The Role of Management Information Systems (MIS) in Decision-Making and Problems of its Implementation

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Abstract

Using management information systems in different countries have good results, that with study the experience of them in section of business Groups achieve new strategies about IT and electronics, traditional manufacturing, trade and commerce, services and agriculture, that with Analysis of the key issues in their use of information systems and the way of management, they can be considered as experiences of our country Iran information systems. In recent decades, increasing growth of technology and its dramatic effect on increasing the productivity of public and private organizations around the world, has led the global movement toward the use of different types of information systems especially the management information system (MIS), it has because our country put in this direction. Movement inside the country, in progress of developments, faced with successes, failures, challenges and a lot of resistance. Many public and private organizations use (MIS) as an effective tool in the management and decision making. And a lot of organizations are deprived of its benefits in this process. Study problems related to planning, deployment, operation and development of management information systems in country. It can be important in such atmosphere for decision making for all public and private government organs. Because Deliberate and conscious use of modern information technology specially the (MIS), Could smooth the path of development and progress of the country and increase their efficiency and effectiveness.

Keywords: Management Information System (MIS), Decision Support Systems (DSS), Organizational barriers

Introduction

Use of information technology, along with a variety of information systems that are designed for different needs is expanded. Information enables managers to make more and better connection with organization, the environment and each other. More participation in decision making, speed up decision making, increase the speed of identifying the issues, reducing the height of organization pyramid, Improve coordination and increase skilled staff, Improve coordination and increase skilled staff, are just some of the impact that information technology and information systems have on some organization. One of the names of the current period of human life is the information age. Reason of putting this name, in fact is because of much attention and extensive activities that is this period has been done in the field of collection, processing and transmission of data. Currently, managers need to know about matters that are dealt with it, Collect and analyze, Organize And they can exchange it with observance three main factors of speed, accuracy and cost that can be seen in all activities of current organization. Some experts believe that
management is synonymous with decision making. Therefore, manager should be able to adopt the wise decision for organization. Should be aware of all information about the situation or problems that subject to decision making. If in defining management, decision making considered then some experts believes that a good decision is a dissection that 80 to 90 percent base on information and 10 to 20 percent dependent on the skills, abilities and experience to be a manager. Thus, the value and importance of data is determined. It means if we give the wrong information to manager, his decision certainly would be wrong. But if we give the manager correct and related information, his decision definitely not but more likely contain accuracy and relevance for organization. However, in a case that manager has the potential of decision making and implementation of information. Information inside the system, in every moment of time has a structure that forms knowledge of that system. This knowledge emerged gradually and during time through various pieces of information or data and transforming into information. If the system continuously gains information from its environment, its knowledge is constantly growing and expanding and change from simple state to Complex and varied from state. Secret of the success of any manager and in any organization is that could link new data step by steps with earlier knowledge and arrange receive and preparing new Information. Try according to the organization situation and with respect to the different levels of the organization, raise the potential of receiving new information in organization. Make sure that one side doesn’t face with the influx of new data, while they are not ready to understand or accept them. On the other hand, there wasn’t a gap between previous and new findings. Because if the system administrator is not only due to the many missing circles, will not be able to link new information. But in terms of alienation, with new information, will lose potential of making right decision to progress and development. Poverty and lack of information cause organization management doesn’t have a clear and complete image of future and even wasn’t able to recognize strengths and weak point of pervious and current situation completely. Therefore, he couldn’t make correct target and he is not able to design a proper activity to organization and following this, it would not optimize the use of resources. Therefore, 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. Today, business environment, face with a variety of challenges, including expanding internal and external relationships of the organization, the need for more communication in organizational units the need for continuous monitoring of the progress. Managers need follow doing things faster and more accurately. The daily interaction and volume of exchanged information in terms of compact work increase in a
way that Perform and follow them traditionally was out of the manpower and may be associated with many problems.

**Introduction of information systems and management information system**

According to the above introduction, you can see that information systems are one of the tools that are provided for organizations and Organizations could use these tools to increase efficiency and productivity in order to achieve their goals. Information systems has different types and they are using in various part of organization. There are different views in determining the types of information systems and their classifications. But in most categories, with titles such as:

1. Management Information System (MIS)
2. Excellent Management Information System (EIS)
3. Decision support information systems (decision support) (DSS)
4. Expert System (Specialist) (E.S)
5. Working group support systems (WGSS)
6. Information systems processing operations (events) (TPS)
7. Office Automation Systems (OAS)

**Types of Information Systems**

Information systems have different types and from different aspects can be categorized:

**Management Information System**

Kind of organizational information computer systems, that take internal information from operating processing system and summaries them to Meaningful and useful forms as management reports to use in performing management duties such as monitoring and decision making. Management information systems are a kind of computer information systems that could collect and process information from different sources in institute decision-making in level of management. Management control, needs to information that some part of it generated by transaction processing systems. Support management control information system, process generated data by Transaction processing systems and offer them to Manager in a new significant form.

