the project manager's satisfaction with PMIS, the use of the information and the impact on decision making.

(Alkhaffaf, 2012) The results shows that the easiness variable had the highest variance to measure the relationship among information systems and the quality of decision making, while the accuracy had the lowest variance. The study found that the accuracy of information was the most usable variable in the bank, while the appropriateness was the lowest usable variable in the study population, however; the risk variable was more usable in the bank that the participation variable, as for the quality of the information; time dimension was the most variable used in the bank. The result show a great influence of risk in decision making, where the degree of risk increases when increasing the difficulties of using information systems, this difficulties is usually faces managers in the high organizational levels and needs intuition, prediction or guesswork. The results also shows a great importance of the participation in decisions making.

(Asemi, et al., 2011) It was found that MIS is best suited to identify problems and help management to understand them to make suitable decisions.
(Heidarkhani et al., 2013) one of the leading causes of inefficiency and failure of organizations is, poor or inopportune decision making of organization management due to lack of sufficient information. This could be because of no enough attention to information, not providing proper infrastructure, and weakness in production, organization, storage and dissemination of appropriate information, valid, reliable, timely and complete. Management information systems increase the knowledge of managers and even specialists in different levels of an organization, with new concepts not only develop knowledge of what they are able to do and what decisions will be made. Rather, help them in better performing their responsibilities and activities.

(Freihat, 2012) There is a statistically significant relationship and positive impact between all of the components of making information system and decision-making in Jordanian shareholding medicines producing companies.

(Hassan et al. 2014) Managers in all levels of organization hierarchy need precise and suitable data and information to make decisions, and the employment of management information systems improves the efficiency and effectiveness of the decision-making process in the organization. Also Information Systems can be used to obtain updated information that could rely upon to make the future decisions.

(Alhazaymeh, 2009) The information provided by the management information systems and the effectiveness of management decision-making in the institutions have an impact milestone in the advancement of the sector, achieve the desired development and to get rid of backwardness and its effects and accelerate the processes in which the address input is quickly than traditional methods, and then get the mature output at less time. The use of management information systems to provide decision makers with the right information at the right time the information is more valuable to the organization and useful in decision-making and operations process, and then the greater the usefulness of the information have increased in value, this has a significant impact in increasing the gross domestic product , meet the demands and needs of beneficiaries and achieve the public interest.

(Ahmed, 2013) The management information systems are used by decision makers effectively in making administrative decisions due to the quality of the information generated by these systems, where the results showed that the vast majority of decision makers are mainly dependent on information systems in the case of management decisions. There is also a relationship between the appropriate information provided by the management information system and using these systems by managers in making administrative decisions, the study showed that there is a strong relationship and this means scientifically that the more appropriate information provided by the system the greater the use of the managers of these systems in their making their decisions.

This study contribute in providing a conceptual framework defines the concept of the nature of management information systems and decision-making process, highlighting the role of management information systems in providing necessary information for decision-making and determine the extent of the contribution of the development of management information systems in decision-making.

The research aims to achieve the following:
1. know the extent of using management information systems in the departments under study.
2. know how the management information systems provides information to decision-makers at departments under study.
3. know the nature of the relationship between management information systems and decision-making in departments under study.
4. know the impact of management information systems on making decisions in the departments under study.

II. Literature Review

2.1 Management Information System:

(Laudon & Laudon, P. 17) Define Management Information System as: "a set of interrelated components that collect (or recover) and processed and stored and distributed information to support decision-making, coordination, supervision and control of the organization." He knew (O'Brian & Markus, p. 13) Management Information System that: "Organization group of people, hardware, software, and communications networks, and resources data, policies and procedures that store, and recover, and turning, and disseminate information in the organization."
Management information systems is a system based on a computer for the purpose of providing information for managers to make decisions correctly based on timely, accurate and correct information depending on the activity of the organization. This information is provided to beneficiaries in the form of periodic reports and mathematical models for the purpose of assisting the decision-maker to solve the problems of the institution, and depends on the management information system database to provide the necessary information to support the decision-maker.

2.2 objectives of management information systems:

Depending on the previous definitions of management information systems, the goals of information systems seeks to achieve are as follows:
• Linking sub-systems of the organization together in an integrated system to allow the flow of data and information between those systems and leading to the achievement of coordination between the activities of those systems.

• To assist in linking the sub-systems of the organization goals with the overall objective of the organization and thus contribute to the achievement of this goal.

