BASIC CONCEPTS OF INFORMATION TECHNOLOGY
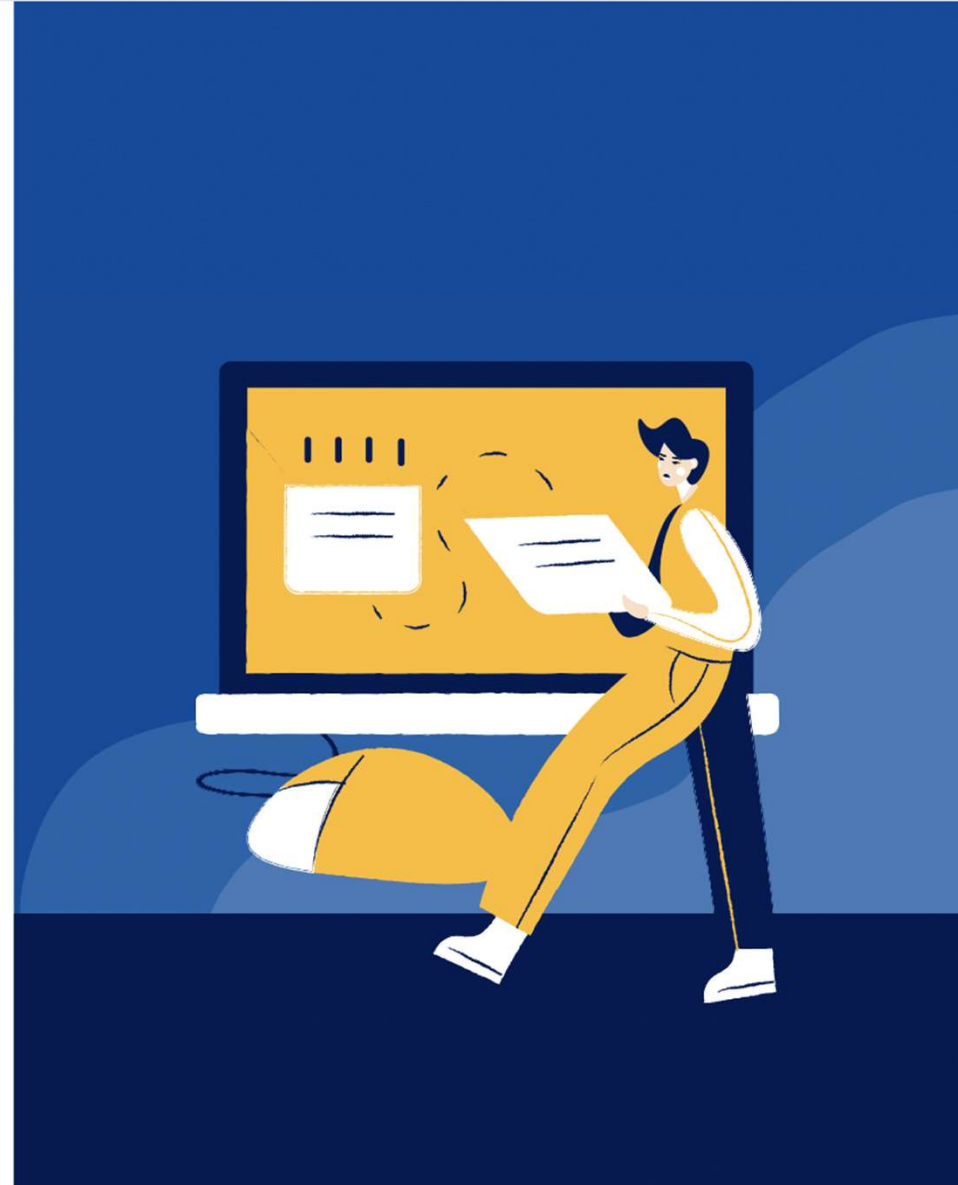
SISTEM INFORMASI MANAJEMEN

JURUSAN TEKNOLOGI INFORMASI
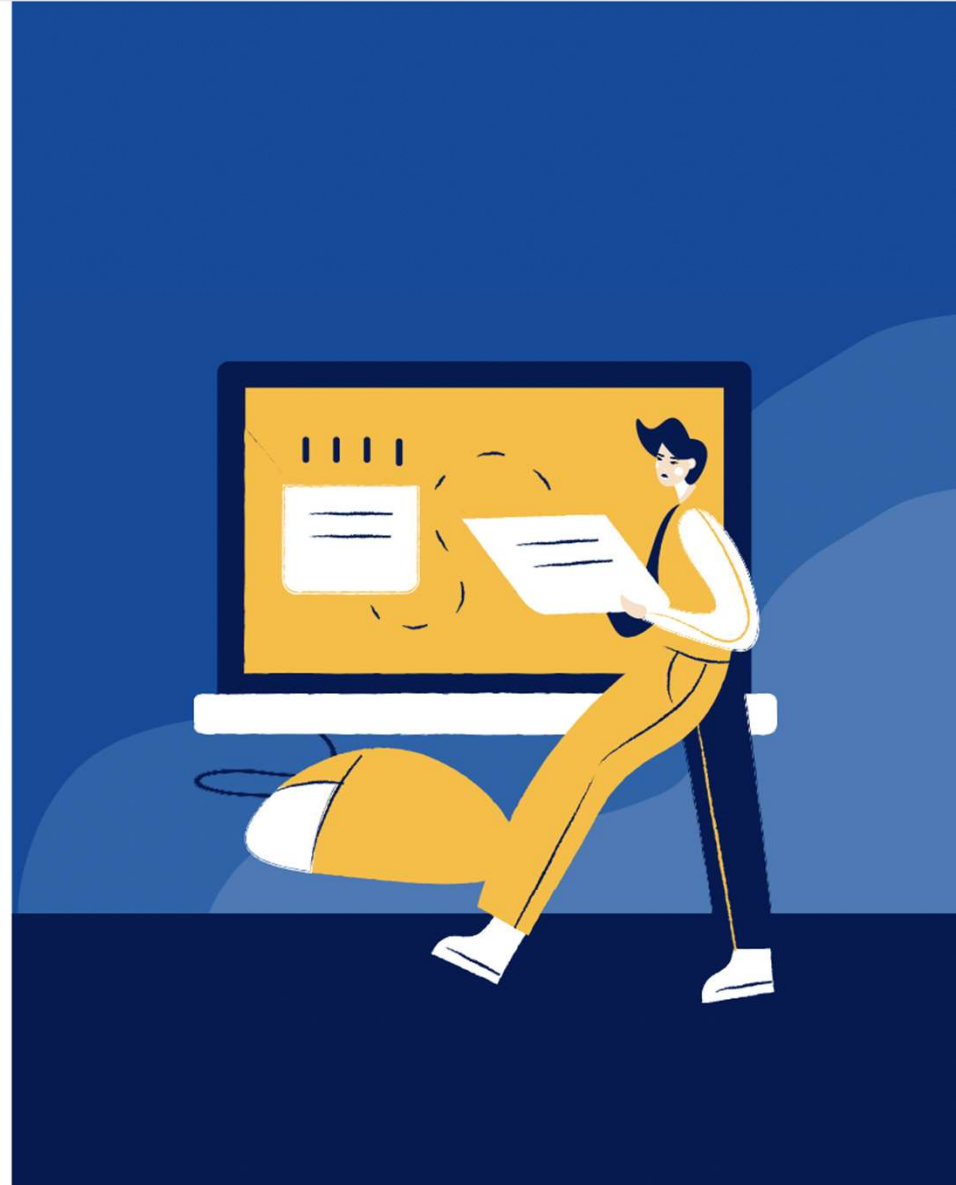
Tim Teaching Sistem Informasi Manajemen 2022

Introduction

- All leaders or managers who are responsible for an organization need to use a holistic approach in the decision-making process, especially in setting goals, allocating resources, and making plans.

