# THE IMPACT OF MANAGEMENT INFORMATION SUSTEMS ON THE QUALITY OF MANAGEMENT DECISIONS

# Johnson Olu Egbuniwe

University of Mediterranean, Karpasia, Cyprus Email: johnson.olu@gmail.com

#### **ABSTRACT**

The study aims to focus on the reality of the impact of using the administrative information systems (operational, administrative and decision support) in the quality of the administrative decision-making process in the Libyan Almadar Company and to identify the problems and difficulties that affect the decision-making process. As well as the study trays to determine the role of MIS in the quality of decision making in Almadar communication company.

One of the most prominent findings was the strong relationship between the management information systems and the quality of managerial decision-making and the highly significant impact of types of management information systems on the quality of decision-making.

**Keywords:** Management information Systems, Decision-Making, operational information systems, Decision support systems, Organizational Performance.

#### INTRODUCTION

The information is the main source for any organization and business success, also information is a major resource for increasing the efficiency and effectiveness of various administrative activities. This will make the organizations be able to perform their functions successfully and efficiently.

The importance of a decision is necessarily equal to the importance of the information on which it is based to decide it. Some writers relied on the distinction between successful organizations and failed organizations (successful administrations and failed administrations), the basis of their success in decision-making, how many wrong decisions have eliminated the hopes and aspirations of large organizations and vice versa. An administration equipped with the necessary information and the required characteristics achieves better results, and at the same time, the incompleteness and misleading information will lead to unsuccessful management. The success of organizations depends on the rate of their management efficiency in successful decision-making. Information is the main ingredient on which decisions are made with regards to the level of accuracy, comprehensiveness and good timing in the provision of information; these factors will increase the efficiency of those decisions (Ghazi A and Hu, W, (2015).

This study attempts to determine the impact of the use of Management Information Systems (MIS) on the quality of decisions in Almadar Libya. By knowing this effects, the company can identify the imbalances in the management information systems and thus try to cure it and then be able to develop and raise the efficiency and the performance of its employees in this area. This study comes at a time when various organizations at the global and local levels are moving towards relying on MIS to make decisions at various levels of administrative and attempts to prove the importance of providing appropriate information at the internal and external levels of management at all levels.

Considering the above discussion, the following Research Questions were developed

- i. Does the use of decision support information systems affect the quality of management decisions in almadar?
- ii. Does the use of administrative information systems affect the quality of management decisions in almadar Libyan Company?

- iii. Does the use of operational information systems affect the quality of management decisions in almadar?
- iv. What are the effects of Management information system on the company's performance with regards to decision-making?
- v. What aspect of MIS affects Managerial decision-making considering the different level of management?
- vi. What is the relationship between a quality decision making process and company's performance in the Almadar Company, Libya?

#### 2.0 Theoretical framework and Research design

This researched is based on three hypotheses and a model will be developed with regards to the relationship between decision support information systems, management information systems, operational information systems, and quality management decisions.

## 2.1 Quality of Administrative Decisions

The quality of the decision means the use of accurate, reliable and relevant information to reach a high level of good decision at various levels of management in the organization. Each decision involves a high level of risks, and to avoids or limits the impact of these risks one must depend on comprehensive and relevant data of information to take the decision. The decision maker has a major impact on the quality of the decision. They play an important role as the even if the information given have the accepted quality, the final say depends on them.

A good decision depends mainly on two elements:

- The accuracy, comprehensiveness, completeness, reliability and relevance information.
- The Qualified person (the decision-maker) has to be available to make the right decision and is able to analyze this information and exploit it in the decision making process.

There are many types of Administrative decisions that are appropriate to different types of MIS. The structural decisions are best suited to information systems known as operational information systems. Semi-structural decisions are best suited to information systems known as MIS. And the non-structured decisions are best suited to information systems known as decision support information systems. (Rhodes, R, 2012).

This research will highlight the impact of the use of MIS on the quality of management decisions in Almadar. After identifying the dependent variable, the quality of the administrative decisions and their components, we will identify the independent variables of the various types of administrative information systems and their relation to the quality of the administrative decision.

## 2.2 Decision support information systems

The concept of decision support systems was introduced in the early 1970s by Scott Morten under the name of departments' support systems, but the decision support systems is a free term that does not agree on a uniform definition as it a new science and there are a large number of specialists who are interesting in it at the present time. It is defined as "an information system that makes use of computers to provides managers with easy and fast access to the internal and external information they need to perform their administrative activities" (Ghazi A and Hu, W, 2015).