MIS consists of three things:

Information management and MIS system not only supports manager in strategic activities, but also in Repetitive and routine decision, gives the necessary information to tactical managers And enables them to access information that may be useful for decisions. These systems can also reveal the image of changes and deviation from determined programs. Such information through preparing management reports and logical image and analyzable provide for manager. Management information systems of human resources, accounting and finance, management, production, marketing and sale are domain of MIS. managers with using this system, should be aware of the existing systems as real world to be able to play an affective role. Therefore they should have the right information. Due to advantages such as closer communication, accurate monitoring and gathering data more reliable, faster processing and converting data into managers information, are using information systems management, planning, organizing, leading and motivating and controlling And does
management actions with the utmost accuracy efficiency within very less time in organization.

**Advantages of Information Systems:**
Information systems provide three types of advantage to organization:

**Improving productivity:**
Efficiency improvements occur when that with the same or fewer resources, we could do more work. In Organizations, improving productivity occur in improving work processes. Information systems can be effective in making work faster, accurate and easier and via this way improve their productivity.

**Improve Effectiveness:**
The effectiveness to ability of an individual or an organization is in doing the things that must be done. Manager, who predicted the conditions that may cause problems and examine causes before problems occur, is more effective than a manager that should solve some problems continuously that they could avoid them. Information systems provide information to help manager to evaluate circumstance and choice better option.

**Competitive advantage**
An Organization that with using information systems has improved its efficiency and effectiveness, Has the potential to change method of organizational competing.

**Information systems define:**
Information System:
Include a complete system designed for the production, collection, organization, storage, retrieval and dissemination of information in an organization, agency or any other defined areas of society. Organizational Information Systems are using for three cases (operations, operations control, and decision making in organizations). Organizational Information Systems can be run manually or by computer, or a combination of manual and computerized (Momeni, 2010).

**Transaction processing systems:**
Organizational information systems, that through defining processes and processing information, take responsibility of perform and controlling organization operation. Storage systems, staffing, accounting, procurement, contract management, sales, inventory control, property, domestic proposals, customer feedback management, and training, are Operations processing systems. Transaction processing systems are one of the types of Organizational information systems that support information. Transaction processing systems are the most important Organizational information systems that without them, creating information decision support systems, such as management information systems and decision support are useless works. This information system, collects, process and store information records that related to queue operations and headquarters of organization. And represent them as documents, reports or raw information Systems Decision Support. As transaction processing systems are often in contact with the customer (such as providing receipt to the client), play a key role in giving customer value and his satisfaction. Without transaction processing systems, transaction processing and recording, spend large amount
of organization resources. Transaction processing systems, and generate required information of other organizational information systems and actually transaction processing systems are base of other information systems. Transaction processing systems do one or more specific repetitive actions during a day or week. But they don't have direct role in manager’s decision making (Sen & Lavdn, 2005). Transaction processing systems are applicable to all queue operations and organization headquarters. For example a bank branch performs all its queue operations through transaction processing systems. Manufacturing organizations and administrative services, according to subject may also use Transaction processing systems in section of their queue Operations. All organizations have headquarters that dedicated to highest use of transaction-processing systems.

Operations headquarters include the following general categories:
1. Accounting
2. Finances
3. Sales and Marketing
4. Human Resources

Processing systems that can be use in headquarters of accounting. Exchange information system and investment is a system that is used in Finances sector. Sales system and marketing information systems are elating to sales and marketing systems and staffing system, payroll are transactions processing systems that related human resource.

Decision Support Systems:
Is a Kind of organizational information computerize systems that help manager in decision making that needs modeling, formulation, calculating, comparing, selecting the best option or predict the scenarios. DSS is one of the most important Information systems that help senior managers at any level of the organization in decision making and system guidance decision support system, with gathering human’s thoughts and computer information support the decision maker. These systems provide for supporting different levels of managing, from senior management to operational. It’s Flexible and increases the power of risk and cause Improve the accuracy, quality, updating decisions in decision making.

