Introduction to

INFORMATION MANAGEMENT SYSTEM

LESSON 1

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TOPICS

01 DIFFERENCE OF DATA AND INFORMATION

02 TYPES OF DATA

03 TRANSFORMING DATA INTO INFORMATION

04 KEY COMPONENTS OF INFORMATION SYSTEM

05 3 ACTIVITIES IN AN INFORMATION SYSTEM TO PRODUCE INFORMATION

06 DIMENSIONS OF INFORMATION SYSTEMS

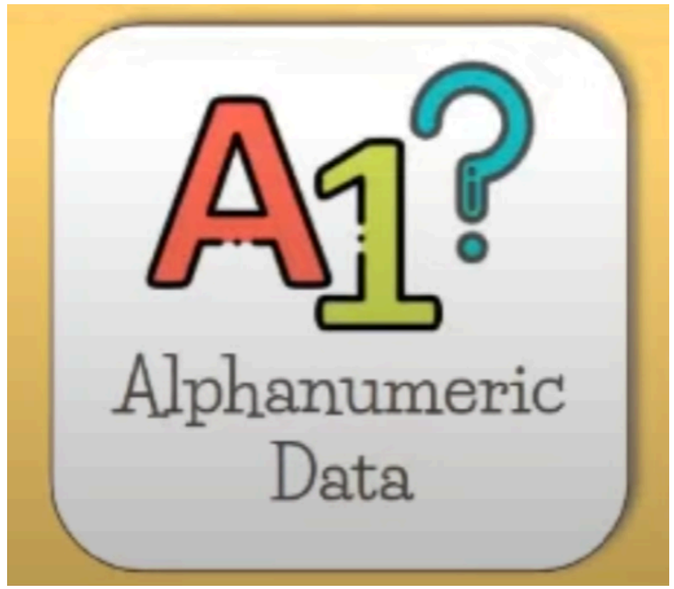
What is Data?

DATA

it consists of raw facts.

Examples 311, 18, Victoria

TYPES OF DATA



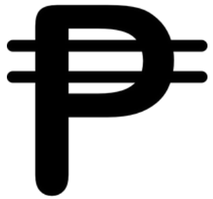
What is Information?

INFORMATION

It is a collection of data organized and processed so that it has additional value beyond the value of the individual facts.

INFORMATION

Example:



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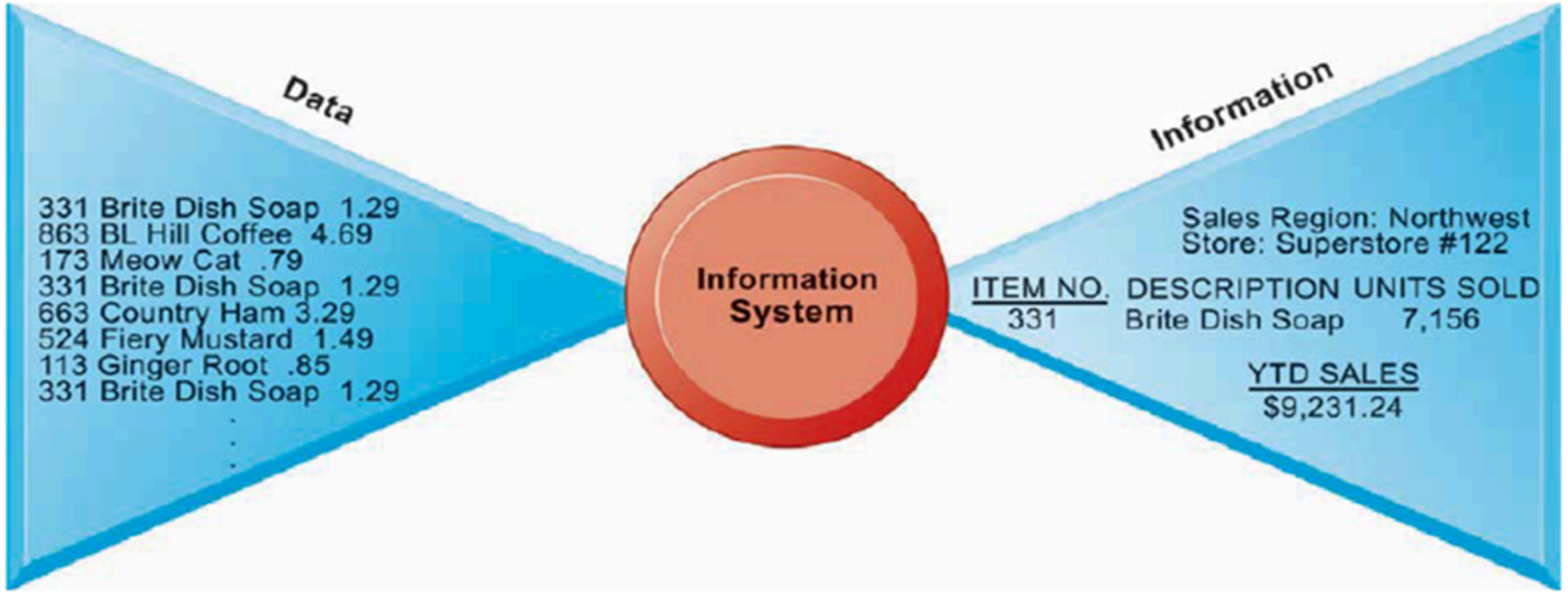
Sale for August 1, 2024