Decision support systems are defined as a complete set of software, ready-made packages, processing tools, interacting with data and information used to deliver proposed solutions. It can combine several models to form an integrated model to retrieve information useful in semi-structured and unstructured decision-making (Hussein A, 2008)

The concept of decision support systems can be clarified through by this definitions:

- Systems: where the decision support system is built based on the needs of the actual beneficiaries while observing the environmental changes that it deals with.
- Support: The decision support systems support rather than replace the director in the decision- making process. It provides the manager with appropriate analytical methods for the studied phenomenon and leaves the final decision of the manager.
- Decision: For effective decision making, a person must be able to forecast the outcome of each option as well, and based on all these items, determine which option is the best for that particular situation. Where decision support systems focus on supporting the transition from the operational levels to solving administrative problems with the manager's attention (Al-Mahasneh Mar, 2005).

It can be deduced from the above definitions that the primary purpose of decision support systems is to improve and support management decision-making in senior management level and that decision support systems focus on supporting non-structured decisions in the Organization. They also serve senior management primarily in the long-term planning of all aspects of the organization and improve the quality of management decisions taken in senior management (Raymond, L., & Bergeron, F, 2008).

#### 2.3 Management Information Systems (Functional)

The management information systems "as an integrated system consisting of a group of individuals, devices, procedures, subsystems of information, in order to provide the department with all the necessary accurate and adequate information about all activities in the organization in order to accomplish administrative functions from planning, Leadership, and control, and to make structural and semi-structural decisions efficiently and effectively (Wu, J., & Wang, Y, 2006). They can be defined as a group of individuals, data, and procedures associated with each other to provide useful information (Encyclopedia Britannica, 2012)

It is also defined as a kind of information system designed to provide the management of the organization with the necessary information for planning, organization, leadership, and control of the organization's activities or to support decision-making.

It is concluded from the above definitions that the basic function of MIS is to provide accurate and comprehensive information that increases the efficiency of the Organization's administrative processes and improves the quality of semi-structured management decisions as the most important in the implementation of the various functions and administrative activities. Management information systems are designed to provide information that meets the requirements of middle and lower management levels, as well as for short-term events and administrative activities. Management information systems also help managers and decision-makers to make their decisions more accurately and better than they are nomads, although this information system does not provide all the required information. Therefore, decision support systems have been designed to be specialized in the process of decision-making (Petter, S., DeLone, W., & McLean, E, 2008). **2.4 Operational Information Systems** 

The operational information systems are the information that deals with the day-to-day operations where detailed, accurate, continuous and frequent information on all aspects of the organization's activity should be provided, e.g. information related with presence and departure of individuals, types and quantities of goods produced and sold.

Operational information systems are considered as computer processing systems aimed at supporting operational management (management in the first line) to implement their programmed activities and to support their decisions. It is also an indispensable starting point for the development and application of MIS in business organizations, economic, social and other institutions (Ragu-Nathan, B. S., Apigian, C. H., Ragu-Nathan, T. S., & Tu, Q, 2004).

It is concluded from the previous definitions that the basic function of operational information systems at the minimum administrative levels is to obtain, analyze, classify, and categorize information accurately, as it is the direct front line for dealing with customers. Thus, operational information systems obtain real, accurate and reliable information for administrative decisions at the lower administrative levels, in addition, it is considered an input to MIS (functional) (Laudon, K.C. and Laudon, J. P, 2001). Thus, information obtained from operational information systems significantly affects the quality of management decisions taken at the lower administrative level and other administrative levels.

## 2.5 The system

As an organization operates in an external environment, as an open system it must know what is around it to be able to cope with all changes. Although the systems existed before the existence of the human, the use of this concept was not known in the fields of science. Since 1929, the concept of the system has become an important role in modern science, especially in the administration, where the method of the system is an essential and effective tool to overcome some of the problems and difficulties being faced by the administration of the organization (P. Trivellas, P. Reklitis, and I. Santouridis, 2006)

The system is defined as "a set of interrelated elements or parts that operate in full coordination and interaction, governed by relationships, and a specific mechanism of action within a specific range, to achieve common ends and a general objective". And (D. Naranjo-Gil, 2009) defined it as a "set of parts that interact and integrate with each other and with their environment to achieve a particular goal or objectives". (Yassin, 2006) defined system as "a Group of an orderly nature of interdependent

and Integrated components that rely on each other to achieve common goals". Also (Edris, 2007) defined it as a coherent and homogeneous group of resources and elements (individuals, equipment, machines, funds, records, etc.) that interact with each other within a certain framework (system boundaries) towards a goal, or a set of general objectives under environmental conditions or constraints.