• Assistance and support in decision-making process at all organizational levels through the provision of reports to ensure that the information required for those decisions in a timely manner.

• Provide necessary information for the purposes of planning and control at the right place, time and format.

• Controlling of data and information handling and preservation process.

2.3 Approaches to the study of information systems:

There are multiple views on information systems show that the study of information systems is a multidisciplinary field, and there is no one theory or just one perspective, and even accurately be studied information systems, they must know these approaches, namely:
1. Technical approach: technical approach of the information systems focuses on mathematical models for the study of information systems, in addition to material technology and official capacity of these systems. And disciplines that contribute to the technical approach is computer science, management science, and operations research.

2. Behavioral approach: There is an important part of the field of information systems concerned with behavioral issues which arise through the development and maintenance of information systems and sustaining in the long term. Such as strategic business integration issues, design, implementation and use. Behavioral approach does not ignore the technology, as the information technology systems are often stimulating behavioral problem or issue. But the focus of this approach is generally not on the technical solutions, and instead focuses on the changes in attitudes and management, regulatory policy, and behavior (Kling and Dutton, 1982).

3. Technical Social approach: The academics and practitioners experience leads us to believe that there is no single perspective effectively that embodies the reality of information systems. Since the problems with systems and solutions are rarely completely technical or completely behavioral. So we have to understand the technical and behavioral approachs. (Laudon & Laudon, 2013) (Sultan, 2005)

2.4 Information Systems Development:

Development is defined as: "the application of the behavioral sciences related to planned in advance strengthening and development of the strategies and organizational structures and operations in order to improve the effectiveness of the organization." (Abawi 2006)

Development of management information systems defined as: "actions that are being taken for the establishment of an information system which solves the organizational problem." Laudon, K., & Laudon, J. 2010)) These include system analysis, system design, computer programming / implementation, system testing, system conversion, production and maintenance. These procedures are usually arranged in this order specified.

The development process usually begins with collecting data and information and locating bugs that provide precisely the exact place of the problem that is necessary to focus on, and locate the change in the organization to reduce this problem, whether these places (structures, culture, processes and individuals). (Abu Galethah2013)

Besides, there are reasons and needs for the development and design of information systems, which we offer are as follows:

• there is an error in the current system as a result of the failure of the system to record some operations or crash repeatedly.

• vision of senior management at its strategic planning to introduce a new information system gives the institution a competitive advantage, or that competitors used the new technology of information which represents a threat to the institution.

• development of information technology.

• evolution in the application properties.

2.5 The role of information system in decision-making:

The management information systems provide the appropriate information on the internal and external levels of management at all levels, so you can make effective decisions and temporary and do planning, control and direction within the organization process. The decision-making core of the administrative work of the Organization process, and is the relationship between goals and problem-solving and decision-making in that managers are responsible for setting goals to do its investigation, but during achieved some problems that prevent this show, and as a result they take a lot of decisions to overcome these difficulties. (Abu Galedah 2013)

2.6 The decision-making process:

(Harris, 2012) defined decision-making process as "a study of identification and selection of alternatives on the basis of values and preferences of the decision maker, and to reduce uncertainty and doubt enough to allow for a reasonable choice of alternatives."

The decision-making process can be defined as: "a compound thinking process, aimed to perceived selection of better alternatives or solutions available to everyone in a certain position choice; in order to reach and achieved that goal by using some objective criteria."

Decision-making process is the nerve of whole human existence, individuals and its groups and organizations, it is play a key and pivotal role in the efficiency and effectiveness of organizations and almost a stone in mind in everything within the institution as its individuals, machineries, equipments, materials and everything related to changes or updates need to take a decision as in the case for administrative process of its core functionality, it needs to be the same resolution as well. (Sharif, 2013)

Through management information systems we can identify problems that faces the organization and then contribute to solving them. Since the management information systems achieve integration between the various functions of the organization, it provides database covering most areas of the organization, and therefore the management information system is an effective tool in front of senior management because it provides immediate, accurate and integrated information, so it is considered the most support for the decision-maker, as it provides for managers information needed by all needed by all of them.

2.7 Factors influencing the decision-making: (Kurdish 2000)

The pioneers of the traditional schools were not interested in the role of behavioral, social and environmental factors and their influence in the decision-making process, they focused on the physical aspects while the pioneers of behavioral schools, have focused their attention on the importance of factors psychological, social and environmental variables and their impact on this process, so their studies focused on the analysis of the decision-making process on psychological factors surrounding the organization, associated customs, traditions, social values, political and economic systems and environmental conditions. Many factors influencing the decision-making process, which is as follows: human factors, regulatory factors, and environmental factors.

