

THE ROLE OF MANAGEMENT INFORMATION IN THE DECISION-MAKING PROCESS

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Abstract

The information systems capabilities considered as an opportunity for many countries and organizations and individuals

Expresses revolution as a result of the speed with which accompanied its development, its use and its spread.

The great importance to decision-makers to the increasing capabilities in the preservation and retrieval of information, access to and helped the emergence of a new concept clearer and is competing with time.

This study aimed at searching for a role of administrative information in decision-making as it showed a relationship between MIS and the production of the necessary information for adopting a decision

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The study showed that the administrative information is necessary to determine the goals and strategies of the company and therefore must provide clear plans for the work of the administrative information system and developed in order to support and strengthen the role of management information in the decision-making process.

Key words: Management Information, the decision-making process

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1. Introduction

When the administration is seeking to achieve the objectives of the organization and increase its efficiency, they are trying to take a series of decisions and rely primarily on information that will enable them to identify the internal and external environment changes and choose the best ways to provide services Then review the decisions taken down and submitted to make sure to link the results of the implementation of decisions taken plan in place to achieve that goal. (Baharati and Pratyush ,2003)

Since the administrative decision is mainly based on the provision of adequate information with the appropriate characteristics and works to be translated into a series of events and activities, Therefore, the success of this resolution and to increase its effectiveness depends on the success of the process of data collection and analysis and the easy access to it whenever the need arises The information systems of the best tactics that work on the administration to provide adequate and complete information in order to facilitate the administrative decision-making, By setting up an integrated system ensures accurate and appropriate information needed by every level of management levels and used at appropriate times in its decision-making, Therefore, this study will address the role of management information systems in decision-making.(Flym J. Anthony , 2000)

Study kakabades, kouzumin &knyght (2000), aimed to study the impact of information technology on the ethics of public sector management which is a comparative study of the theory of Socrates, Aristotle and Plato, and I have this study concluded that there is a strong likelihood of becoming a morality tool additional management and that there is need for an adjustment ethics organization for specific roles of management and that there is a need to amend the ethics of the organization for specific administrative roles and that there be a central feature of the Organization. Study Ashcroft maggie (1998), aimed at measuring the impact of the use of information in decision-making among workers in physiotherapy in Britain and found to confirm the existence of traces of information to make decisions with respect to patient care. The

study also reported that the information enabled workers in physiotherapy to avoid dealing with large numbers of patients and give regular intervals in large quantities as well as to avoid the review process. Study Bouchet, Hopkins ,etal (1998) The study aimed to measure the effect of the use of information in decision-making in the pharmaceutical industry companies in the United Kingdom and concluded that the information have an impact specifically on decision-making and whether characterized by continuity. The study also confirmed that the information she know I have suppliers and also concluded that the information contributed to the improvement of the relationship with customers.

Study winerman smith &Abell (1998); aimed to explore the impact of information on the decision-making in government departments in the United Kingdom have concluded that most managers the positive role played by information in the decision-making and the study confirmed the value of the information being continuous, accurate and save time and money.

2. Aim and Metodology

Since the modern world is characterized by a high degree of technological development and scientific excellence is reflected in its effects on different areas of life and work and production sectors Technological progress has arrived to manage organizations with respect to the growing need and urgency of an arbitrator information system cope with work areas, It has become incumbent on the administration to take decisions in a short time ,And therefore it is essential that the necessary data and information available in the know on the role of information management in the decision-making process Thus, the problem is the question:

Is there an effective role of the management information systems in the production of the necessary information for decision making?

The importance of this study is to identify the role of management information systems in decision-making through the review and the importance of these types of systems and components.

This study aims to identify the impact and effectiveness of management information in providing the necessary information systems to makers.

This research is used in desktop Descriptive method and analytical method which is based on the study and analysis of the results of previous studies that have examined this topic in different aspects. And try to find a comprehensive conception illustrates The role of Management Information in the decision-making process

3. Systems and information: concept, types, infrastructure and decision-making

The researchers differed in defining the concept of system, where some of them stressed the importance of the elements and component parts to him, While the other focused on the system is a unified entity consists of parts and components and general systems theory relating to the concepts and principles prevailing key for the advanced systems and described as viable and development systems, It also understands the nature and characteristics of the system is the basic step to understand the **information systems**

3.1. The concept of the system and its components and theories:

First, the concept of the system:

System is a set of elements associated with or interacting parts that work together to achieve common goals and specific objectives. There is another definition of which is that the system is a set of components with overlapping relationships with each operate in an integrated manner within certain limits to achieve the goal or common goals in the environment (Ward Patriciaon ,2003).