The system includes several elements that can represent a subsystem within the system itself and interact with one another to achieve a goal or set of objectives that the system seeks to achieve under certain environmental parameters, (X. Deng, W. J. Doll, and M. Cao, 2008)

- 1. Inputs: represent the resources required for the system to be able to do different activities to achieve the objectives. The inputs include many heterogeneous elements such as data and machines, and the inputs are outputs of other systems, whether they are in a system or subsystems within the system itself.
- 2. Process: Operations are intended to convert inputs into outputs and the conversion may be a machine, a human or both (Bharati, P., & Chaudhury, A, 2004).
- 3. Output: It is the result of the process of converting inputs into outputs, these outputs are a commodity, service or information. The output is the tool from which helps checks the system performance and its ability to achieve its objectives.
- 4. Feedback: The feedback tool is a corrective tool for any outputs to achieve the system performance control. The feedback can be divided into two types:
  - Corrective feedback is intended to return objects to their correct position.
  - The developmental feedback that working on the development of system performance or change of objectives.
- 5. Relations: Represents the way through which the subsystems are connected to each other, and the system is also linked to its environment.
- 6. Environment: The environment where the system operates.

# 2.6 Research design

The research is based on the descriptive and quantitative type methodology. This will analyze the variables of the study and will conduct the correlation and causal tests between independent and dependent variables. The characteristics of the demographic sample are measured by calculating the percentages and frequencies. Also, the response of the sample of the study variables (independent and dependent) will be measured by calculating the mean and standard deviations.

A simple random sample was selected from the study community of 700 employees in the Libyan Almadar company, based on the scientific foundations that have been developed from the sample size is suitable for most researchers if it is more than 30 and less 500 items. The researcher conducted the validity of the questionnaire by presenting it to (6) faculty members with competencies in marketing and business administration in Libya.

The stability value of the measuring instrument was determined by calculating the (reliability coefficient) for each area of the questionnaire, as well as determining the total degree of stability. This was done by

using the Alpha Cronbach test, and the value of this coefficient is between (0) to (1), Value is considered ( $\alpha \le 06.0$ ) an indication of the low degree of reliability of the internal scale (Malhotra, 2004) The value of alpha for the study variables is as follows:

**Table 1**: Results of the value of the alpha stability coefficient.

Variable	Cı	onbach alpha coefficient
The stable coefficient for a	.11	81.3
variables		

**Note** Table (1) shows that the coefficient of stability for all study variables is higher than the minimum acceptable level (60%).

#### 2.6.1 Measurement of study variables

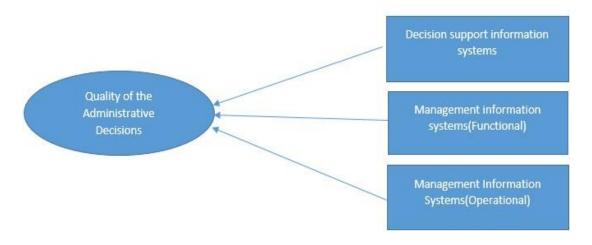
The information support systems, management information systems, and operational information systems of Almadar were measured by using the Likert scale to select the correlation and causal relationships between these variables. The measurements were as follows: Strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5.

The quality of administrative decisions is characterized by a set of characteristics: consistency and coherence of decision, integrity and transparency of the decision, comprehensiveness and integrity of the decision.

The operational information systems have a set of characteristics and they are as follows: a system of facilitation, representing a rapid response to diverse information needs, flexibility and adaptability, including models and can name new models, advanced technology.

Management Information Systems (MIS) have a set of characteristics and they are as follows: summary and diverse reports, timeliness and reliability, simplified models with data infrastructure, technology are stable.

The decision support information systems have a set of characteristics, as follows: detailed and report-driven information systems, modular information systems, good performance, reliability, and stable technology.



#### Figure 1: The Model of the Study

This model shows the extent to which the use of MIS will affect the quality of management decisions used in the Libyan almadar Company. The level of correlation between independent variables (systems Administrative information) and the dependent variable (quality of administrative decisions) will also be examined. The study data were analyzed by using several statistical and descriptive statistical methods based on the statistical analysis program (SPSS). A model has been developed showing the relevance and impact of MIS in their departments on the quality of administrative decisions.