EXAMPLE OF DATA AND INFORMATION

FIGURE 1.3 DATA AND INFORMATION



Raw data from a supermarket checkout counter can be processed and organized to produce meaningful information, such as the total unit sales of dish detergent or the total sales revenue from dish detergent for a specific store or sales territory.

INFORMATION SYSTEM

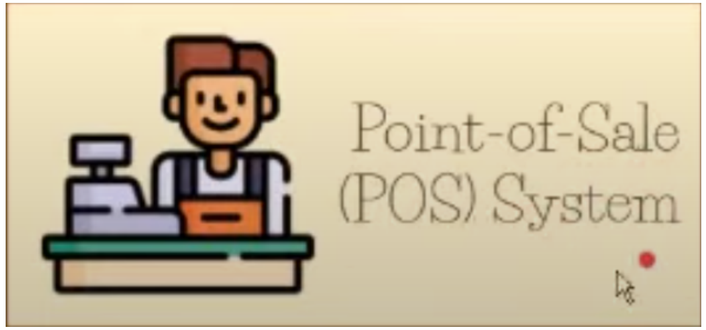
It is a set of interrelated components that collect, process, store, and disseminate data and information. It provides a feedback mechanism to monitor and control its operation to make sure it continues to meet its goals and objectives.

INFORMATION SYSTEM

Example

1

2



FIVE KEY COMPONENTS ON INFORMATION SYSTEM

- Hardware
- Software
- Data
- Processes
- People

HARDWARE

– refers to the physical layer of the information system. Hardware includes computers, networks, communications equipment, scanners, digital capture devices, and other technology-based infrastructure.

SOFTWARE

consists of system software and application software.

DATA

An information system transforms data into useful information

PROCESSES OR PROCEDURES

describe the tasks that users, managers, and IT staff members perform. Processes necessary to support a specific business model are described in written documentation manuals and online reference materials.

PEOPLE

also known as users or end-users. Users include employees, customers, vendors, and others who interact with an information system.

TWO TYPES OF USERS

Internal users – include managers, technicians, sales rep, and corporate officers.

External users - include customers who track their orders on the company’s Web site, suppliers who use a customer’s system to plan their manufacturing schedules

3 ACTIVITIES IN AN INFORMATION SYSTEM TO PRODUCE INFORMATION

1. **Input**

   It captures or collect raw data from within the organization or from its external environment

2. **Processing**

   It converts the raw input into meaningful form.