Accounting Information Systems:
It’s a Kind of organizational information systems that collect and process financial information about accounts and generate reports from that account for manager. Accounting information systems assist decision-makers by assessing the data transfer processing, that two types of accounting information systems that can be named
1- Information Systems of Management Accounting
These systems, provide information about financial operations, investments and functional for those interior decision makers that have responsibility of Achieving the profit goals and liquidity.
2 - Financial Accounting Information Systems
These systems provide reports and transfer them to outer decision makers, So that they can evaluate the success of the business in achieving its goals. Accounting Information Systems,
as a part of management information system always provide maximum load of information for performing functions of planning, controlling and other duties.

**Human Resources Information Systems:**
One of the most important tools in the management of human resources especially in large organizations is Human Resource Management Information System. This information system, is able with using databases that related to human resources, provide information's that middle managers and senior managers regarding human resource need them. Human Resource Information System is a set of regular data, reliable and valid that using for Human resources planning. It’s a set of management tools that enables managers to establish goals for the utilization of human resources and determine the rate of success in achieving the goals. Currently human resource of management systems are including payroll, work hours, benefits, recruiting, training, and...

**Document management systems:**
Document management system is one of transaction processing systems. By using this system, the organizational documents and different versions of that, are collecting, organizing and storing. And users based on their access levels can retrieve their needed documents and information and to update information associated with them.

**Backup systems senior managers:**
It’s a special type of DSS which help decision making in high levels of organization and shows an accurate image of organization performance and a summary of competitors’ activities. The system is easy to work with and provide information in a way that is easy to understand. (As graphics, charts, etc.) Actually is an executive support system that includes, office automation communication, and support for analyze and...
Facilitate access to organizational goals, compact access to information, increasing productivity by enabling users to make more effective decision, Increasing the quality of communication, control and strategic design and create competitive advantage are the benefits of this system.

**Intelligent systems (expert):**
One of most relevant fields of expert systems, are accounting and finance fields. Nowadays, many kinds of expert systems for different applications in the field of human knowledge is built Used by different groups of decision-makers in companies and organizations such as managers, accountants, financial analysts, tax experts and finally general public. Even experts in the different fields of accounting knowledge and financial, use this software as an attractive tool for finding "second guess" And further assurance toward Results and their personal judgment(Roll,2008).
Many uses of expert systems in three fields of accounting, management accounting and tax affairs are as follows:

A) **Audit:**
Risk assessment-prepare audit program - providing technical assistance- detect fraud and prevention of them

B) **Management accounting**
The pricing products and services - to determine cost price - design of accounting systems - Capital budgeting - accounting methods - evaluate the validity - creating and establishing control

C) Tax affairs:
The tax Recommendations- Calculation of tax differentials - personal financial planning, financial analysts are now one of expert systems users. During Investigating the status of company or specific customer, Financial analysts beside his definition from financial data also has expert system comments as an extra special comments and In the case that this comment or second judgment is opposite to him and Tries to act more carefully in their analysis and even reconsider in some cases. (Manian, 2011)

Customer Relationship Management:
In fact, the system is a strategy to gather customer needs and business behaviors to develop stronger relationships with them. Finally, a strong relationship with client is a key to success in any bossiness. CRM consists of three main parts: client (Customer), relationships (Relationship) Management (Management) Purpose of customer is the ultimate consumers who in valuable relationships, has a supportive role. Purpose of Relationships is to create loyal and more useful customers through client communication through a learner communication (Hussein poor, 2009).

Management, include creativity and leading a customer-oriented business processes and put the customer at the center of the organization’s processes and experiences. Nowadays organizations give a strategic importance to customer relationship management. In difficult circumstances of competition organized and updated communication with customers, is the best way to increase customer satisfaction, increasing sales and reducing costs. Due to these issues, customer relationship management in an organization consider as a kind of business strategy. Banks by using CRM can shorten sales cycles and increase customer loyalty to build closer relations. Customer relationship management systems can help to maintain existing customers and to attract new customers. In the Competition banking atmosphere, banks are more successful that they get more customer loyalty. Banks differences in dealing with customers, is in the way of explaining it to the customer that customer also make mistakes. Banking system should provide needed service for current country community according to market structure and provide Accelerate growth and welfare of country economic. If we equipped with the best tools but we do not have proper behavior with customer, we will have hard impact on our bank. Customers today ask us provide fast service with good morality and best promote is good performance at the box office bank. Another important factor in customer satisfaction is employee performance. Because service is usually present in front of customer, Evaluation of service quality are influenced by appearance, presence, behavior, speech, competence, courtesy, responsibility, help, understanding, and surely is employees. To realize the philosophy of marketing and customer-oriented we should pay attention to needs of employees and specially office keeper. Office-holders, as a member of the bank's front-line can directly contact with the customer and can attract or repel them. From customer view office-holder behavior is the bank behavior and it will apply it to all
banks. Today banking requires new ways, effective marketing and customer-orientation, providing innovative technology, serving and customer service. Each bank act more successful in these matters, in competitive market, cause Attract and sustain high resource and as a result cause Durability and permanent survival of the banks with high productivity. Information technology by facilitate communication with customers and increase the speed and efficacy through the sharing of information services, way of providing these services, financial and credit condition, Funding... provide Field of improve the performance and innovation in services.

