

LET'S LEARN

# DATA AND INFORMATION

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**DATA AND INFORMATION**

**INFORMATION SYSTEM**

**TYPES OF INFORMATION  
SUPPORT SYSTEMS**

# WHAT IS DATA??



Raw, unprocessed facts and figures without context. It is a foundational element upon which information is built

# WHAT IS INFORMATION??



It is data that has been processed, organized, and structured to provide meaning or context.

# HOW DATA TRANSFORMS INTO INFORMATION

01

Adding Context

02

Ensure quality and relevance

03

Interpret patterns

01

# APPLICATIONS ACROSS DOMAINS

Law: Data becomes information when organized within legal frameworks to influence judicial decisions.



Academia: Raw data from experiments is interpreted into information through scholarly analysis, contributing to the knowledge base.

Visual: Icons or images representing law (e.g., scales of justice) and academia (e.g., graduation cap).



# INFORMATION SYSTEMS

Involves the integration of people, technology, and processes to collect, process, store, and distribute information.

# MAIN COMPONENTS OF INFORMATION SYSTEMS

COMPONENTS:

SOFTWARE

DATA

NETWORKS

PROCEDURES



# DIFFERENT TYPES OF INFORMATION SUPPORT SYSTEMS

TRANSACTION PROCESSING SYSTEMS (TPS): HANDLES ROUTINE TRANSACTIONS AND OPERATIONS.

MANAGEMENT INFORMATION SYSTEMS (MIS): PROVIDES INFORMATION FOR MANAGEMENT DECISION-MAKING.

SUPPORT SYSTEMS (DSS): ASSIST IN COMPLEX DECISION-MAKING PROCESSES.

EXECUTIVE INFORMATION SYSTEMS (EIS): PROVIDES HIGH-LEVEL INFORMATION FOR EXECUTIVES.

# REFLECTION

Learning about data and information and different types of information systems really helped me understand the importance of them all in IT. As a student in IT, I am exposed to lots of data constantly. But that raw data is of no good if not transformed into useful information in the first place when it comes to making a decision. This is not a technological transformation, but it is more about data cleaning, filtering out the unnecessary pieces, and applying algorithms to mine for useful insights. I consider it very important to understand the difference between data and information, particularly since I am soon entering the professional field of information technology where proper processing and interpretation of data may mean either success or bankruptcy of a venture.

Information systems have shown me how technology ties into the way businesses operate. These systems are not just data-processing tools; they form the backbone of modern business through improvement in decision-making, communication, and efficiency in general. From basic systems that support everyday transactions with accuracy to complex systems to help in facilitating decision-making, information systems are what help in keeping an organization running smoothly.

The increasing relevance of information systems alone, let alone big data and real-time analytics, means they are at the heart of strategic decision-making in today's fast-paced environment. Again, this outlines the need for technical competencies in combination with insight into how such systems support business objectives. Different information systems, like MIS, EIS, Expert Systems, amongst others, perform different functions in the organization to satisfy its needs.

These systems have made me realize the strong link between technical knowledge and the understanding of business. Continuing to work towards my career in IT, the understanding of such concepts ensures that I get whatever I might need to apply technology efficiently in solving some existing problems. Knowledge of the use of information systems assists not only in handling data in a better way but also contributes to the success of businesses one will be dealing with.

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