The correlation and causal relationships have been tested by using the linear regression model using the primary data. The hypotheses were tested by using (T-Test) to test the effect of the independent variable on each dependent variable in the simple linear regression model, and the correlation coefficient (R) was used to determine the strength and the type of relationship between the dependent variable and the independent variable. And using the limiting factor (R2) to determine the extent to which independent variables contribute to changing variance in the dependent variable.

In addition to descriptive statistical methods, the arithmetic mean and standard deviation to determine the degree of acceptance or rejection of the sample members of the sample for the questionnaire paragraphs.

### 3. Analysis

#### 3.1 Descriptive analysis of the data study

In this section, the characteristics of the sample will be displayed according to their demographic characteristics

**Table 2:** Distribution of the sample items by gender.

Gender	Number of Respondents	Percentage	
Male	33	55%	
Female	27	45%	
Total	60	100%	

**Table 3:** Distribution of the Sample Items by age.

Age	Number of Respondents	Percentage
Less than 25 years	32	53.3%
From 25 to 35 years	14	23.3%
From 35 to 45 years	9	15.1%
45 years and more	5	53.3%
Total	60	100%

**Table 4:** Distribution of the sample items according to Academic qualification.

Qualification	Number of Respondents	Percentage	
Diploma	12	20%	
BA	38	63%	

**Table 5:** Distribution of sample items by years of experience.

Years of Experience	Number of Respondents	Percentage
Less than 3 years	18	30%
From 3 to 6 years	20	33.3%
From 6 to 10 years	16	26.7%
More than 10 years	6	10%
Total	60	100%

**Table 6:** Distribution of Sample Items by Education Level.

Career Level	Number of Respondents	Percentage
Higher Management	7	11.7%
Central Management	27	45%
Minimum management	26	43.3%
Total	60	100%

# 3.2 Test of hypotheses:

In this section, hypotheses are stated clearly. The result of the research hypotheses is presented in the tables which are shown below.

**Table 7:** Results of the first hypothesis test (Ho1), which states that there is no statistically significant effect of the use of decision support information systems on the quality of administrative decisions of Almadar Libyan Company.

T/Morality	T	T	R	R <sup>2</sup> The coefficient of determination	Statistical
*Sig	Calculated	Table	Engagement		Resolution
0.002	3.259	1.96	0.393	0.155	Rejection of the Null hypothesis

The above table shows that the null hypothesis can be rejected according to the hypotheses rule. The calculated t value is greater than the t-table and the significance of the test is less than 5.0. It can thus be concluded that the efficiency of the decision support information systems and the efforts of these systems at the senior management levels of Almadar Libyan Company significantly affect the quality of management decisions taken at this level. Despite the weakness of the ratio of R (0.393) and R<sup>2</sup> (0.155), they're important in interpreting the relationship between the two variables. The influence of decision support information systems in providing accurate and detailed information, in the quality of administrative decisions, can explain this relationship through the adoption of a good decision-maker on such modern systems in obtaining the information for adoption as the basis for effective decision making in the company.

**Table 8:** Results of the second hypothesis test Ho2, which states that there is no statistically significant effect of the use of functional management information systems on the quality of management decisions in Almadar Libyan Company.

T/Morality *Sig	T Calculated	T Table	R Engagement	R <sup>2</sup> The coefficient of determination	Statistical Resolution
0.223	1.232	1.96	0.160	0.025	Rejection of the Null

The results of the simple linear regression analysis in Table (3.8) show no significant effect of the MIS on the quality of the administrative decisions in the middle management level of Almadar Company because the (Calculated T = 1.232) less than their tabular value, and at a level greater than (.05). And accordingly, to the statistical and explanatory rule, we accept the second Null hypothesis (Ho2), and we reject the alternative hypothesis. The value of correlation coefficient R between the variables is (0.16), and this indicates the weak effect of MIS (functional) on the quality of administrative decisions at the middle administrative level of the Libyan Almadar Company.

**Table 9:** Results of the choice of the third hypothesis (Ho3), which states that there is no statistically significant relationship to the effect of the use of operational information systems on the quality of administrative decisions in Almadar Libyan Company.