2.8 Stages of the decision-making :(Salmi, 2005) and (Sabah, 1998)

- Definition and discovering of the problem: the problem defined in the area of decision-making process as a "deviation from the target set in advance or is a state of imbalance between what the object is and what it should be."
- Diagnose the problem: the diagnosis means to identify the causes of the problem and determine the dimensions and investigate the main reason for its appearance and knowledge of the causes and symptoms.

- Analysis of the problem: the problem analysis required to identify and classify data and information required to solve them and their sources, and means classification problem determine the nature, size and complexity and the quality of the optimal solution is required to address it.

- Find alternatives to solve the problem: it means workaround solution available to the Director to resolve the problem, or at another hand is a proposal or decision to be taken into account along with other proposed resolutions with a view to comparison and analysis in the sense even the best are selected and become the final decision.

- Evaluate the available alternatives to solve the problem: after the manager having seen of alternative solutions to the problem, he must then conduct a comprehensive evaluation of it, and this stage considered of the difficult stages, because the trade-off process between the alternatives are not clear and easy process because the advantages and disadvantages of each alternative does not appear as discussed but stand out when implementing the solution in the future, and from here the doubt and uncertainty about the validity of alternatives to resolve the problems comes.

- Choosing the appropriate solution to the problem: The final selection of the alternatives available process to resolve the problem of the most important steps that attaches managers their energies.

2.9 Role of information systems in decision-making: (Gana'em, Alshargawi, 1982)

The primary objective of the information system is the process of decision-making in the service of the organization, and will show us the role that could be played by information systems at each stage.

First stage (intelligence stage): The information systems store massive amounts of information that can be useful to the decision maker.

Second stage (prototype design stage): The role of information systems summarized by the need to identify possible alternatives to solve the problem, and the standard trade-off between them.

Third stage (the stage of research and selection): The information systems at this stage does not makes decisions, but provide a quantitative and mathematical models that contribute to the identification of possible solutions to resolve the problem and evaluated according to pre-defined criteria.

Fourth stage (the application stage): The implementation of the resolution requires persuading the parties involved specially parties which perform it.

2.10 Importance and role of information systems in decision-making in Najran University:

It has become increasingly important function of management information systems at the University of Najran, Faculties, Deanships and various departments for several reasons:

• Increased knowledge available to the deans and managers, which can be used in making their decisions in accordance with advanced scientific knowledge.

• Growth of the university and its faculties, departments and Deanships in size and complexity of its business, forcing those managers to rely increasingly on the way written information.

• Increased the degree of specialization and the direction of some departments, mostly to diversify its business.

• Increased technological complexity of society in general.

• Increased scarcity of some natural resources.

• Increased degree of environmental and technological change.

• Spread centralization departments and activities, increasing the need for advanced methods of control to secure the officials do their duties in accordance with what was agreed in the plan consciousness.

• Widespread uses of computers and low cost, making it an ideal way for data processing.

III. Research hypotheses

3.1 Scale of the study model:

Model's scale consists of (7) seven paragraphs to indicate the general characteristics of respondents, and (10) paragraphs to indicate the relationship of the quality of information provided by the management information systems with decision-making, (7) paragraphs to indicate the Uses relationship offered by the management information systems with decision-making, in addition to (6) paragraphs to indicate the impact of the development of management information systems with decision-making.

3.2 Study's Hypotheses:

* The first main hypothesis:

Ho1: There is no importance for management information systems in decision-making in the departments surveyed.

It is also divided into three sub hypotheses. The three sub hypotheses are:

Ho1a: There is no relationship between the quality of information provided by the management information systems and the effectiveness of decision-making in the departments surveyed.

Ho1b: There is no relationship between the uses of management information systems and the effectiveness of the decision-making in the departments surveyed.

Ho1c: The development of management information systems does not contribute in increasing the effectiveness of decision-making in the departments surveyed.

The study population consisted of Faculties, Deanships and Departments in Najran University in 2014, where numbered (35) departments. The study sample is a number of Deans, Vice-deans and General Managers that responded to questionnaires.