- Data and information is a basic material in the preparation of information systems so that an understanding of data and information and information systems is very important.
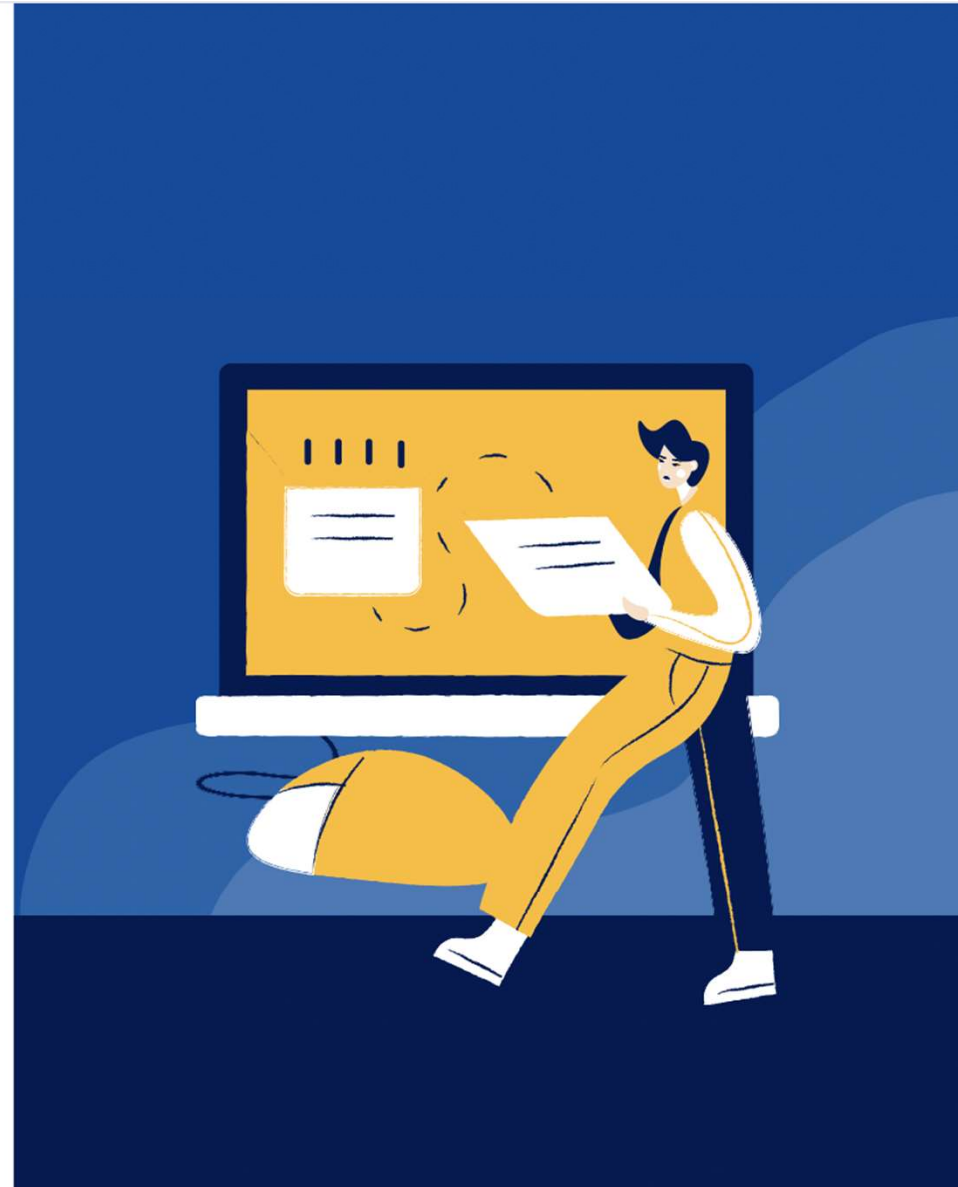
Information Technology

- Information technology is the study or electronic equipment, especially computers, for storing, analyzing, and distributing information including words, numbers, and images (Oxford Dictionary, 1995).

- Information technology is not only limited to computer technology (software & hardware) used to process or store information, but also includes communication technology to transmit information (Martin, 1999).