T Calculated	Table	R Engagement	R <sup>2</sup> The coefficient of determination	Statistical Resolution
4.070	1.96	0.471	0.222	Rejection of the

The above table shows that the null hypothesis (Ho3) can be rejected. Where the value of (Calculated T = 4.070) is greater than the table T value and the significance of the test is less than (.05). We can find out that the operational information systems at the lower administrative levels of the Libyan Almadar company significantly affect the quality of the administrative decisions that taken at this level. The correlation coefficient R between the two variables reached (0.47). This indicates that there is a positive

effect of operational information systems on the quality of management decisions of Libyan Almadar Company, and the explanatory power  $R^2$  to the independent variable is (0.22) is low but important. This result can be explained by the fact that operational information systems try to make quality administrative decisions taken at that administrative level, as well as the low management level, make use of the information correctly to make effective administrative decisions.

**Table 10:** Results of the test of the effect of independent study variables (x3, x2, x1) in the dependent variable (Y), (Multiple linear regression analysis).

T/Morality *Sig	T Calculated	R Engagement	R <sup>2</sup> The coefficient of determination	Statistical Resolution
6.933	0.520	0.271	Rejection of the	Null hypothesis

Based on what is shown in the previous table, we reject Ho and accept the alternative hypothesis, where it is noted that the significance of the test (sig) is equal (.000) which is less than  $\alpha$  (.05). Also, the value of calculated F equal (6.933) which is greater than the tabular F, so there is a significant effect of (x3, x2, x1) in the dependent variable (Y). There is also a strong correlation between independent variables (MIS) types and variable (The quality of the administrative decision), the fact that R equals (.52), in addition to the explanatory power R2 (271).

## 3.3. The results of descriptive statistical analysis of the response of the sample study to the variables of the study.

This section will extract the arithmetic mean and standard deviation of the study questions (independent variables and dependent variable).

**Table 11:** The Results of Descriptive Statistical Analysis of the Independent and Dependent Variables.

The subject of questions with reference to	Arithmetic	Standard	Corresponding
each variable	mean	deviation	degree
Operational Information Systems	4.043	0.771	High
Provides detailed information	4.216	0.783	High
Be guided by reports	3.783	0.865	High
Typical operation	4.083	0.719	High
Affected by good performance	4.250	0.627	High
The technology used is stable	3.883	0.865	High
Management information systems	4.123	0.706	High
Whose reports are diverse	3.883	0.865	High
Effects of the appropriate timing	4.250	0.627	High
Simplified models are used	4.216	0.783	High
Use a data infrastructure	3.900	0.543	High

Technology is fairly stable	4.366	0.712	High
Decision support information systems	4.070	0.799	High
The system supports the decisions of senior management	3.883	0.865	High
The system provides support for decision- making stages	4.250	0.627	High
The system supports a variety of decision- making processes	4.216	0.783	High
The decision support system is easy to use	4.366	0.712	High
The technology used by the system is	4.083	0.712	High
sophisticated	7.003	0.717	111511
The decision support system is	3.950	0.946	High
adaptable to user needs (flexible)			
The system provides information in multiple forms and formats	3.783	0.865	High
Easy to understand and apply	4.033	0.882	High
Quality of administrative decisions	4.011	0.753	High
Consistent with the company's general policy	4.000	0713	High
In line with the company's objectives	4.050	0.928	High
Can be easily pursued	4.033	0.636	High
You can always know who you are	3.583	0.961	High
Achievable	3.750	0.932	High
Contribute in its entirety to achieve	4.250	0.571	High
the company's mission	1		I

the company's mission

Not conflicting 4.416 0.530 High

(\*) Average measurement tool= Total measurement weights  $\div 5 = (1+2+3+4+5) \div 5 = 3$ .

The results of the descriptive statistical analysis of the study questions in Table 11, shows that the trends of the study sample were positive for all sections of the independent and dependent variables and their corresponding dimensions. For operational Information Systems, the mathematical averages for "Effects of good performance" dimension of the study samples are greater than the mean of the measurement instrument, and the standard deviation is less than the half of the arithmetic average. Note that there is a high approval of the least independent variable, where the average response is (4.043) and the standard deviation (771.), Questions (6-10). This indicates that Almadar Company is using operational information systems at the low management level. Finally, the use of operational information systems in this department affects the quality of the management decisions made in that company.

The results in the table also indicate that there is a high degree of approval for a second independent variable, the management information systems. The average response to this variable was (4.123). This indicates the extent to which the use of management information systems at Almadar middle management levels has affected the quality of management decisions (questions 11-15). It should be noted here that despite the high overall response levels of the sample on the first independent, the average overall response to this variable was greater than the total response on the first dimension.

