

A Study on Information System in an Organization

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Abstract: There are several technological advancements have been achieved in the past and there are several more to go . Such a technological advancement in the field of organization or business is Information systems. In the past paperwork was more and workload was too much. These systems make it easier ,make it fully computerized to work in an organization. There are several aspects covered by these systems like decision making , accountancy , billing , transaction handling etc. Quite well to handle for a software specifically designed for this purpose. These papers are about the Information systems used in business environment and its several types . This is completely about the importance of these systems in the modern business. It is successful in its purpose if it broadens the mind of the young entrepreneurs about the modernization of business.

Keywords: Information systems, types of information systems , management information systems , decision making systems

1. Introduction

THE MEASUREMENT OF **IS** (information system) is the involve of information like as technical, human resources, storage, computing, distribution, database, internet and communication for the information required by all or some part of an organization. The concept of information may be such as process and knowledge. The process me define as A set of logically related task performed to achieve a define out come and knowledge may also define according to oxford dictionary as expertise and skills acquired by the person through experience or education in the theoretical and practical understanding of the subject. A special form of IS is a management information system (MIS), which provides information for managing an organization. The main aim of Information System functionality performances evaluation is upgrading and especially improvement in quality of maintenance. in point of view the information system has been define by the two scene: one relating to its function another is relating to structure. From a functional scene; information system is a technologically implemented medium for the purpose of recording, storing, and disseminating linguistic expressions as well as for the supporting of inference making. From a structural scene; an information system consists of a collection of people, processes, data, models, technology and partly formalized language, forming a cohesive structure which serves some organizational purpose or function. The most important factor that impact the success of an information: such as information functionality, data quality, self-efficiency, simplicity of information etc.

Table 1 alternative definitions of IS:

Huber (2007) [13] and O'Brien (2003) [14]	Information System as “An Organized collection of people, business processes and information technology designed to transform inputs into outputs, in order to achieve a goal.”
O'Brien (2003) [14]	Informations system as “A system that accepts data resources as input and processes them into information products as output.”
According to Davis (2000) [4]	“A simple definition might be that an information system is a system in the organization that delivers information and communication services needed by the organization.”
Lyytinen & Newman 2006) [11]	Information system as “an Organizational system that consists of technical, organizational and semiotic elements which are all re-organized and expanded during ISD (Information System Development) to serve an organizational purpose.”
Lucas, 1978) [1]	“Information is a set of classified and interpreted data used in decision making. It has also been defined as 'some tangible or intangible entity which serves to reduce uncertainty about future state or events'.”
O'Brien, J A. (2003)	“information system is a form of communication system in which data represent and are processed as a form of social memory. An information system can also be considered a semi-

	formal language which supports human decision making and action.”
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2. Components Of IS

As mentioned previously, an information system (IS) is a set of parallel elements or components that collect (input), string along (process), store, and expose (output) data and information and provide a corrective reaction (feedback mechanism) to meet an objective. The feedback mechanism is the component that helps organizations achieve their goals, such as increasing profits or improving customer service.

