

## **Management information systems and their importance in decision-making**

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### **Abstract**

Information is meaningful. The organization needs information so that it can connect its different parts to achieve its objectives and to adapt successfully to the surrounding environment. Information is of value to the Organization as it is of greater benefit in decision-making and processes. There are five essential characteristics of information to be of value to the Organization:

Relevance, accuracy, quantity, timeliness, and accessibility of information to the technology used in the Organization.

A pilot field study was conducted to test the impact of information in decision making,

Governmental institutions; two basic assumptions were developed:

- Assuming a relationship between the appropriateness of information and the effectiveness of administrative decision making.

The research and analysis of the findings revealed findings that information systems and technologies play an active role in decision making in government institutions.

Especially modern ones, and computerization has an important role in the speed of access to information

The speed of decision making, which would increase the effectiveness of administrative decisions and increase their value.

The researcher finally came up with a set of recommendations that would pay attention to systems design

Information for each department or institution before the lesson and speed up the government project

With the benefit of Arab and international experiences in this field.

As well as attention to issues of information confidentiality and protection from tampering, vandalism, theft and forgery

And other security and protection issues in automated information systems.

### **Introduction**

I chose this research to increase my knowledge of the administrative system and the importance of administrative information in decision making. Management is the art and science of things. We believe that the system plays a prominent role in the life of the individual and society.

The human duty is not limited to learning and gaining experience for itself, but rather to the need to transfer its experiences and knowledge to its children and generations after it. Therefore, it was necessary to invent what

is known as external memory because the memory of man belongs to it closely and is affected by what happens. It is from psychological emotions and health disorders and biology.

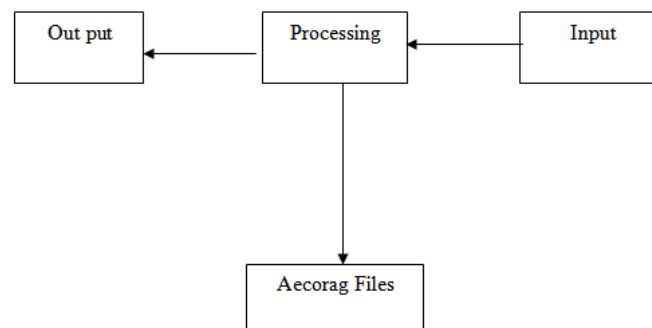
And includes the external memory in the use of man from the media record the information and data collected by the views of the daily and obtained from the results of his creative thinking and experiences and experiences over the days, and has been said among the circles of specialists in administrative science that the first person without his observations and experiences engraving on the walls of caves. And the caves that were inhabited, and developed the method of registration used by man, and developed the means of recording the evolution of time appeared clay tablets in various forms as well as other Geratin and stone paintings that the importance of the information management system confirms that difficult Identify trends, strategies and objectives of work without information, and it is not possible to carry out the activities of the Organization and follow up and seek to develop them without the availability of accurate information, organized and mobilized.

The development of the world and its entry into major administrative and organizational revolutions accompanied the new industrial style. Through the introduction of information systems on the computer sophisticated types of modern technologies that can meet the problem, and is intended to transform the method of conservation, processing and circulation of information to a system (programs) to suit the nature of information that exists in it.

### **I need information for managers**

The administrative information systems can be classified according to the administrative tasks related to the administrative tasks to be addressed, which will be between the head of the department and the departmental managers of the department, and before classification systems we have to identify the system and management and information can be defined as follows:

- The definition of the system in general as: the set of interconnected parts and these parts may be Processing processes or components, components may be: a person, a group, an institute or something.
- Management can be defined as: the art of doing business through others.
- Information is: Data processed so that it has a certain significance, and should address these data and mutate one way or another so that it can turn into so-called information. (1)



**These systems can be classified into:**

**Financial Information Systems: -**

It is one of the most important information systems in the management of informatics. It includes historical information on labor imports, job requirements (balance sheet), information about them and through the process of determining the estimated budgets. The information management system is available on the planning and control of profits. To the investment of the shareholder for the mixed sector enterprises, and there is no doubt that senior management and executive managers need these types of information, so often these systems are wide, including all the information needed by different administrative levels

**Marketing Management Information Systems: -**

Marketing is the sale and distribution of established products. For these events, the manager develops a comprehensive strategy by identifying the marketing mix and analyzing the profitability, and developing these activities by mixing.