For the third independent variable, the decision support information systems used by Almadar Libyan company, the results of the descriptive analysis indicates that the total response of individuals is high (questions 16-23). Where the average response to this independent variable is (4.070), and the standard.

deviation (.799), which means that the decision support information systems at Almadar's senior management levels use this system effectively and efficiently. The average response to this variable is close to the average response of the first independent variable and the second. In addition, decision support information systems have an effective impact on the quality of management decisions taken at this level of management. This means that Almadar Company benefits from the three types of management information systems in a very effective way with regards to the quality of management decisions at administrative levels but in varying degrees.

The results of the analysis, as shown in the table, indicate that there is high approval for the quality of the administrative decisions. The average response was (4.011) and the standard deviation (0.753). These values were for the dimensions of the dependent variable, (questions 24-30), which indicates that the quality of the administrative decisions taken in Almadar Libyan company at all levels of management is at a high level of quality. And the various types of MIS affect the quality of management decisions taken in this organization effectively.

#### 4. Conclusion

The results of the study show a strong relationship and significant effect for the different form of management information systems on the quality of administrative decisions in the Libyan Almadar. The value of correlation coefficient R between the independent variables and the dependent variable combined is 52%, and this indicates a positive and acceptable relationship between Management information systems and the quality of management decisions. The explanatory power of the R<sup>2</sup> independent variable reached amounted to (23.1%), which considered as limited but still important. The results of the test of the impact of the three types of management information systems in the quality of the administrative decisions of Almadar Libyan Company by using the simple regression method were as follows:

- There is a statistically significant impact of decision support information systems on the quality of administrative decisions at the top level of management in Almadar Libyan Company. The value of correlation coefficient R is (39.3%) between the two variables in the top management, and the explanatory power of  $R^2$  for the independent variable is (15%), it is weak but significant.
- There is no impact of administrative information systems (functional) on the quality of administrative decisions at the middle management level of Almadar Libyan Company. The correlation coefficient R between the two variables (16%) and this indicate to weak and unacceptable relationship between the (functional) management information systems and the quality of managerial decisions taken at the middle management level in Almadar Libyan Company, and the explanatory power of the independent variable R<sup>2</sup> is (2.5%), which consider as a weak value but significant.
- There is a statistically significant impact of operational information systems on the quality of management decisions at Almadar Libyan Company. The value of the correlation coefficient R between the two variables is (47.1%) and that indicates to a positive and acceptable effect of operational information systems on the quality of management decisions in Almadar Libyan Company, and the value of  $\mathbb{R}^2$  of the independent variable (22.2%).

The results of the study showed that there is an important and significant effect of the different types of MIS on the quality of administrative decisions in the Almadar Libyan Company where the value of R reached about (52%), and  $R^2$  about (23.1%).

Almadar Libyan Company is using operational information systems efficiently and effectively and has a positive effect on the management decisions at the lower level of the company and is characterized by diversity in terms of collecting the information resources.

Almadar Libyan Company does not make much effort in the use of administrative information systems (functional) in the middle management level of the company, and therefore the administrative information systems (functional) affect weakly on the quality of administrative decisions taken at this level of management.

Almadar Libyan Company is actually using the decision support systems at the top level of management at Almadar Libyan Company in effectively and efficiently way in influence the quality of decisions taken at the level of the organization.

The administrative decisions are taken by Almadar Libyan Company for their administrative levels (low and top) are on the high level of quality and efficiency, by relying on the information provided from the various kinds of MIS.

# 4.1 Recommendations and proposals

- 1. Despite the efficiency of administrative information systems in the Almadar Libyan Company, the company must increase the attention of administrative information systems (functional) in the middle level of management and work to increase the efficiency in influencing the quality of management decisions.
- 2. The need to increase the efficiency of operational information systems at the low management level, as well as decision support information systems in senior management, despite the positive impact of these systems on the quality of management decisions taken in the company that have been reached in this study.
- 3. Work on the use of administrative information systems in a way that contributes to improving the quality of administrative decisions at all levels of management, and in a manner way that helps the company to achieve competitive advantage and sustainability.
- 4. The important to increase the interest Almadar Libyan Company, in the quality of information, obtained and relies on modern management information systems to ensure the quality of this information.
- 5. The need to conduct more research in the field of modern administrative information systems and the quality of administrative decisions is essential by determining the relationship of modern information systems.
- 6. There is a need to increase the efficiency of decision makers in the Almadar Libyan Company, by using the information resulting from the various management information systems at all levels of management in the company.

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