MANAGEMENT INFORMATION SYSTEM

A SYSTEM

A system can be broadly defined as an integrated set of elements that accomplish a defined objective. People from different engineering disciplines have different perspectives of what a "system" is. For example, software engineers often refer to an integrated set of computer programs as a "system." Electrical engineers might refer to complex integrated circuits or an integrated set of electrical units as a "system." As can be seen, "system" depends on one's perspective, and the —integrated set of elements that accomplish a defined objective‖ is an appropriate definition.

An information system is a set of interrelated components that collect (or retrieve), process, store and distribute information to support decision making and control in an organization. Information systems contain information about significant people, places and things within the organization or in the environment surrounding it. **Information** is data that has been shaped into a form that is meaningful and useful to human beings.

Why information systems

We are in the midst of a swiftly moving river of technology and business innovations that is transforming the global business landscape. An entirely new Internet business culture is emerging with profound implications for the conduct of business. You can see this every day by observing how businesspeople work using high-speed Internet connections for e-mail and information gathering, portable computers connected to wireless networks, cellular telephones connected to the Internet, and hybrid handheld devices delivering phone, Internet, and computing power to an increasingly mobile and global workforce.

The emerging Internet business culture is a set of expectations that we all share. We have all come to expect online services for purchasing goods and services, we expect our business colleagues to be available by e-mail and cell phone, and we expect to be able to communicate with our vendors, customers, and employees any time of day or night over the Internet. We even expect our business partners around the world to be —fully connected. Internet culture is global.

IMPACT OF INFORMATION SYSTEMS IN AN ORGANIZATION.

- **Flow of Information**: Information is a key resource for all organizations. What information describes might be internal, external, objective or subjective. **External** information describes the environment surrounding the organization. **Objective** information describes something that is known. **Subjective** information describes something that is currently unknown. With information system the flow of all these three types of information is made simple buy use of centralized data centers where all this data can be retrieved. Information in an organization can flow in four direction and these include upward flow of information, downward flow of information, outward flow of information and horizontal flow of information.
- **Transaction processing**: Information system simplifies the transaction process of an organization. A transaction process system (**TPS**) is a system that processes transactions that occur within an organization. At the heart of every organization are IT systems whose main role is to capture transaction information, create new information based on the transaction information. **TPS** will update any transaction process and store that information in a database, so any concerned party in the organization can access that information via a centralized information storage network of internet.
- **Decision support**: A decision support system (**DSS**) is a highly flexible and interactive IT system that is designed to support decision making when the problem is not structured. A DSS works together with an artificial intelligence system to help the worker create information through (**OLAP**) online analytical process to facilitate decision making tasks that require significant effort and analysis.

- **Workgroup support:** Since information system facilitates in the creating an information sharing environment, workers can easily consult each other across different department without any interruption. They can use emails, text chatting services to inquire something related to a given task at work. With work group support systems, group decision making becomes easier.

- **Executive support**: An executive information system (EIS) is an interactive management information system (MIS) combined with decision support systems and artificial intelligence for helping managers identify and address problems and opportunities. An **EIS** allows managers to view information from different angles. Yet it also provides managers with the flexibility to easily create more views to better understand the problem or opportunity at hand.
- **Data Management**: With the help of database software, an organization stores all its relevant data on a database. This infrastructure can be designed when it is internal or external. An internal centralized system can only be accessed with in the organization while an external centralized system allows data to be accessed out side the organization using a remote **(IP)** internet protocol Address or a domain name. In this case, employees or managers can use a company website to access relevant company data by use of passwords. This data is not exposed to the public and search engines.

- **Communication**: Information technology accounts in the development of communication technology. Services like electronic mail make communication within and outside the organization easy and first. Now days email communication is a default communication technology used by every organization. Communication is a great tool in business develops, with advanced communication tools, employees and managers can easily make beneficial decisions in the organization.