3. **Output**

   It transfers the processed data to the people who will use it or to the activities for which it will be used.

3 ACTIVITIES IN AN INFORMATION SYSTEM TO PRODUCE INFORMATION

Input, Processing and Output (IPO)

3 ACTIVITIES IN AN INFORMATION SYSTEM TO PRODUCE INFORMATION

Input, Processing and Output (IPO)

INPUT

- Data
- Information
- Resources

PROCESS

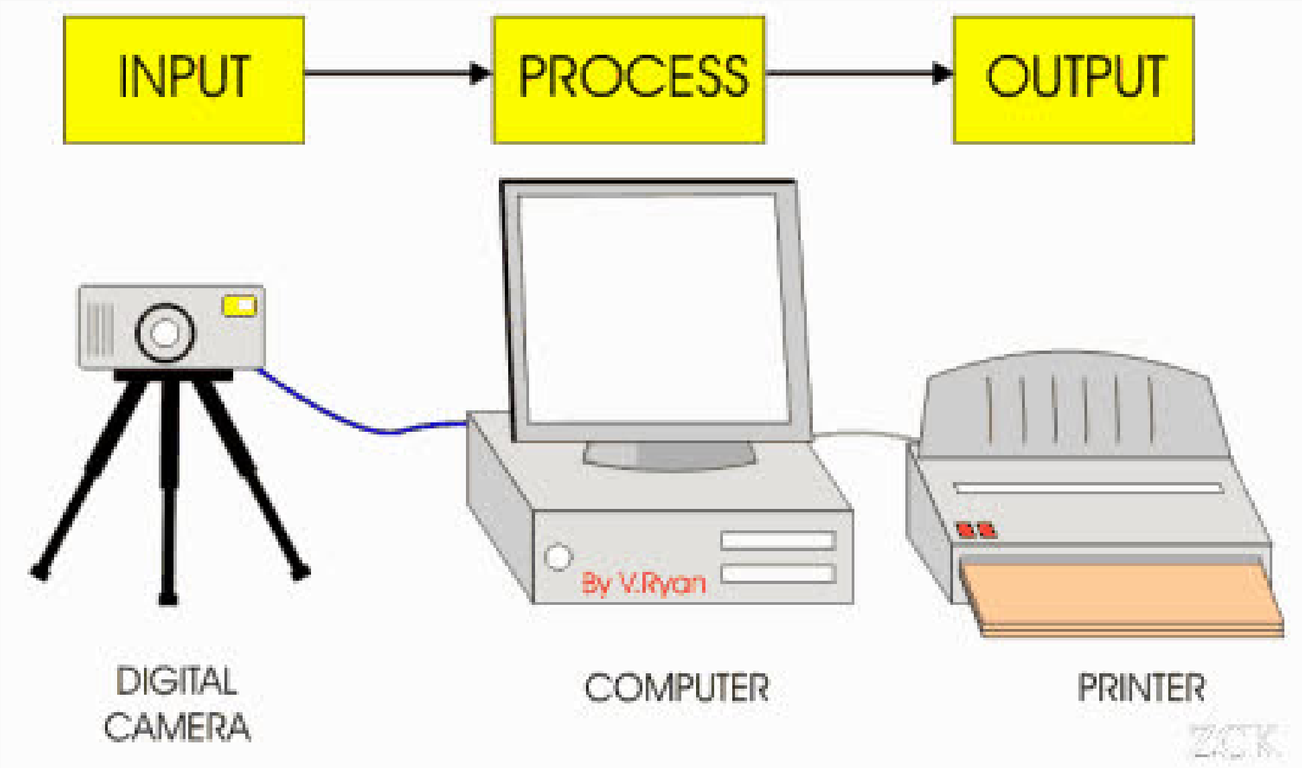
- Activities
- Transformations
- Operations