The marketing manager uses the information systems used to develop a comprehensive strategy for multiple and non-specific marketing. The manager relies on various sources for information, such as economic studies, marketing, market research, technology development reports, specialized journals, suppliers and customers.

**Information Systems in Operations Management: -**

Operations management includes all administrative processes related to the production of the goods or services marketed by the establishment. In enterprises producing goods, this is called the production department. The concept of operations management is broader than the production management, because it regulates the operations of the enterprises providing the services.

The planning of operations requires the scheduling of production or services, and the necessary information is derived from a large number of records of the establishment.

Production scheduling information is used to develop detailed implementation plans, estimated budgets, change of financial and production records, and key sources in the development of these plans.

In order to provide control over production processes, an integrated information system should be developed to provide management with the results of the processes that have been planned and have already been implemented.

**Project Management Information Systems:**

In some cases, the task of the administration is limited to the achievement of a specific goal or task, such as building a new plant or producing a new commodity.

Because of the peculiarity of this type of business, the information systems required for it differ from those previously mentioned for the first establishments to complete a specific project. The system includes the budget of the project and its records on its activities and the cost of these activities.

**Management Information Systems: -**

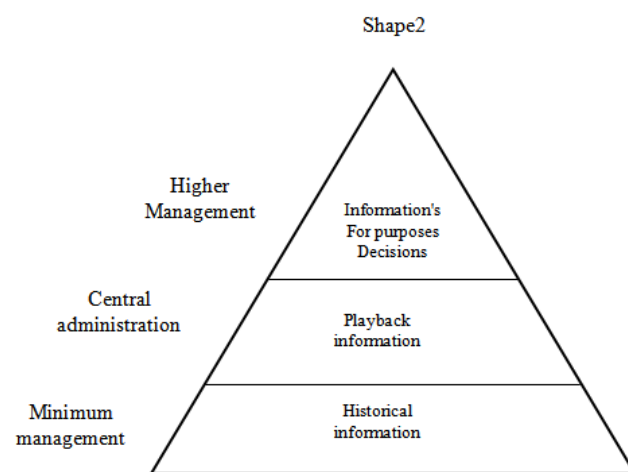
The use of mathematical and statistical methods in information analysis makes decision-making more sophisticated for management.

The means used in the quantitative analysis of information are called operational research. These are used to analyze information about decisions that have certain characteristics such as general and operational planning decisions.

In some cases, some factors are known or confirmed. For example, storage, cost of production and demand for the product can be determined for the management of warehouses in most cases.

Sometimes there are factors, such as different sales.

In some cases, the fundamentals are completely unknown, such as the inability of the manager to identify customers or demand for a new plan implemented by the company. The information systems used in these cases are systems to support administrative decisions. The system uses complex models that work on the manager of the evaluation of available alternatives, and uses symbols and mathematical transactions (2)



(1) Dr. Ali Al-Salami, Information Service in the Service of Management, Journal of the Arab Director.

(2) Strategic Information Systems, Ghassan Issa and Salwa Amin, Dar al-Massira, publishing and printing.

### **The second axis**

#### **The concept of MIS**

We understand from the meaning of the MIS that the responsible manager must consider the establishment as a set of secondary systems or a series of secondary systems, each of which alone is a system integrated with its inputs, processes and outputs. For example, production enters raw materials (inputs) (1).

Each secondary system depends on the first secondary systems. The output of one of these systems is the input required for another secondary system. Each secondary system presents a set of information from other outputs. And a set of information with other outputs.

A set of information from secondary systems is important for decision-making centers at work, if the harmonized information group falls within the same fields or fields and falls within the same time dimension within the certainty of being viewed as an information network called information systems.

Dealing with information according to computer programs:

In order to process the information available, the calculator selects the programs that will be followed during the processing of the information, either by feeding the calculator to the desired program or by retrieving the program from the computer memory if it has already been saved. The operator also feeds the calculator with the necessary information, and the central control unit follows the steps of the program by searching for the necessary information from the computer memory and processing and saving it again in a part of the memory.

Steps of the program, by searching for the necessary information from the memory of the calculator and processing and save it again in a part of memory.

The programs include the nature and arrangement of the processes to be carried out. That is, the function of the control unit precedes the calculations, and also transfers information from the input devices to the output devices after processing.

The internal memory is partial, the information store part is permanent, the software is temporarily stored, and the information store is temporary.