Second the system components:

In any system must be available for the following matters:

- The five components are the elements, relationships, and mechanisms of action, borders, and goals
- Every private entity system has certain limits that distinguish it from the environment in which they live
- All components of the system are located within its borders and all what is beyond these boundaries called the system environment
- The system environment is all that affect this system and its Another
- Elements of the system are interrelated and integrated the functions of this interdependence and integration
- The system objectives and functions

The system is a set of inputs are operated or treated to turn into outputs

System Input : are all the variables that affect the system can be divided into

- Key inputs and include all materials, components and materials available and necessary for the continuation of the system
- Input current and include elements of the new materials and advanced

- Input environment and represent all environmental indicators that are not subject to the system does not turn inside

System outputs: It returns any results in targets and associated system and can differentiate between the two types of output:

Final output :which is produced by the system and affect the general framework in which it operates

feed back: where the bounce of these outputs to the system again as inputs, meaning that the system uses a portion of the output of new inputs. (Flynn J. Anthony (2000)

Thirdly systems theory

This theory addresses the four essential

- Individual incentives and trends
- Official work arrangement or the organizational structure and the subsequent positions
- Informal organization and particular patterns of relationships between the groups and their interaction with each
- The Technology and official requirements and where consistent with the psychological and physiological makeup of humans

4. The concept of information systems

First Information System

The information systems of the methods used to provide management with adequate and complete information to help in making the right decision

To find out the information system must identify information sources and their importance, characteristics and benefits provided

The information

And is defined as all of the facts and the data and the identifier recorded in the form of registration valid for use, ie in the form of Read or audible

There is also another definition is more acceptable to the information which is:

Information is the data that is being prepared to become more useful in the form of the individual and its value to the Director of the decision-maker as it changed from the possibilities for expected results in the position in which it makes the decision

And we should know that we distinguish between the following:

1- Data: These are hard facts without treatment or can be defined as the raw material that produces such information

2- information: data is subjected to processing, analysis and interpretation.

3- Knowledge: is the substance extracted from the information, which is the outcome of (Ward Patriciaon ,2003).

what is owned by the individual or society of information

- Sources of information:

Multiple sources of information received by the management division as follows:

1- outside sources: the information from local and international organizations, as well as information from individuals and groups who coexistence organization as well as information emanating from the top systems in the community, such as government

2- internal sources: sources such as documentaries blog or registered and be in the form of sheets or Audio & Video and thumbnails and media Cassette

3- Oral sources: such a question a colleague in the same institution or discussions between colleagues and side meetings at conferences and meetings(Baharati, Pratyush 2003)

- The importance of information:

Information is considered an essential resource in any activity, as well as a key resource investment can be supplied and benefit from, the information is considered an important cornerstone in the modern administrative building because it is the main link between parts of the organization tool, the information a key means of administration in the planning, coordination and follow-up.

Good information properties:

Good information properties are easy and quick access, as well as inclusiveness and completeness and freedom from errors and information must be accurate and appropriate, clear and flexible, measurable and can be provided in a timely manner with no bias this information to any third party.

The benefits of the availability of information to the Director of the decision-maker:

Of the benefits offered by information managers, which is the ability to take advantage of the data, information and knowledge available and experiences

that have been made before and also rationalize and coordinate research and development efforts in light of the information available, and provides information methods of modern alternatives to solve problems and also good to information act to raise the effectiveness and efficiency of the technical activities that carried out by organizations and ensure the safety of the decisions taken

Second, the concept of information systems

Differed writers and researchers in defining the concept of information system where some expressing information system as a network of elements evolved to provide decision-makers with information, Another described as a group of individuals make evidence and data-processing equipment and pull data to reduce the efficiency of use. The known British encyclopedia of information systems as a system that is manually or automatically collect and organize information, stored, processed and displayed in various forms and any text and visual aids From the above we can know the information systems as a set of interrelated elements that work together to collect, retrieve, store and disseminate information to support decision-making, coordination and control, analysis and observation of the organization.