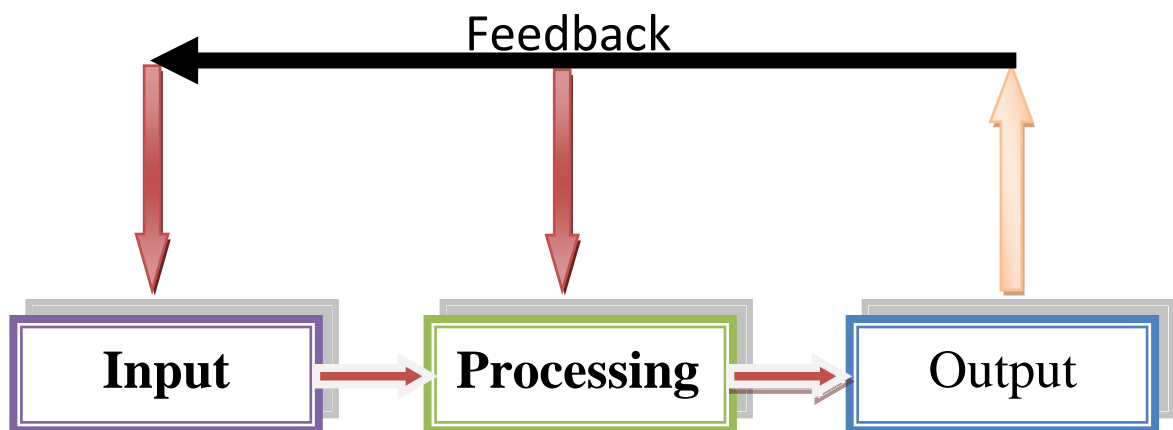


Figure: 1 The component of an information system

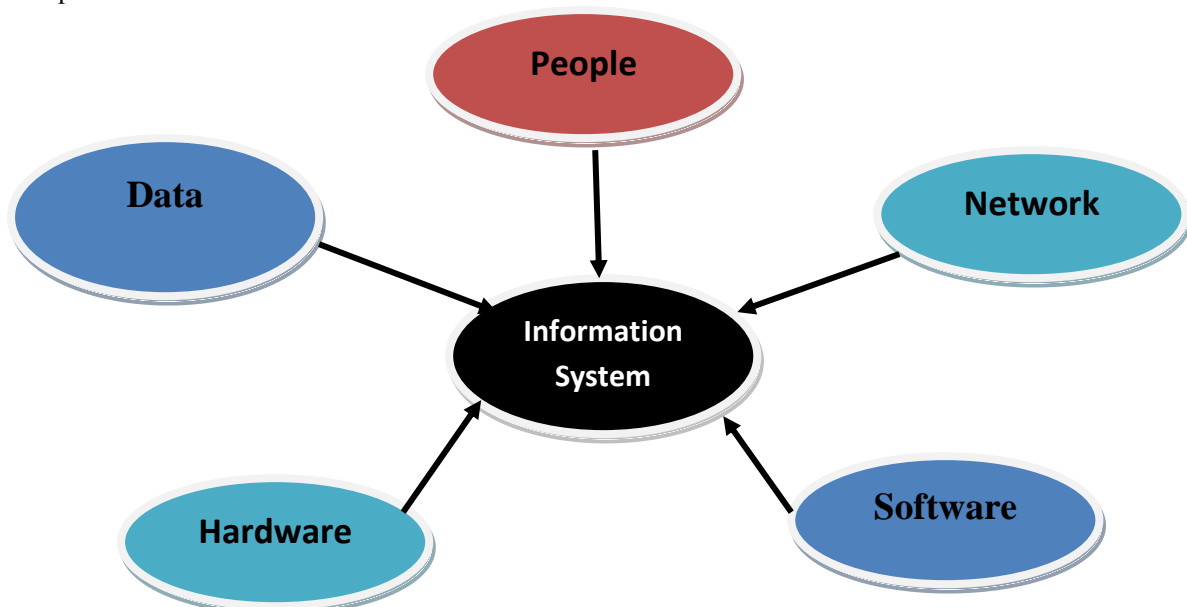
Input: The input involves capturing and assembling elements that enter the system to be processed. Example: raw material, energy and data.

Processing: its involves transformation process that convert input into output. Example: manufacturing process, Mathematical calculation.

Output: its involves transferring elements that have been produced by transformation process to their ultimate destination. Example: finished product, human services.

Feedback: Is the data about the performance about the system. Example: data about sales performance are feedback to sales manger.

Computerized information system: A computer based information system consists of the following component.



Hardware: Hardware consist of machinery. This category include input/output device, processor, operating system and media device. Which is often referred to as central processing unit(CPU) and all its support equipments.

Software: The terms software refers to various program and procedures.

Database: Database consist of the data are the facts that are used by programs to produce and useful information.

Network: Network consists of hubs, communication media and network devices. People consist of device operators, network administrators and system specialist.

People: information system professional and users who analyze organizational information needs, design and construct information system, write computer program, operate the hardware and maintain software.

Role of information system:

3. Role Of information system

In this paper the focus is to give an understanding of the role that information systems have in managers decision making process and to discuss the their possibilities how managers of an organisations can make best use of resources information systems. Its role is to support the key aspects of running an organization, such as communication, record-keeping, decision making, data analysis and many more. Organization uses this information to improve their employee’s performance, make strategic decisions and gain a competitive verge (edge).