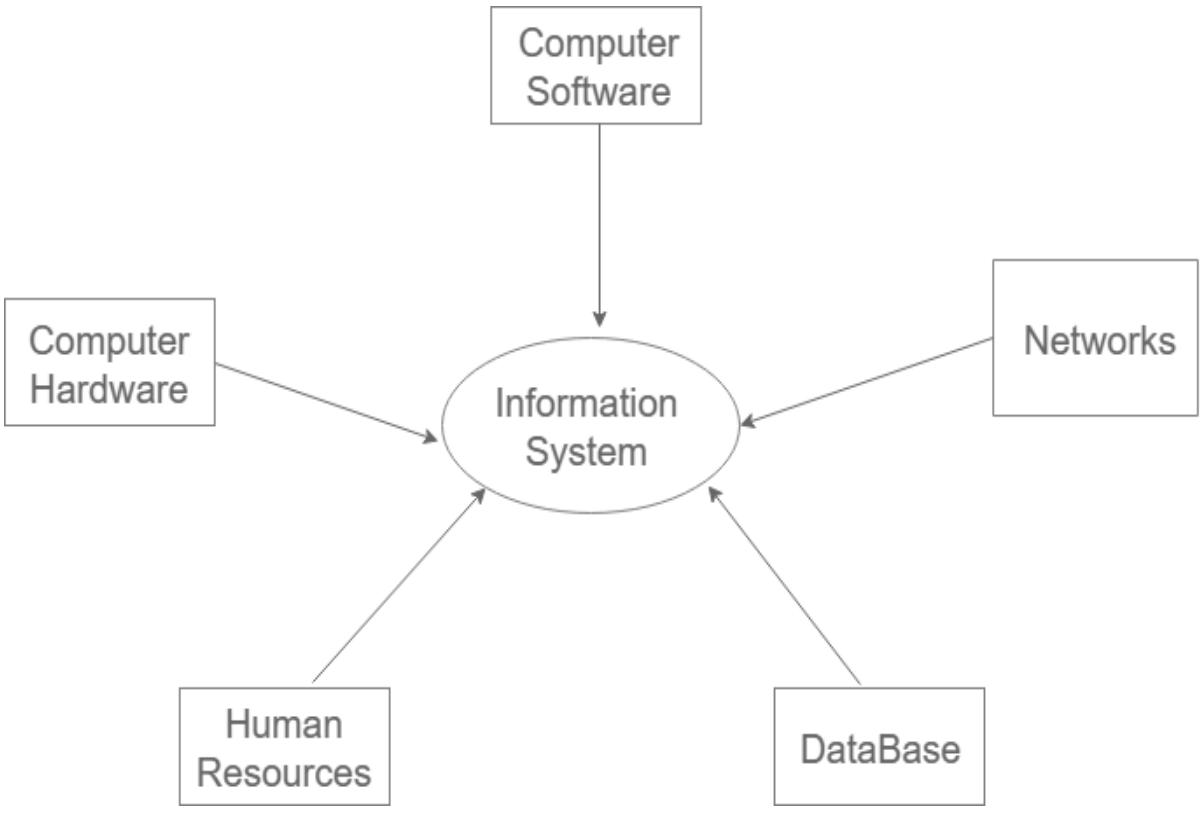
The Advantages of Information systems

1. Organizations across all industries can leverage information technology to make smarter decisions and grow their revenue. Today, we have access to cutting-edge software that allows us to improve customer care service, turn big data into valuable insights, assess risks and increase business security.
2. It has ability to process complex data. Modern IT solutions can help one collect, analyze, process and store data, leading to more efficient operations.

3. They help boost marketing campaigns by providing the data needed to reach the ideal customers. Even basic tools like Google Analytics can give accurate insights about website traffic, bounce rates, sales and other key metrics.
4. Ability to work remotely; employees are no longer confined to their employer's premises. This gives more freedom and flexibility, leading to greater performance and increased morale. IT solutions make it easier to work on the go, keep in touch with your team and access your files anytime, anywhere.

COMPONENTS OF INFORMATION SYSTEM

An **Information system** is a combination of hardware and software and telecommunication networks that people build to collect, create and distribute useful data, typically in an organisational, It defines the flow of information within the system. The objective of an information system is to provide appropriate information to the user, to gather the data, processing of the data and communicate information to the user of the system.



Components of the information system are as follows:

1. Computer Hardware:

Physical equipment used for input, output and processing. What hardware to use depends upon the type and size of the organisation. It consists of input, an output device, operating system, processor, and media devices. This also includes computer peripheral devices.

2. Computer Software:

The programs/ application program used to control and coordinate the hardware components. It is used for analysing and processing of the data. These programs include a set of instruction used for processing information.

Software is further classified into 3 types:

1. System Software
2. Application Software
3. Procedures

3. Databases:

Data are the raw facts and figures that are unorganized that are and later processed to generate information. Software is used for organizing and serving data to the user, managing physical storage of media and virtual resources. Data are managed using Database management system. Database software is used for efficient access for required data, and to manage knowledge bases.

4. Network:

- Networks resources refer to the telecommunication networks like the intranet, extranet and the internet.
- These resources facilitate the flow of information in the organization.
- Networks consists of both the physicals devises such as networks cards, routers, hubs and cables and software such as operating systems, web servers, data servers and application servers.
- Telecommunications networks consist of computers, communications processors, and other devices interconnected by communications media and controlled by software.
- Networks include communication media, and Network Support.

5. Human Resources:

It is associated with the manpower required to run and manage the system. People are the

end user of the information system, end-user use information produced for their own purpose, the main purpose of the information system is to benefit the end user. The end user can be accountants, engineers, salespersons, customers, clerks, or managers etc. People are also responsible to develop and operate information systems. They include systems analysts, computer operators, programmers, and other clerical IS personnel, and managerial techniques.