Where the results of operations that have been held until the appropriate time to be converted to the output devices.

One of the most important features of an electronic calculator is its ability to store information. It can save a large volume of constantly increasing information records.

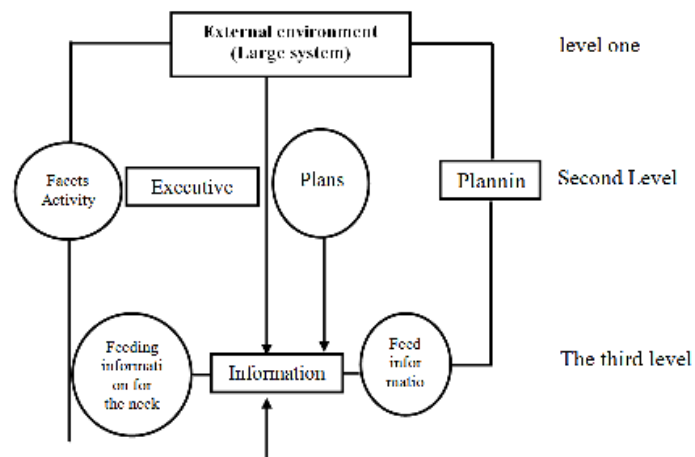
(1) Dr. Fouad Al-Qadi, Information Systems and Decision Making in Developing Countries, Journal of Public Administration, Institute of Public Administration, Riyadh, No. 26 of 1980.

### **Benefits of Management Information Systems**

When we talk about the benefits of an information system, we mean the actual need of the organization. Many management writers agree that the organization needs an administrative information system to enable it to coordinate its effectiveness and the numerous sub-goals of all administrative units within it, and to undertake effective planning and oversight functions.

It can be said that the need for the information system is in place as long as the organization intends to stay alive, efficient in directing, organizing and balancing all its activities, to reach the results that were found for it, especially if we compare the survival of the organization in a changing and evolving work environment.

Format (3) (1)



Management information systems can be useful in providing the information they need in the various departments of the organization to exercise administrative processes. In another expression in the light of this information can be effective planning, organization, guidance and control of performance. In addition to identifying and clarifying channels of communication horizontally and vertically between the administrative units in the work, facilitating the process of retrieving information and evaluating the activities of the organization and its return on investment for all the available capacities through the indicators or standards produced by the system for purposes of measuring performance efficiency and evaluating results. The future needs of the future and the potential for change in the expected work environment, so that the Department can determine in advance the actions necessary for any possible change.

### Decision support systems

Are interactive information systems that provide managers with information, models and data processing tools that help them make semi-structural and non-structural decisions in those circumstances where no one knows exactly what decision to take.

The traditional approach to decision support systems involves the interaction of problem solving, the direct use of models, methods of analysis, formulation and evaluation of decision-making alternatives. This was in the 1970s when TPS and MIS did not respond to managers' satisfaction in this regard.

Decision support systems are designed to solve problems in their semi-structural and unstructured parts, helping managers to separate the places and parts of the problem so that they can use their expertise and judgment to solve them. Through its core components (data management systems, models, knowledge and user interface).

(1) Dr. Said Mahmoud Arafa, Information System and Planning and Control Functions, Arab Organization for Administrative Sciences, April 1974.

Many decision support systems have used original innovations to effectively interact with the use of scheduled data, databases and other tools. They also contain decision-making applications that are in line with the situation or situation in a high degree, as well as use optimization models to handle business situations.

Decision support systems thus play a large role in semi-structural and non-structural decision-making through their identification of different procedures and forms. But there remains hope as to how and when to use their efficiency efficiently (1).

#### Information Systems in the Age of Globalization

Globalization has spread and everything is changing in the world of globalization and the information revolution. Thinking about markets on a global rather than a local level is that the world has become one market without borders. Different organizations must adapt to these global changes.

The role played by nations in international strategies has increased. International business expansion makes companies able to determine the physical location of each activity in the value chain. Companies take key decisions in locating each activity to enhance performance, reduce cost and risk.

Business has moved towards the global forms of organizations, but the success of this requires the organization of information systems and the formation of business processes where information can be used by different business units in many countries.

However, managers in the global context are working in a volatile and complex environment that can not be ignored compared to the local context, where the entity deals with multiple nationalities and cultures that affect the dissemination and flow of information between the institutional sponsor and the multinationals.