Some Investigation about role of information system:

year	Names of researches
1983	Alloway & Quillard
1985	Cooper
1986	Daft & Lengel
1978	Daft & Macintosh
1985	Davis & Olson
1992	Ghani
1971	Gorry & Scott Morton,
1987	Macintosh & Daft
1978	Tushman & Nadler
1998	Zigurs & Buckland

In this table we give some details about the research in the role of IS in organizations has been to identify variables that will provide consistent and valid predictions of their value.

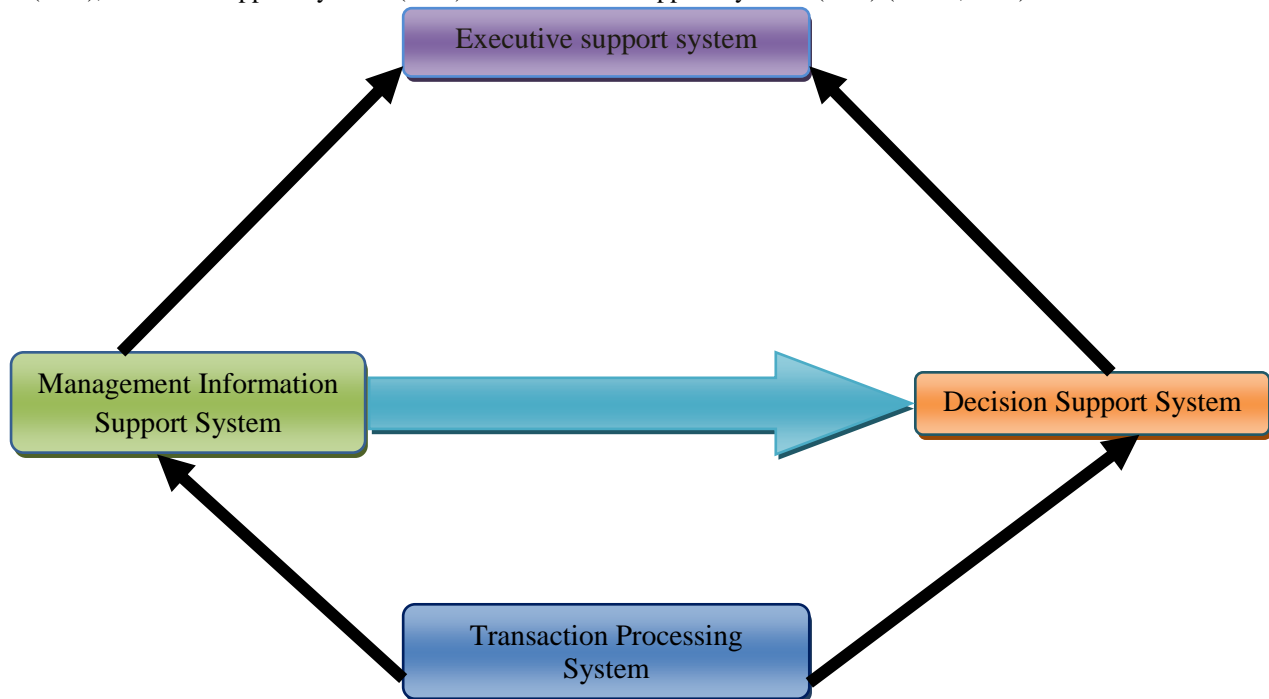
4. Importance Of IS

Information system is very vast subject. In order to discuss the importance of Information system for an organization function successfully. Without information generating system is an effective then organization cannot work properly. In addition, lack of effective and proper information may send a wrong signal to other associated organization. As the name world, is Information and System(s). Organizations can deal with massive amount of data, making up information, and unless there are Systems to manage those data (information), an organization cannot run properly. It is therefore important that Information Systems has to be required in all organization, depending on how much data and information they operate on. To increase the information system's effectiveness, you can either add more data to make the information more accurate or use the information in new ways. Information Systems exist so that organization can meet the goals, be it for profit or not. Information plays a key role in many critical tasks such as decision making. The importance of information for organizations is listed below:

1. an information focus, designed for employees in an organization.
2. inquiry and report generation, usually with a database.
3. structured information flow
4. It entitles organization to identify and utilize their employees` knowledge. This enhances an employee’s morale and job satisfaction.