- Implicitly and explicitly, information technology is not only in the form of computer technology, but also includes communication technology. In other words, what is called information technology is a combination of computer technology and telecommunications technology.
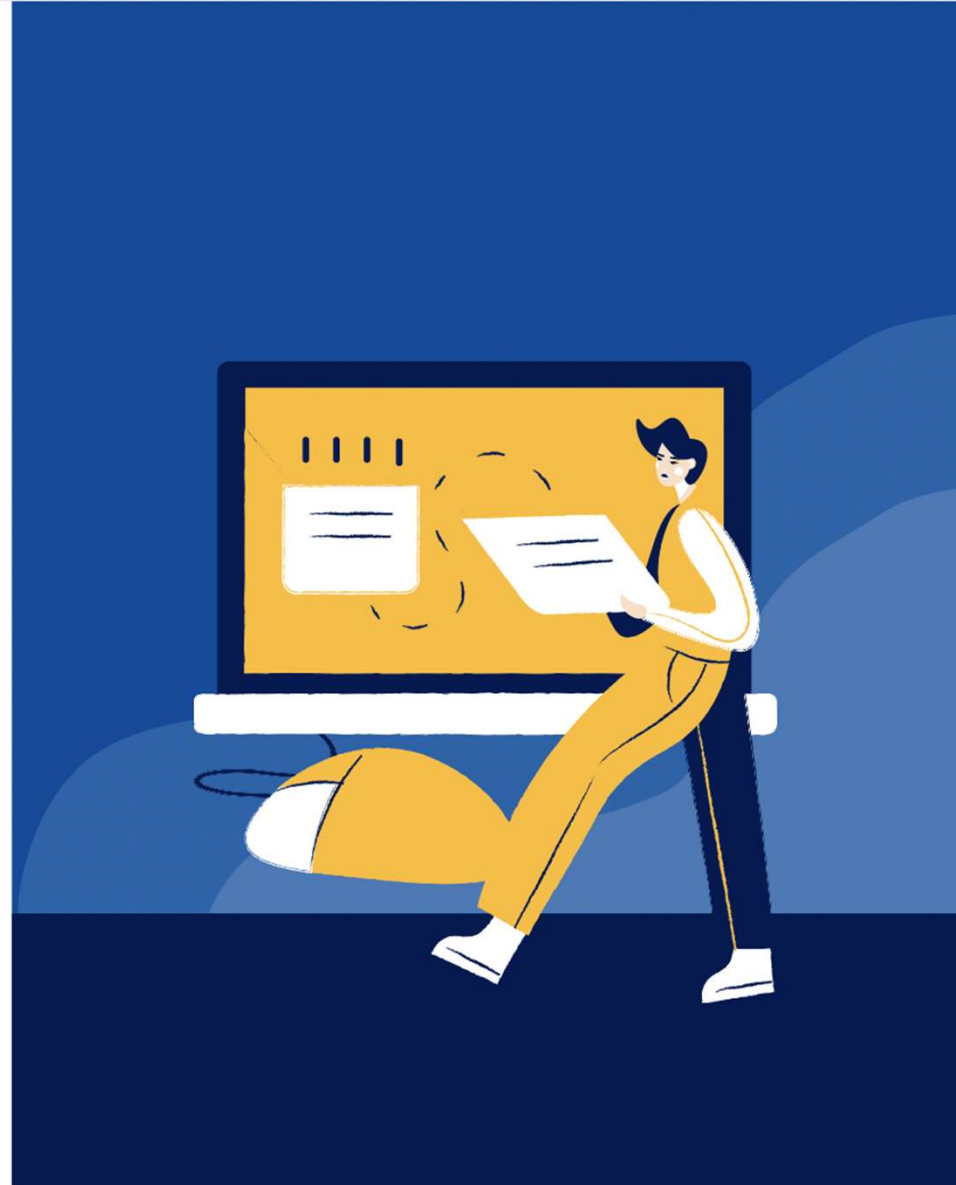
Information Technology Concept

- The term information technology began to be widely used to replace management information systems. The term information technology (IT) is more technology-oriented. Information technology (IT) is a sub-system or system part of an information system.