Third, the main variables of the information system

And it can identify the key variables of the system information as follows

- Amount: or the amount of data collected and interpreted by participants in the organization, and the amount of information that has been processed for submission of parts, and the amount of information known address size
- The ambiguity of information: the number and diversity of the meanings of ideas transmitted by information about the regulatory activities, ie that the information can take more than one meaning, if the clear and specific information and have had to interpret and find similar, will not obscure either when it is dominated by the nature of the differences and perhaps the multiplicity of explanations will be then vague.
- Ability to provide information: refers to the ability and ease of access to what suits the needs of the business unit of the perceived information
- Regularity refers to the Total awareness stable through time to the requirements of the work unit information
- Independence refers to the degree to which processed by the unit of information processing the information you need

Fourth types of information systems

Difficult to find precisely the types of information systems because they differ in terms of the concepts that are left out and the degree of absorption of technological progress and can be identified in four groups of systems are:

Old information systems

It is information that mainly rely on manual methods of paper and some traditional machines and tools in the collection, processing and distribution of information, that is, they systems that do not use electronic means in the operation of data and information systems

Modern information systems:

It is those systems that rely on computer devices. Any electronic data processing means and mechanism, other advanced such as the telephone and the Internet

Integrated Information Systems

And reflect the modern concept of information systems and is applied when the presence of more than one system in the organization

Comprehensive Information Systems

Meant to be a comprehensive information system for each influencing it and affected by variables both in terms of organization or the external environment level.

5. The concept of Management Information Systems

There were many definitions of management information systems and used several terms to express them, such as information processing systems or information resources management or simple form of information systems, either the most is the term communist Management Information Systems And know the management information systems as the organization the way they provide management with data that reflect the past and present and future expectations of the time period and help to perform the functions of planning, control and operating functions of the organization by providing coordinated information in a timely manner They also know it is one kind of information systems at the administrative level of the organization that serves the functions of planning, control and decision-making by providing management summaries routine and special reports. (Sarker, Suprateek ,2000).

Through previous definitions can extract the six key components of the system (equipment - software - databases - Communications - action - individuals)

5.1. Types of management information systems and classified:

It can be classified as administrative information systems in several ways, such as:

- Classification by level of mainstream technology in organizations has been classified into manual systems and automated systems or computer-based
- Sorted by historical evolution: data operating systems, management information systems, office information systems, expert systems or artificial intelligence and cognitive systems
- Sorted by regulatory or administrative functions: production, processing information systems, marketing and human resource systems and systems funding Information
- Sorted by administrative activities of the director: planning, organization, implementation and control systems Information Systems
- Classified by the number of people benefiting from the regime: support individual decisions systems, and systems supporting collective decisions (Sarker, Suprateek ,2000).

The information systems are classified into the following:

- CEOs support systems
- Administrative information system
- Decision Support Systems
- Knowledge Systems
- Office Information Systems
- Operational information systems (functional)

5.2. Administrative levels of the organization:

Where organizations that contain different disciplines and interests, it is possible to be divided into different levels and customize the information systems that serve each of these levels as follows:

Strategic level: It consists of the senior management of the organization, which means strategic matters and long-term planning with regard to the organization

Level administrative: It is the second level of the organization, responsible for the control and supervision and take the second category of decisions by managers and decisions are considered the structure of the first level

decisions, and serves this level two types of information systems, namely:

- Management Information Systems: which is designed mainly to serve the planning, (Gottschackl Petter, 2000)

direction and decision-making and provide management reports businessman and contains predefined procedures provide managers with solutions to the many questions

- Decision support systems: It enables managers to make unique decisions of its kind, and keep pace with the increased speed and is dealing with the information received from the other in the lower levels of the systems as well as information received from outside of the organization, and is a decision support system with analytical capacity is greater than all other regulations in the organization

Knowledge level

It consists of people who hold formal degrees and working in their field of specialty, such as doctors, engineers, lawyers, programmers and scientists and their work is concentrated mainly on the production of new information and knowledge and serve this level two types of information systems are:

- Cognitive System: Organization provides the information needed by the knowledge level of the specialists who reminded them earlier as he tries to create a state of integration between levels of the organization g

- Offices: Systems is an information system designed to increase the productivity of workers in the field of data through the support and layout are increased and communication between the various activities of the Office of this system and works to link workers in the region geographically and functionally.