OUTPUT

- Result
- Product
- Outcome

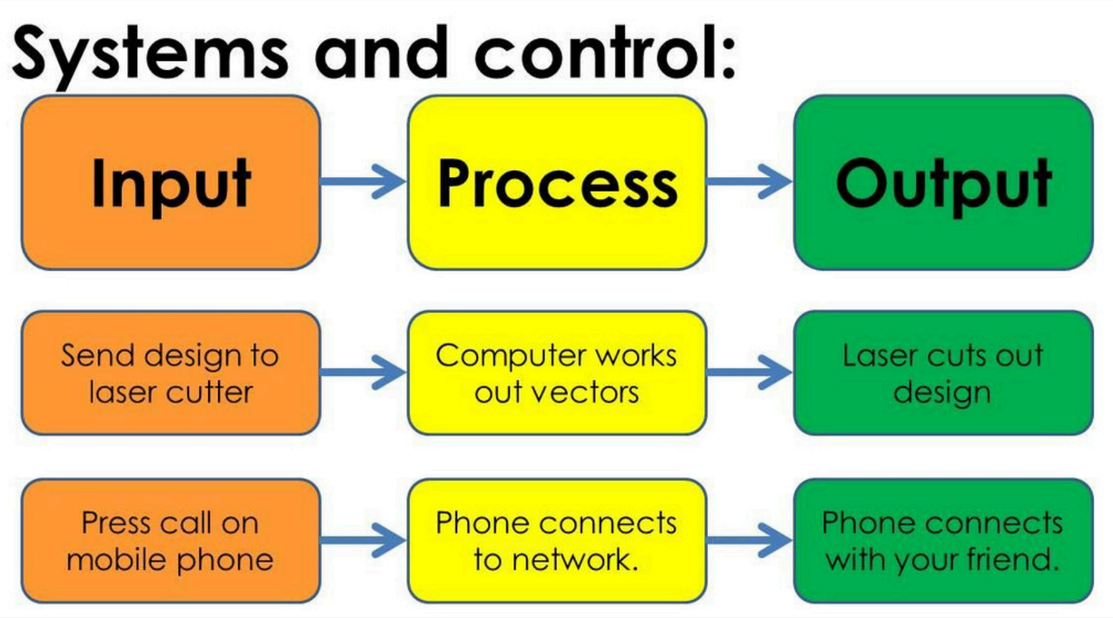
3 ACTIVITIES IN AN INFORMATION SYSTEM TO PRODUCE INFORMATION

Input, Processing and Output (IPO)



3 ACTIVITIES IN AN INFORMATION SYSTEM TO PRODUCE INFORMATION

Input, Processing and Output (IPO)