- The term information systems technology (TSI) or information systems technology (IST) also denotes the technology used by information systems. The term information systems technology has a similar meaning to information technology (IT) or information technology (IT).

- A computer system is also an information technology used in information systems. Information technology can be any technology that can produce information, including computer technology and telecommunications technology. Thus, the computer system is a subsystem or system part of information technology.
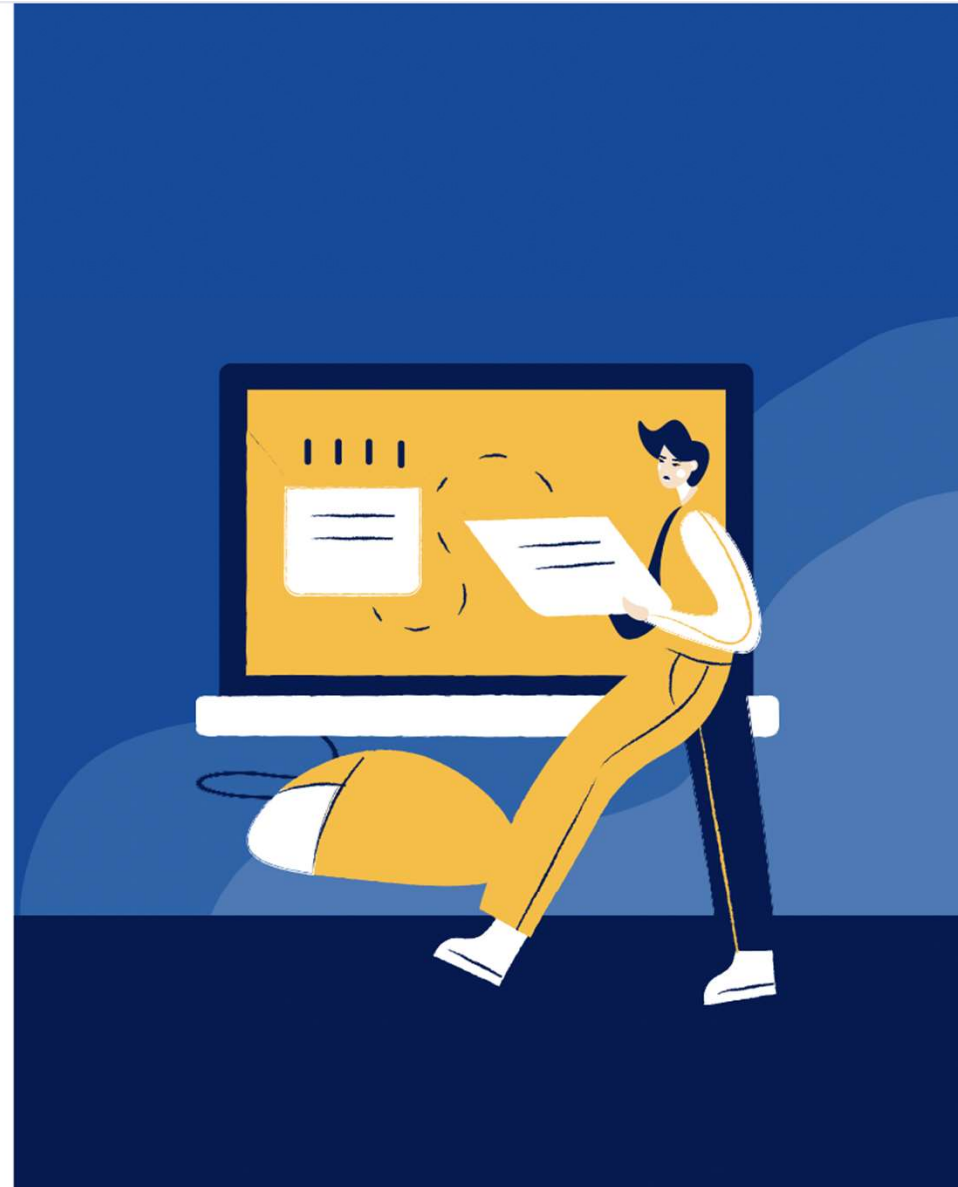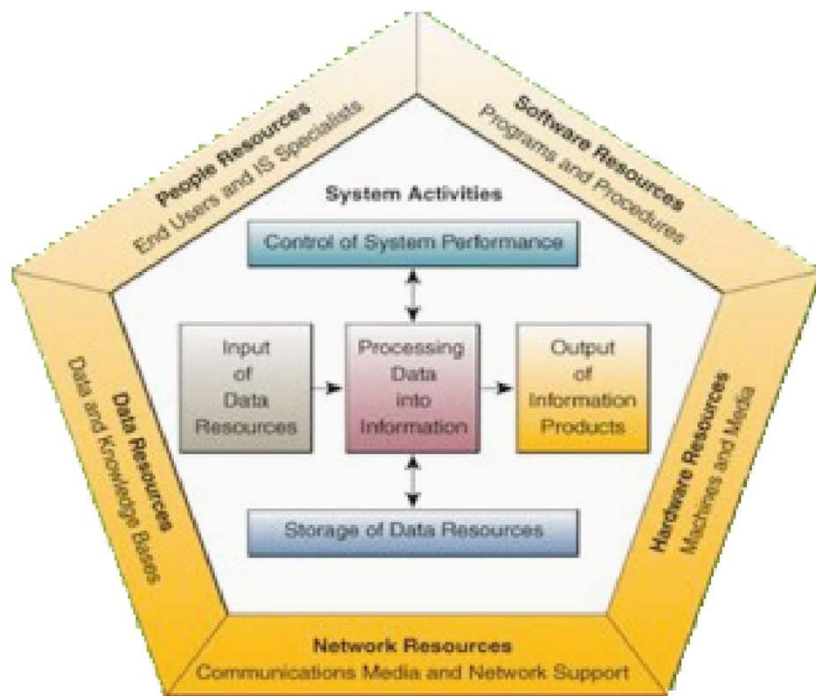
Information Technology Grouping