The most important service that providing trough this way are provide information via internet and mobile And also ATM machines and credit card and sales terminals which is very useful in Save money and time, But if these services are provided correctly. Related to customer relationship management (CRM) in banks is very important to note that a CRM, is a bank business strategy not the services offered by a bank. (Ghazi Zadeh Fard, 2009)

**Office automation system:**

Branch of information systems as information systems management, with title of information systems management help manager and employees in field of information flow in an organization. One of the most widely used types of information systems that will help managers control the flow of information in organizations, is office automation system. In this system, mainly circulation of official correspondence will be considered. But usually include a variety of communication tools such as a variety of communication tools to send and receive letters and instructions, send and receive private messages and quickly, send and receive internal e-mails and... Office automation to increase productivity in the office has greatly contributed. Various definitions have been offered for information systems. Most of the definitions information systems are set of: People (users, operators, designers), data, methods and applications, hardware and tools. According to the definitions of all the interpretation, the human body is considered essential in information systems. If this main factor doesn’t play its role well, certainly we should suspect to efficiency and productivity of information systems. Because of the importance of this factor in each stage of process, the creation and using information systems (The stages of feasibility studies, planning, requirements analysis, design, programming and production, implementation, testing, implementation, and operation and maintenance and development) (Ghazi Zadeh Fard, 2000)

Research and investigating issues like this, especially in our country seems to be useful. Considering about the human subject and human barriers that impede the development and implementation of information systems, does not mean that there are no other obstacles in this way. Because this issue is one of obstacle n the way of using a proper management tools in our country. However Among the obstacles as human obstacles, obstacles software, hardware obstacles, structural and organizational obstacles, communication obstacles, barriers related to inappropriate design and... Human identified as the main factor in appropriate use of management information systems, in this study, we examine the dimensions and angles. In particular, Human footprint can clearly see in other
problems and obstacles of proper use of management information systems. Investigating this issue could help in better understand this system. Because in design process, implementation and application of management information systems typically consist of three groups of people:

(1) System users with users (Which are the managers)
(2) System designers (who are designers, programmers and system builders)
(3) leaders (who are operators and those involved sending, collecting, preparing, and nutrition information to operators and managers, system operators and operations, administration, and maintenance information service system and Play fundamental role. In addition that features and characteristics of each these three categories is effective in increasing productivity, Points that in Establishing Communication between these three categories of people involved in the system appears to be very important That addressing them is very important. (Panahi,2011)

Administrators need management information systems:
Successful managers are those who are able in order to timely decision making and solving problem in organization, management better and use it as well.

4 - Characteristics of management information systems and their role in the organization
(MIS) plays two important roles in management decisions. First, it helps managers to base on provided information, make decisions. Second, in terms that decision making and decision patterns remain constant and only input data changes, as a repeater will be supportive for all kind of management decisions. Means (MIS) is tools that as an organization’s information resources provides needed information for manager and prepare managers for their decision making. Moreover, the managers use (MIS) as a tool for defining understanding the issues that are facing. Because of light emitted of MIS, acts as a light for managers to understand and find solutions to problems. If the information in organizations assume as large area with different mosaic, Colorful and with different sizes, any manager through this various categories, naturally look for the parts that related to its responsibility and provide for him needed knowledge for decision making. Some of these pieces are based on the observation that the manager can identify and provide and main part of it provide through information systems particularly via the management information system. (Rezaeian,2010)