The questionnaires were conducted on Deans, Vice-deans and Managers, limited interviews to whom filled the questionnaires. The total questionnaires had been retrieved (56) out of the (84) questionnaire was distributed, and so the number of individuals who have been surveyed in the surveyed departments is (56 individuals) this represented a approx percentage of (66.7%). Simple random sampling method was adopted to select the sample. The sample of this study was conducted on Deans, Vice-deans and Managers working in senior management.

IV. Methods of Data Collection:

The secondary data, reviewing all researches, articles, books, and literature relating to the study, both available in the university's libraries or through access to Web sites, in order to clarify the basic concepts and the various dimensions of the subject of this study. The primary data, where the study conducted on to clarify the phenomenon throughout the collection of data as follows: interviews: structured interviews with some of the deans, vice-deans and managers to complete and clarify the study's variables addressed by the study, and to enhance the information that can be accessed, as well as to find out the relationship between management information systems and the decision-making process in the departments surveyed. Questionnaire was designed and contained general information about the deans, vice-deans and managers the departments surveyed, it also includes an independent variable management information systems, and the dependent variable is the decision-making process, in order to collect the raw data from management of departments surveyed.

Table (1): Internal consistency coefficient (Cranach's Alpha) of the different paragraphs of the measurement tool

No.	Dimensions of the Study	Number of Paragraphs	Alpha Values
1	The relationship of quality of information provided by the management information systems with the decision-making.	10	94.9%
2	The relationship of uses offered by management information systems with the decision-making.	7	87.9%
3	The impact of developing management information systems with decision-making.	6	81.6%
Total		23	93.2%

Resource: Bu Researcher Depending on SPSS Results.

Likert Scale was used, and the weights assigned for approval are: (5) very high (4) High (3) Medium (2) Low (1) very low. Where the study relied on specific criteria in the interpretation of the degree of approval depending on the values of the arithmetic average. The measurement had been tested in two phases: First stage is testing the validity measurement tool: through presentation of the questionnaire to a group of specialists in the field of information technology and business administration, were made the necessary adjustments, and then were presented to a group of arbitrators of specialists from academics and professionals, in order to make sure of the questionnaire validity, where all the notes were introduced into consideration until the appearance of the questionnaire in its final form. The researcher has conducted a preliminary study on four of the surveyed departments, so as to make sure that the paragraphs contained in the questionnaire is clear and understandable to measure the purpose of the study. Supplement No. (2). Second stage is testing the stability of the measurement tool: internal consistency coefficient though the use of (Cronbach's alpha), (SPSS Version 20.0) was used to extract the internal consistency coefficient of the different paragraphs of the measurement tool to find the total stability coefficient for the questionnaire, which is (93.2%) this percentage considered a strong indicator of the stability of the measurement tool, table (1).

4.1 Statistical Methods Used:

SPSS version 20.0 was used for the analysis of data collected through the questionnaire devoted to this study, descriptive statistics methods were used (frequency distribution, percentages, arithmetic mean and standard deviation).

Table (2): The verbal values of arithmetic mean

Value of the Arithmetic Mean	Verbal Explanation
0 - < 1.5	very weak
1.5 - < 2.5	weak
2.5 - < 3.5	Medium
3.5 - < 4.5	High
4.5 - ≤ 5	very high

The criteria have been identified to explain the degree of approval, depending on the values of the arithmetic average, as is shown in the above table (2).

Table (3): Standard Strength Answer

Correlation Coefficient	Strength of Answer
0- < 0.3	Weak
0.3- < 0.7	Medium
0.7- ≤ 1.0	Strong

The inference statistical techniques were used Nonparametric tests. The three criteria adopted for the classification of the relation's strength, are shown in the above table (3).

V. Analysis of Results

There is no importance of management information systems in decision-making.

Table (4): Arithmetic Means and Standard Deviations/ The relationship of quality of information provided by the management information systems with the effectiveness of decision-making.

No.	Paragraph	Mean	Std. Deviation	The degree of approval
1	Information provided by the management information system characterized by accuracy.	4.00	.54	High
2	Management information system helps by providing information suitable for decision-making.	3.79	.95	High
3	Management Information Systems provides most of the necessary information to make the decision.	3.57	1.25	High
4	Management Information Systems provide information in the suitable time to make decisions.	3.50	.83	High
5	Management information systems in gives historical information and relied upon to take future decisions.	3.57	1.59	High
6	Management information systems It helps in providing predictive information.	3.21	1.27	Medium
7	The introduction of management information systems gives the best form of information, making it easier to deal with it.	3.79	.95	High
8	Information provided by the Management Information System characterized by concise.	3.71	.80	High
9	Information provided by the Management Information Systems meets the needs of its beneficiaries to make decisions.	3.79	.56	High
10	Management information system provides the user with clear information to make decisions.	3.79	.56	High
General Arithmetic Mean		3.67		High

Resource: By Researcher Depending on SPSS Results.