- Input technology

- Processing machine

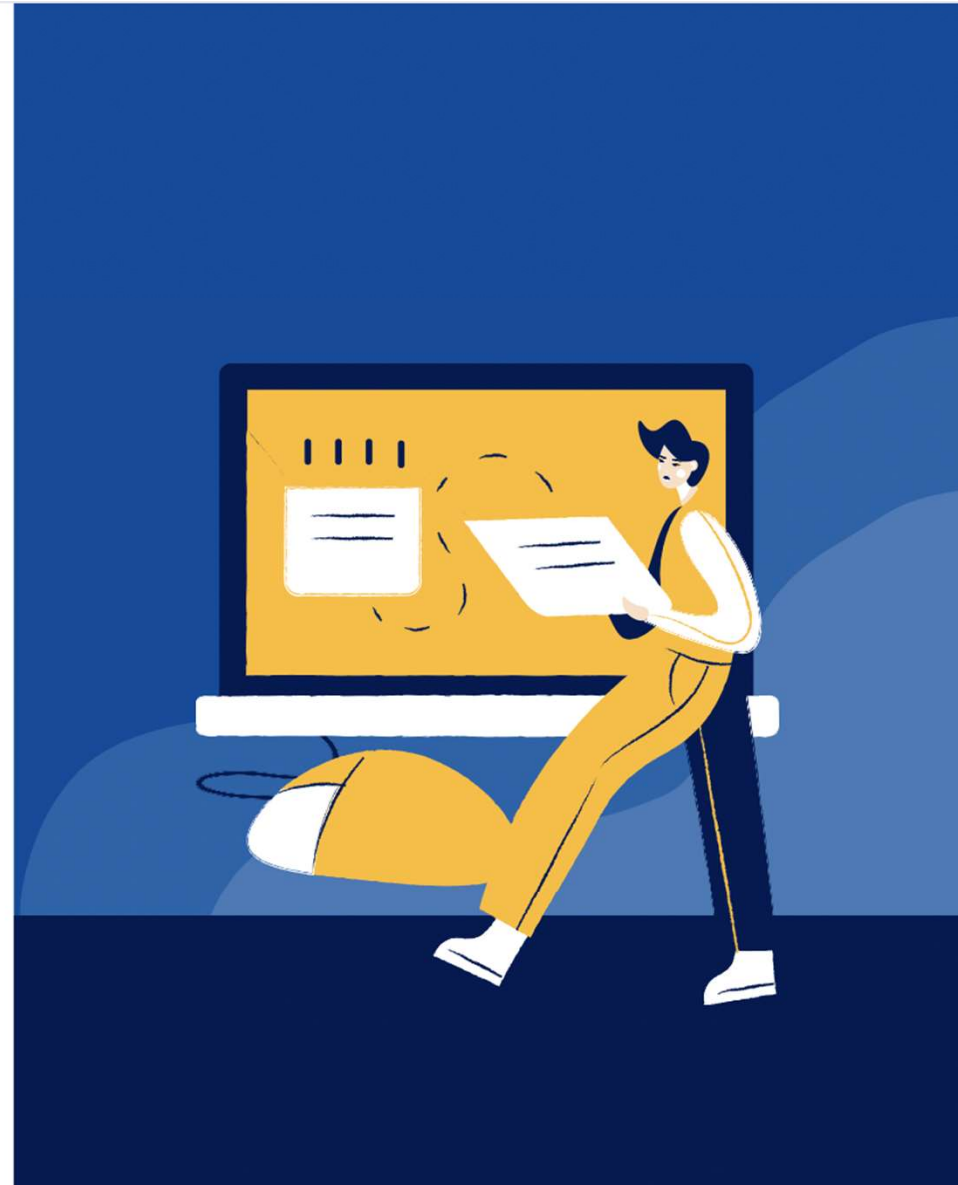- Storage technology (internal and external)

- Output technology

- Software

Information Technology System Components

Information Technology System Classification

- According to system function: Embedded IT system, dedicated IT system, and general-purpose IT system.

- By department: Accounting information system and marketing information system.

- According to support for management level within the company: Transaction processing systems and decision support systems.

- By size and way of serving requests: Client-server.

The Role of Information Technology

- Information technology has become the main facilitator for business activities, contributing greatly to fundamental changes in organizational structure, operations and management.

- Examples of the results of the application of information technology: withdrawal of money through Automated Teller Machines (ATM), transactions via the internet known as e-commerce or electronic commerce, money transfers through e-banking facilities that can be done from home.

- The role of information technology can be used as a means of cooperation between individuals or groups with other individuals or groups without recognizing the boundaries of distance and time, country, race, economic class, ideology, or other factors that can hinder the exchange of ideas.

Information Technology Trends

- Increased speed and capacity of electronic components

- The availability of information in digital form is increasing

- The portability of electronic equipment is increasing

- Improved connectivity

- Ease of use increased

Information Technology Development (1)

- **Understanding the development of information technology**

The development of information technology spurred a new way of life, from life begins to end. This life is known as e-life, meaning that life has been influenced by various needs electronically.

- **Technological discovery**

Towards the turn of the current century, humans tend to occupy a central place in the production process because this economic stage is knowledge based and information focused. In this case, telecommunications and informatics play a role as a key technology (enabler technology).

Information Technology Development(2)

- **Information technology advancement**

Advances in information technology and telecommunications are so rapid that new, more efficient ways of producing, distributing, and consuming goods and services are applied. It is this process that brings people into the information society or economy. Life in the future, the information technology and telecommunications sector is the most dominant sector. Information technology has many roles in education (e-education).

- **Use of information technology**

Humans are social creatures. Besides clothing, food, and shelter as their main needs, as social beings, humans need communication between each other so that they can be interconnected. Therefore, humans seek and create systems and tools to interact with each other. The communication tools and systems created by humans are then called information technology or "IT", an abbreviation of Information Technology.

Let's Discuss