Operational level

A level Operational Managers who maintain the continuity of business activities and routines of the organization to provide the service or sale or collection of salaries and the flow of raw resources and inventory control

6. Decisions

- The concept of the decision in the administration:

Is the process of choosing an alternative from among several alternatives and this means that there are fundamental elements necessary for the existence of the resolution, they offer an alternative, and the selection process (Gottschackl , Petter, 2000)

6.1. Decision-making stages

Decision-making process consists of several stages, and each stage requires a different type of information in order to be successfully implemented, these stages are:

Awareness of the problem: any should draw the attention of the decision-maker of a problem and provide information in a way that led to the problem doth

Design: by absorbing the extent of acceptable decisions and consequences of each of them and think of several solutions to the problem (substitutes), providing information (Winterman .et al , 1998). that will help decision-makers to predict and assess the consequences of these decisions

Selection: After analyzing the available alternatives process is choosing the most appropriate alternative will be implemented

Application: to put an alternative that signed him to choose in place.

- Recipes resolution: good decision is characterized by many features including:

* The ability to rationalize the decision: the existence of any field to straighten out the decision and its development and increase its efficiency to increase expertise in their respective fields

* Resolution influenced by factors humanities and social: the decision-making process influenced by factors stemming from the psychology of personal decision-maker and subordinates and all the people who contribute to the decision-making or affected by it

* Process extends from the past to the future: the decision is based on information from the past and which is expected to happen in the future

* Vulnerability joint effort: you need decision-making process to a joint effort in preparation, preparation, information collection and analysis and the implementation of resolution

* General: as the decision-making process is similar to steps taken and the varied conditions

* Characterized by inclusive: should have the ability to take decisions on all those who hold managerial positions are available at different levels and the upper middle and lower

* Dynamic and continue: this is shown as such in the decision-making process from being transmitted to another stage down to the desired goal to solve the problem supersede Resolution(Winterman ,et al ,1998).

6.2. Types of decisions

Administrative decisions are classified according to the following criteria

- The possibility of programming: programmed decisions and unprogrammed
- The basic functions of the organization: decisions relating to production and financial, marketing and administrative functions
- Important decisions: the strategy taken by senior management decisions and tactics taken by middle management and executive decisions taken by the minimum operating administration
- Depending on the type of leadership: autocracy individual and collective decisions of the democratic decisions
- According to the circumstances taken: decisions in light of the case and make sure decisions are made in conditions of uncertainty(Bouchet ,et al , 1998)
- Taken as appropriate: intermediate appellate decisions and the resolutions and decisions of the innovative
- Depending on its field: political decisions, economic and social decisions and resolutions
- According to Risk: decisions in light of the risk factor and the decisions under uncertainty
- Depending on the style of take: descriptive decisions and read the amount of

6.3. Factors influencing the decision-making:

There are a lot of factors that affect the decision-making ones

Human factors: namely that help to rationalize the behavior of the manager and directed towards choosing the best alternative

Regulatory factors such as the pattern of administrative organization and the multiplicity of administrative responsibilities and the nature of the problem, replace the decision and the degree of complexity and the time available to solve them

Environmental factors as there are many factors or limitations that affect the effectiveness of the decisions resulting uncle surrounding the resolution of environmental conditions such as the nature of the political and economic system of the state and social customs and traditions (Bouchet, et, al 1998)

7. Conclusion

Information systems are of great importance in the decision-making process,

which must be set up with him and sophisticated design systems commensurate with the urgent need for adequate information and good on all the alternatives in front of decision makers

The good organizational level is considered a key element affects the production of management information crisis for good decision making, as well as the presence of a strong infrastructure of information systems helps in the production of good and sound information for decision-makers

So should raise the efficiency of management information systems components to ensure the production of sufficient and good information significantly contributes to making the right decision, and this is only the continuous development of information systems and increase its production capacity

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