ACTIVITY TIME

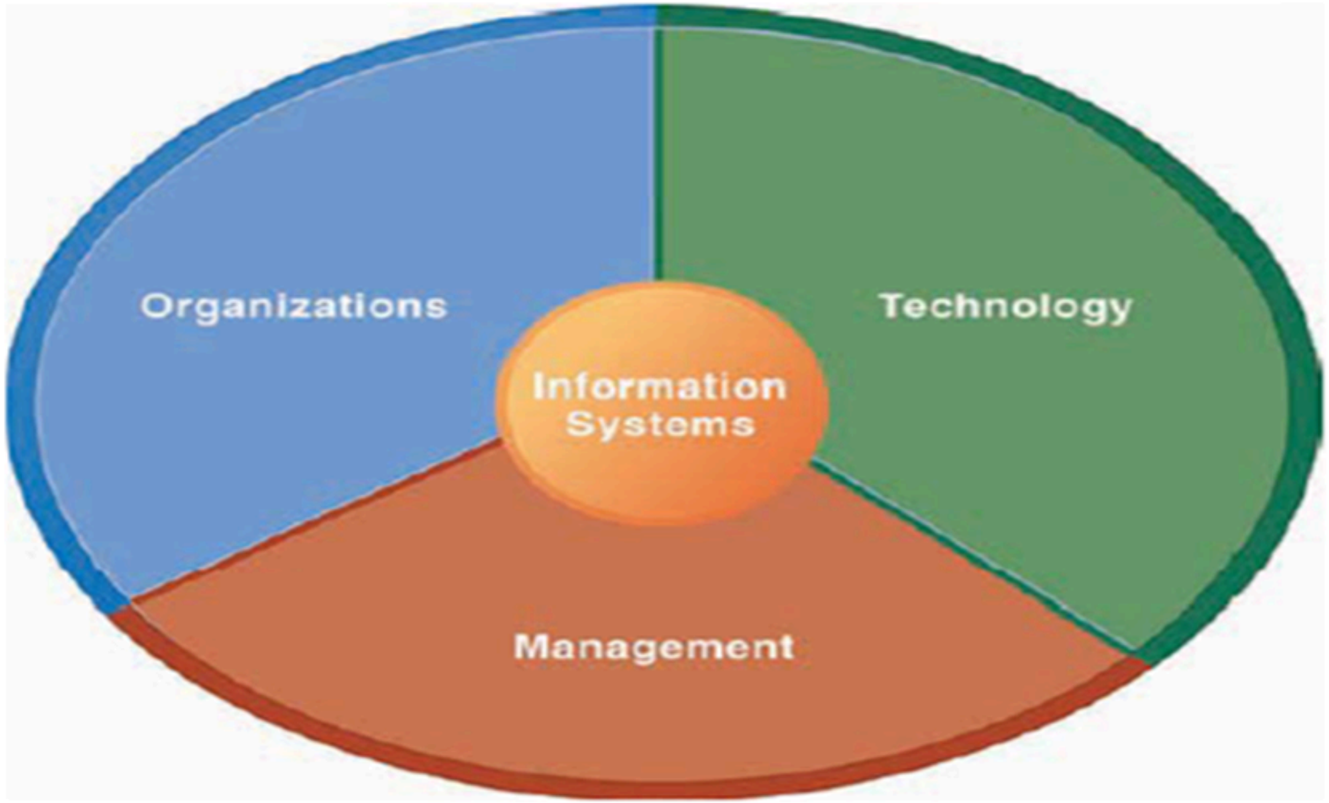
Write an example of an **IPO (Input-Process-Output)**. This exercise will help you understand how to break down a system or a task into its essential components.

Task

1. **Choose a Simple Task or System:** Select a task or system that can be easily broken down into inputs, processes, and outputs. Examples include making a cup of coffee, calculating the average of numbers, or logging into a website.
2. **Write Your Example:**
    - Clearly label each section ***(Input, Process, Output)***.
    - Use bullet points or a table format for clarity.
    - Ensure your example is simple and easy to understand.

DIMENSIONS OF INFORMATION SYSTEMS

FIGURE 1.5 INFORMATION SYSTEMS ARE MORE THAN COMPUTERS



ORGANIZATIONS

- These are firms/companies who handle or need the information systems to transact business.
- The key elements of an organization are its people, structure, business processes, politics and culture.
- It has structure that is composed of different levels and specialties.