5 - Success Factors in Information Systems Management
Many organizations in the world today, especially in information systems and management information system the different layers of organization. And some of them have a lot of project in relation to establishment of management information systems or consider running them in their future plans. Research shows that despite considerable progress in the field of knowledge and related skills (MIS) and the use of this management tool in developing countries, Implementation of relevant projects in this area has not been very successful in our country. In Islamic Republic of Iran that is developing and passing through third world countries into sublimity and growth, In last two decades a lot of discussion related to the information technology develop a lot And tendency of public and private
organizations, especially to discussion of establishment of a management information system become considerable. But it must be admitted that the performance of these systems (MIS) have been associated with failures. And Partial or complete failure of the system in this area is significant. Things are very important in this regard, considering causes of failure and lack of success. Actually with Identifying and explaining main issues and with considering the attitude of system and take advantage of a comprehensive model for investigate stable project (MIS) in organization we could perform the development process in line with other goals of organization and to achieve more success. it could be mention that statistics of failure and success in the field of Information Technology Projects in 2004, Developed countries and developing countries reveals the fact that only about 15 percent of these projects have achieved complete success. Or in other words the nature of the project results, are not same as described in the original proposal and the proposal for this project. According to the research about 50% of the projects have partial failures and about 30% of them have complete failure. According studies done by ‘cont lavden’a renowned experts in the fields, important factors in the success or failure of an information system can be divided in three areas of technical, managerial and organizational. In other classification that is presented by Madison and Darentoon, effective factors in the success or failure of these systems introduced as technical, human, organizational, and environmental groups, While some researchers consider human and behavioral factors as the most important factor in this regard. Criteria for failure or success of the project can be a gap between the ideal situations (programs) with the implemented proposed project. In other words, the greater the gap, the greater probability of project failure and if this gap will disappear the probability of success of the project will be more. Systematic and comprehensive approach we can found this gap can be achieved in different area. For example, the gap that can occur in subject such as technology, processes, information, values, skills, structure and style of management. Several factors could be the cause of the gap. (Ghazi Zadeh Fard, 2011)

Identifying obstacles and problems of using management information systems in organizations

Entering information systems to Iran, particularly government organizations, has not always been successful without the trouble. In many cases, these systems couldn’t satisfy the expectations of applicants (especially managers) and this dissatisfaction cause not only to previous problems that are not resolved, but also the system and organization become disorder. In addition to spending a lot of time and cost their quality and efficiency will be reduce. (Roll, 2008) This problem also exists in developed countries. However, in third world countries, including Iran, which hasn’t a long history of information science and technology, and there is no formal or informal policies or standards or are still in early stages and newly forming, Seems to be more acute. In most unsuccessful systems, investigation haven’t done or done incomplete. Particularly, the lack of user knowledge and improper advertising of hardware equipment vendors and software services cause the problem. Incomplete primary investigate causes the context of information systems does not ready and Designed and other existing systems (especially traditional and manual systems) in organization, do not
designed and other existing systems (especially traditional and manual systems) organization, and do not coordinate with them, and cannot properly communicate and exchange with them and created a regular and useful set. The problem that often exists in successful implementation of analysis is analysis communication (designers) with users (users) of the system. Typically users few knowledge of computers and information systems and analysts have few knowledge of the organization’s affairs. This results because designed system do not meet real needs of users. Besides the above issues, accelerate of the manager not only for creating and operation of individual information systems But also towards creating (MIS), the lack of financial resources, lack of expert personnel and skilled and qualified and motivated, There are other factors that have caused the governmental organizations couldn’t keep the system as it should, and perhaps they should take advantage of this system in their organizations. (Feizi & Moghadasi, 2010)

Conclusions
In this paper generally refers to a variety of systems used in organizations and benefits of information systems, including: information system, quantity and quality by providing optimal performance, quantity and quality by providing optimal performance, increased accuracy in doing things faster, more storage and speed up recovery time and increase speed of access information. Managers, who are constantly involved in the decision to spend money or invest for the use of IT in their organizations, must know Use of information technology information systems how useful and effective is in the organization. They have count the effect of information technology on quality of product or service, improve customer service and improve communication and information that all of them are f the parameters and initial conditions for the success of today's organizations. Determination level of achieve this goal is one of the important challenge for corporate decision makers. History of using (MIS) in Iran especially in public organizations is limited and mainly back to experiences during after the revolution, and more 70's and 80 's. Such a way that about 70 percent of government agencies do not (MIS) and the number of government agencies that have Using experienced (MIS) more than 5 years is very limited. Majority of organizations designed their MIS system with the help of personnel working in the organization. Such a way that 60 percent of organizations with, help of personnel do this work. This indicates that there is less willing to transfer design and development projects (MIS) and managers of government agencies. While about 90 percent of the managers and employees of these organizations believe that their organization has not succeeded in using and deploying (MIS). And more than 80 percent of the managers (the users of these systems) believe that deployed systems do not meet their need.

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