5. Types of information system

Information system could be define as a set of people, process, hardware, software, and other recourses which take input, process it and then produces it and then produce the output. According to Huber et al (2007,p. 392)An organized collection of people, information, business processes, and information technology designed to transform inputs into outputs, in order to achieve a goal. There may be a lot of definition in information system as its examine from their different points of view. Still and all the cases Organizations use several types of information systems to suit their needs. The traditional types of information systems can be categorized into following categories, which include Transaction Process Systems (TPS), Management Information Systems (MIS), Decision Support Systems (DSS) and Executive Support Systems (ESS) (Baker,1992).



Relationship of system to one another Interrelationship among system

Executive support system: Generally, ESS or EIS is known as a support system a software for the quick assessment or conversion of organization data into some kind of reports. These reports can be considered as summarized reports that are very beneficial for managers or employees with lack of time to spare on report generation. So, this system is quite helpful in quick generation of reports.

EX: we can take several examples in favour of this argument like the accounting of some kind. Suppose a group of persons in the office has some personal expenses of their own. So to save time this system is helpful in generating a report for their respective billing accounts.

Management Information Support System: Now this system refers to the managers , in this system their concern is on the stake. A manager in a small business no wonder can handle the organization efficiently but in some cases no. of managers are not grown relative to the organization's growth. In such cases, MIS is a perfect system tool which performs all the managerial functions for a manager resulting in less burden on the fellow.

It has some useful tools like software that helps in decision making, data resources such as databases, the hardware resources of a system, decision support systems, people management and project management applications.

EX: We have seen several managers crawling with so much workloads that it seems like never ending workload. So such organizations make use of Management Information Support System. We can take examples of big industries and big companies in reference to this system. Now is the age of technology , where these systems are widely used.

Decision Support System: Most confusing aspects for an organization's continuous growth is dependent on choosing the right decisions. But the answer also relies with the today technology. There are such systems that understand what business means to owner and client and these systems also capable to take decisions ; the right decisions for the organization at the most crucial times.

Looking at this system from the technical point of view will give us the conclusion that it is just like any other software ; a set of codes to perform some specific tasks for the business. But from the organizations point of view it is a major step in the growth of the organization.

The success of an organization depends on the right decision making and that's what the purpose of this system is.

This system includes some analyzing algorithms that analyze the business data and presents it before the user, making sure that he chooses the right decision. So this system is making it easy to take the decisions. However, the system does not take any decision from itself as it includes some emotional aspects, some strategies and other external factors too.

So, it basically just enhances the decision making a little bit. It is useful in big organization's where analyzing of data by itself is difficult.

Transaction Processing System: Transactions are set of tasks either you talk of a bank transaction or some accounting transaction. Transaction Processing system is also a gain of technology. Suppose a sales order is fulfilled by a company, then questions arise like to whom, what is the proof, billing etc. So these kinds of organization transactions need a system to improve the overall organization performance. These transactions include sells, purchase, sales return, purchase return etc.

Transaction Processing System basically are used to handle transactions. There is a cycle of transaction processing system that is followed:

- 1) Data entry activities
- 2) Transaction processing activities
- 3) File and database processing
- 4) Document and report generation
- 5) Inquiry processing activities.

Right from the first stage to the last it handles most of the transactions for an organization making the work pattern a little easier.

Transaction Processing System process data in two ways:-

- 1) Batch processing
- 2) Real-time processing

Batch processing is a repeating process in which transactions come and get processed periodically. But a real time process follows the real time; it does the process more efficiently and fastly. We can consider the banking system to understand the transaction processing system better.

6. Conclusion

The information systems help in maintaining the organization for a cost effective better performance growth. We can say that, it has made the business concepts a little bit easier and has also reduced some amount of manpower like a no. of managers are not needed for a small business or enterprise rather than MIS can be used. The transactions are safe and secure and are handled correctly. So information systems in many ways has changed how the organization works. "IS" from its conventional function of supporting business operations, today information systems are used to reduce business risks and to ensure that correct information is made available, so managers can make better decisions. These are not necessary systems, but they have now become so adaptive to the current business industry that they are considered to be a necessary part of the industry. Information systems surely have made a way to make the work a little easier. So, upto this technology has made such a systems (Information systems) that are very essential in the long term growth of the organization.

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