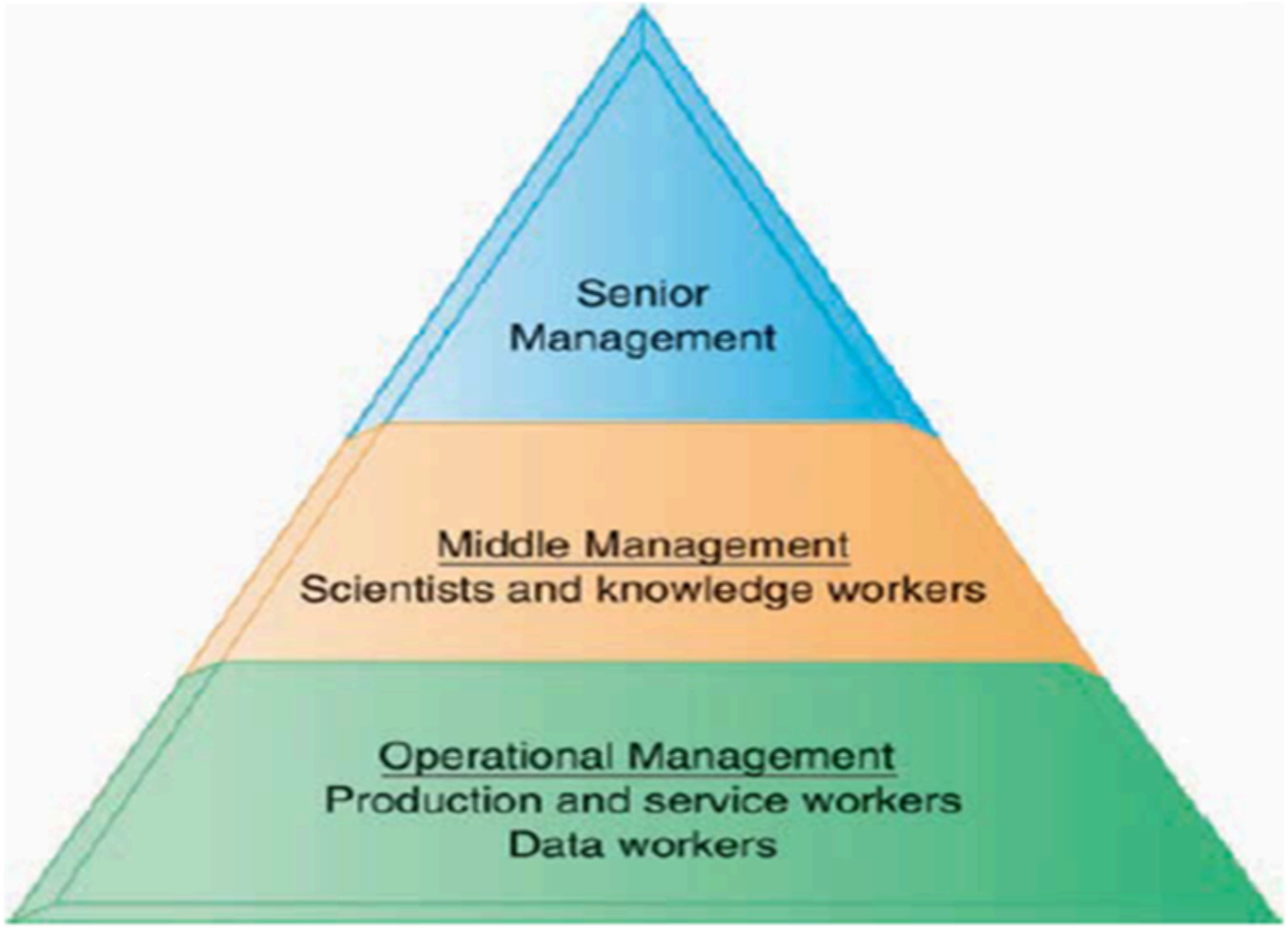
MANAGEMENT

- Management’s job is to make sense out of many situations faced by organizations, make decisions, and formulate action plans to solve organizational problems.

MANAGEMENT

•Managers perceive business challenges in the environment. They set the organizational strategy for responding to those challenges and they allocate the human and financial resources to coordinate the work and achieve success.

LEVELS OF MANAGEMENT



SENIOR MANAGEMENT / TOP MANAGEMENT

Top manager develop long-range plans, called strategic plans that define the company’s overall mission and goals. Strategic planning focuses on issues that affect the company’s future survival and growth, including long-term IT plans.

MIDDLE MANAGEMENT

They carry out the programs and plans of senior management/top management. The knowledge workers are under this category like engineers, scientists or architects design products and create new knowledge.

OPERATIONAL MANAGEMENT

They are responsible for monitoring the daily activities of the business. The data workers and production or service workers are under this category.