As shown in the above table (4). It was explained that the arithmetic means of the relationship of quality of information provided by the management information systems with the effectiveness of decision-making paragraphs ranged from (3.21 to 4.00), it reflects an average and high degree of approval, the standard deviation of the different paragraphs demonstrates the severity of answers and that their agreement on the relationship of quality of information provided by the management information systems with the effectiveness of decision-making, it ranged between (0.56 - 1.59), which means that the most of answers were centered around the middle and not dispersion.

Table (5): Arithmetic Means and Standard Deviations/ The relationship of uses offered by management information systems with the effectiveness of decision-making process.

No.	Paragraph	Mean	Std. Deviation	The degree of approval
1	Management information systems helps to provide periodic reports to facilitate researching activities for problems.	3.50	.83	High
2	Expert systems helps in completing the various stages of decision-making.	3.36	.72	medium
3	Use of decision support systems at all stages of decision-making.	3.64	.98	High
4	Decision support systems Helps to solve complex problems easily.	3.64	.82	High
5	Management information systems provides quantitative methods for decision-making processes as an operational research.	3.29	.97	medium
6	Management information systems reduces the use of discretion in decision-making.	3.50	.83	High
7	Management information systems provides information in the graphical or mathematical form.	3.14	.75	medium
General Arithmetic Mean		3.44		medium

Resource: By Researcher Depending on SPSS Results.

As shown in the above table (5). It was explained that the arithmetic means of the relationship of uses offered by management information systems with the effectiveness of decision-making paragraphs ranged from (3.14 to 3.50), it reflects an average and high degree of approval, the standard deviation of the different paragraphs demonstrates the severity of answers and that their agreement on the relationship of uses offered by management information systems with the effectiveness of decision-making, it ranged between (0.72 - .98), which means that the most of answers were centered around the middle and not dispersion.

Table (6): Arithmetic Means and Standard Deviations/ The impact of developing management information systems with the effectiveness of decision-making.

No.	Paragraph	Mean	Std. Deviation	The degree of approval
1	Modern management information systems contributes to identifying the problem accurately greater than the	4.14	.65	High
2	Modern management information systems to provide appropriate information to help identify the real	4.21	.68	High
3	Modern management information systems contributes in identifying the real problem more quickly.	4.07	.60	High
4	Modern management information systems offer alternatives and solutions to the problems better and	4.07	.89	High
5	Old management information systems contributes to	3.50	.92	High
6	Modern management information systems contributes in achieving expected results better than the previous.	4.7	.71	Very High
General Arithmetic Mean		4.01		High

Resource: By Researcher Depending on SPSS Results.

As shown in the above table (6). It was explained that the arithmetic means of the impact of developing management information systems with the effectiveness of decision-making paragraphs ranged from (3.50 to 4.70), it reflects a high degree of approval, the standard deviation of the different paragraphs demonstrates the severity of answers and that their agreement on the impact of developing management information systems with the effectiveness of decision-making, it ranged between (0.60 - .92), which means that the most of answers were centered around the middle and not dispersion.

5.2 Test Hypotheses:

Ho1: There is no importance for management information systems in decision-making in the departments surveyed.

Table (7): Results of t-Test for the importance and the role of information systems in decision-making.

Paragraph	Arithmetic Mean	T-Value Calculated	T-Value Tabulated	Degrees of Freedom	Confidence Level (α)	Decision
Paragraphs of the Main Hypothesis **Ho1**	3.71	20.11	3.46	55	0.000	Significant

Resource: By Researcher Depending on SPSS Results.

Depending on the table No. (7) The value of t-calculated (20.11) is greater than t-tabulated (3.46), and the average calculated from sample data (3.71) is greater than the assumed average (3.00), and the level of significant (0.000) is less than 0.05, we reject the null hypothesis Ho1 and accept the alternative hypothesis.

First main hypotheses is also divided into three sub hypotheses. The three sub hypotheses are:

Ho1a: There is no relationship between the quality of information provided by the management information systems and the effectiveness of decision-making in the departments surveyed.

Table (8): Results of t-Test for the relationship of the quality of information with the effectiveness decision- making.