Hence, the need for rapid change in strategies was the inevitable result of the institution, especially the emergence of huge mergers that led to the emergence of giant entities to deal with different cultures and environments and the search for appropriate information systems.

Organizations need to develop the strategy, taking into account the development of the information system and not ignoring the need to deploy this system to business units and external partners.

The networks help to strengthen the implementation of the strategic alliance between local and foreign companies because of the ease of electronic data exchange over the wide and global networks. The networks connect the branches and their subsidiaries because of the low cost and the increase in the speed of performance. The databases also provide reports to senior management about the company's activities. In this regard, it should be noted that the task of developing the MIS does not stand in its design, testing and final implementation. It is also important to make such a system live and interact with the Organization and meet the evolving needs of the And is characterized by a high degree of flexibility that makes it face many variables in and outside the organization as well as the end of the project management information system on the day of completion of its design and implementation. But the process of sustaining it and reviewing it from time to time to make changes to it.

- (1) Strategic Information Systems, Ghassan Issa and Salwa Amin, Dar Al Masirah for Publishing, Distribution and Printing, pp. 339, 2008

For the top management of the company's activities geographically. In this regard, it should be noted that the task of developing the MIS does not stand in its design, testing and final implementation. It is also important to make such a system live, interact with the organization, meet its advanced information needs and be highly flexible. Many variables within and outside the organization as well as the end of the MIS project on the day of completion of its design and implementation. But the process of sustaining it and reviewing it from time to time

to make changes to it.

With the development of the world and its second millennium, there has been a major revolution in the development of new methods and innovative concepts of planning, follow-up, performance evaluation and the inevitable result of this development emerged in the form of a huge volcano of scrutiny of information emerging as a result of human thinking and experience and experience, On him and chasing him as a push.

In order to confront this huge flood of information loaded in documents in different forms, the need to devise appropriate systems to absorb the information by introducing information systems on the computer with advanced types of modern technologies and advanced methods that can meet the problem in order to transform the method of saving and processing information to the system ) Is appropriate for the nature of the information and the place of work in which it is located

(1) Strategic Information Systems, Ghassan Issa and Salwa Amin, Dar Al Masirah for Publishing, Distribution and Printing, pp. 339, 2008

(2) Management Information System, Fayez Jumaa Saleh Al-Najjar, Dar Hamid Publishing and Distribution 2, p. 339, 2007.

### **Conclusion :**

In this research, I obtained some conclusions: To save administrative information and to cope with the large amount of information, it is necessary to keep it in a variety of systems. Depending on the nature of the work of the organization or establishment. The function of the systems involves designing the required system and supervising the programmers. Each secondary system also relies on other secondary systems.

Information systems are systems to support administrative decisions and these systems can be classified according to the administrative tasks that relate to them.

We also conclude that the administrative information systems provide all the information needed by different departments to practice the administrative process and facilitate the statistical measurement of results and the reasons.

In conclusion, I hope that I have succeeded in doing so, so that you may receive your satisfaction and thank God the Lord of the Worlds.

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- 2- Hassania, Salim Ibrahim. Management Information Systems. I Amman: Al-Warraq Publishing and Distribution Est. 1998.
- 3- Al-Tai, Mohamed. Administrative Information Systems. Baghdad . University of Mosul, 1988.
4. Narrator, Hikmat Ahmad. Accounting Information Systems and Organization. I. Oman: Dar al-Masirah. 1997.
- 5- In order to save administrative information and face the huge amount of information, it must be stored in a variety of systems
- 6- Administrative information systems must be classified according to the administrative functions to which all the information needed by different departments to exercise the administrative process and must be accurate.
- 7- Recording the possibility of measuring the results and finding out the causes.
- 8- In order to overcome errors and problems in the process of collecting, tabulating and analyzing information, researchers should be encouraged to expand their research in this field and keep pace with scientific development.
- 9- Proposing / developing the work of the network systems in order to update the information according to the scientific development and its complexity.

#### **B - Journals, periodicals and reports.**

- 1- Abu Al-Ma'ali, Iman, Department of Information Technology Obstacles and Problems, University of Khartoum, April 2010.
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- 3 - Afifi, Mahmoud, "Management of Information Institutions between the Present and the Future," Administrative, No. 1992, p.

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- 3 - Turki, Kazem Abis, Management Information Systems and its Importance in Decision Making, Journal of Babylon University, Humanities 2010