Paragraph	Arithmetic Mean	T-Value Calculated	T-Value Tabulated	Degrees of Freedom	Confidence Level (α)	Decision
Paragraphs of the Main Hypothesis **Ho1a**	3.67	34.75	3.46	55	0.000	Significant

Resource: By Researcher Depending on SPSS Results.

Depending on the table No. (8) The value of t-calculated (34.11) is greater than t-tabulated (3.46), and the average calculated from sample data (3.67) is greater than the assumed average (3.00), and the level of significant (0.000) is less than 0.05, we reject the null hypothesis Ho1a and accept the alternative hypothesis.

Ho1b: There is no relationship of the uses of management information systems with the effectiveness of decision-making in the departments surveyed.

Table (9): Results of t-Test for the relationship of the uses of management information systems with the effectiveness decision- making..

Paragraph	Arithmetic Mean	T-Value Calculated	T-Value Tabulated	Degrees of Freedom	Confidence Level (α)	Decision
Paragraphs of the Main Hypothesis	3.44	30.80	3.46	55	0.000	Significant

Resource: By Researcher Depending on SPSS Results.

Depending on the table No. (9) The value of t-calculated (30.80) is greater than t-tabulated (3.46), and the average calculated from sample data (3.44) is greater than the assumed average (3.00), and the level of significant (0.000) is less than 0.05, we reject the null hypothesis Ho1b and accept the alternative hypothesis.

Ho1c: The development of management information systems does not contribute in increasing the effectiveness of decision-making in the departments surveyed.

Table (10): Results of t-Test for the contribution of the development of information systems in increasing the effectiveness of decision-making.

Paragraph	Arithmetic Mean	T-Value Calculated	T-Value Tabulated	Degrees of Freedom	Confidence Level (α)	Decision
Paragraphs of the Main Hypothesis	4.01	41.85	3.46	55	0.000	Significant

Resource: By Researcher Depending on SPSS Results.

Depending on the table No. (10) The value of t-calculated (41.85) is greater than t-tabulated (3.46), and the average calculated from sample data (4.04) is greater than the assumed average (3.00), and the level of significant (0.000) is less than 0.05, we reject the null hypothesis Ho1c and accept the alternative hypothesis.

VI. Discussion of results

As a result of the application of a study's questionnaire on the departments surveyed, the study found the following results.

6.1 The importance and role of Management Information Systems:

The results show that management information systems available in the departments surveyed. management information systems provides the hysterical information that are suitable, necessary and predictive information at the suitable time to make the future decisions. Management information systems gives the best form of information, making it easier to deal with it, these information characterized by accuracy, concise, clear and meets the needs of its beneficiaries in decision-making.

6.2 Uses offered by management information systems:

Management information systems provides uses that helps in effective decision-making, provide periodic reports to facilitate researching activities for problems and reduces the use of discretion in decision-making,. also using decision support systems at all stages of decision-making because it helps to solve complex problems easily in a high rate, Management information systems provides quantitative methods for decision-making processes as an operational research, provides information in the graphical or mathematical form. and Expert systems helps in completing the various stages of decision-making in a medium rate.

6.3 Continuous developing of management information systems:

Continuous developing of management information systems represents by the emergence of new techniques and methods more effective in processing information accurately greater than the previous, the old management information systems contributes to choose the best alternative solution, but Modern management information systems to provide appropriate information to help identify the real problem, contributes in identifying the real problem more quickly, offer alternatives and solutions to the problems better and enough than the old management information systems and contributes in achieving expected results better than the previous in a high rate.

VII. Conclusions:

The importance of management information systems in decision-making process are the theoretical foundations of this study. The use of statistical analysis such as descriptive and t-test helped to clarify the relationship between the quality of information provided by the management information systems and the effectiveness of decision-making in the organization under study, the relationship between the uses offered by the management information systems and the effectiveness of decision-making in the organization under study and the relationship between the uses offered by the management information systems and the effectiveness of decision-making in the organization under study.

The experimental validation of the model is the importance of management information systems in decision-making process in a sample of 56 of 84 Saudi Deans and Managers in Najran University, showed the importance of management information systems with decision-making process. The results of the study confirmed the results of previous studies that have confirmed the positively impact of management information systems on decision-making process, and there is a relationship between the quality of information provided by the management information systems and the effectiveness of decision-making, the relationship between the uses offered by the management information systems and the effectiveness of decision-making and the relationship between the uses offered by the management information systems and the effectiveness of decision-making in the organization under study.

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