DATA & INFORMATION

PORTFOLIO #2

TJ C, TABURA

11:11PM

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Topics Covered

- *DATA AND INFORMATION
- *INFORMATION SYSTEM
- *DIFFERENT TYPES OF SUPPORT SYSTEM IN INFORMATION SYSTEM
- *REFERENCES
- *ANALYSIS/REACTION

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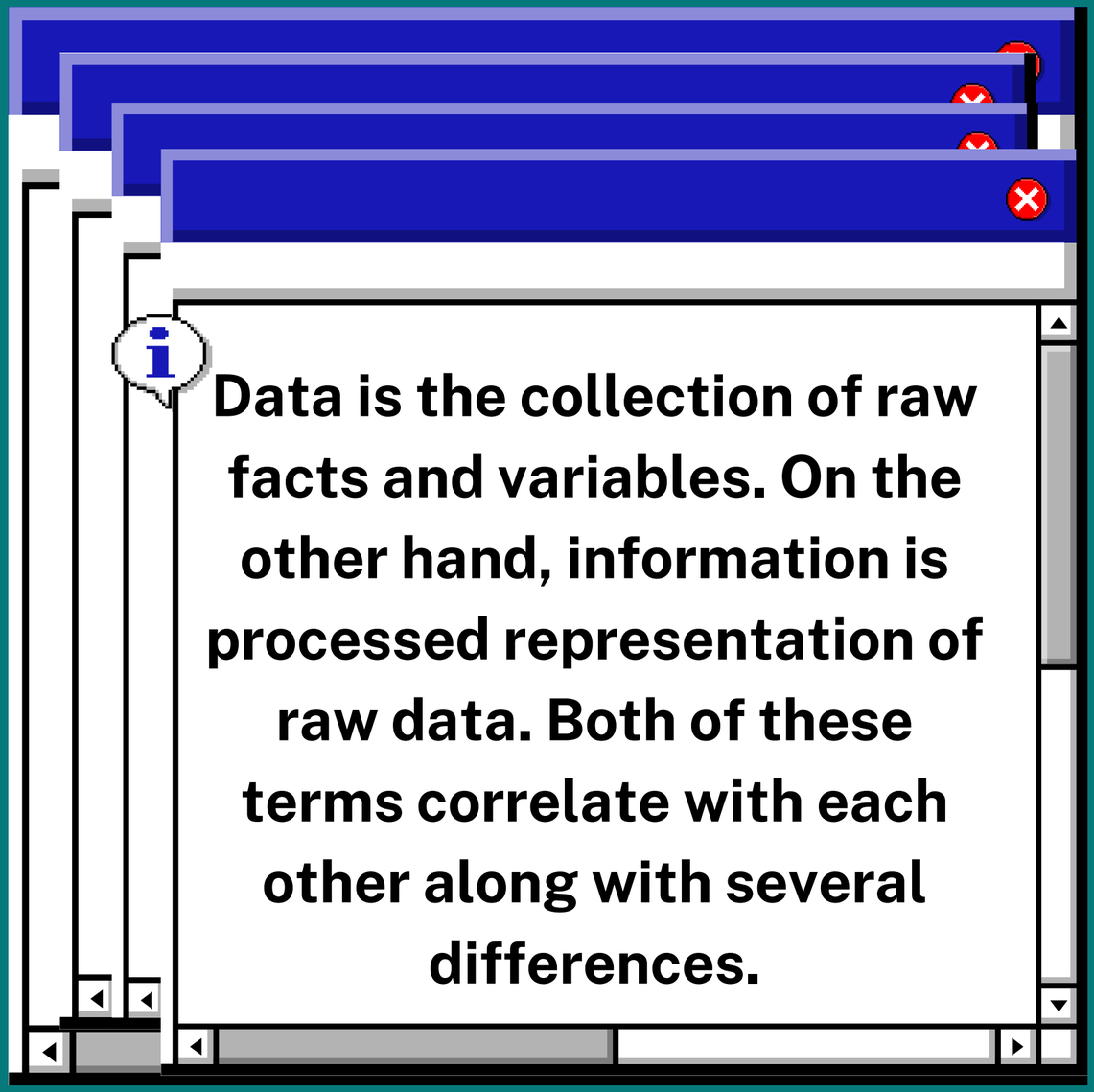
DATA AND INFORMATION



Data is the collection of raw facts and variables. On the other hand, information is processed representation of raw data. Both of these terms correlate with each other along with several differences.

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DATA AND INFORMATION

1.The raw data is a collection of the variables, which could be an event, entity, idea, conditions, etc., which are based upon the randomly collected facts. On the other hand, information is the processed form of this raw data to represent a particular event, an organised idea, a certain condition, etc.

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DATA AND INFORMATION

2.Data consists of variables that include text, numbers, symbols, etc. On the other hand, information is a process and interpreted data to give out and represent a proper explanation.

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DATA AND INFORMATION

3.The data at the time of collection or gathering does not assure the meaning of the purpose of the facts. However, the raw data that is organised in the form of information is a useful and relevant explanation of certain situations, events, conditions, etc.

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DATA AND INFORMATION

4.Both data and information are correlated to each other, but the data is not dependent upon the information. However, the information does not exist without data.

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DATA AND INFORMATION

5.A researcher cannot rely upon data for decision-making. However, this raw data in the form of information supports decision-making.

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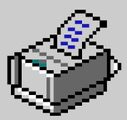
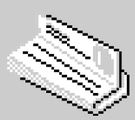
INFORMATION SYSTEM

*information system (IS) is a formal, sociotechnical, organizational system designed to collect, process, store, and distribute information.

From a sociotechnical perspective, information systems comprise four components: task, people, structure (or roles), and technology





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INFORMATION SYSTEM

Hardware: The term hardware refers to machinery and equipment. In a modern information system, this category includes the computer itself and all of its support equipment. The support equipment includes input and output devices, storage devices and communications devices. In pre-computer information systems, the hardware might include ledger books and ink.






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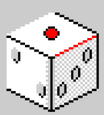
INFORMATION SYSTEM

Software: The term software refers to computer programs and the manuals (if any) that support them. Computer programs are machine-readable instructions that direct the circuitry within the hardware parts of the system to function in ways that produce useful information from data. Programs are generally stored on some input/output medium, often a disk or tape. The "software" for pre-computer information systems included how the hardware was prepared for use (e.g., column headings in the ledger book) and instructions for using them (the guidebook for a card catalog).



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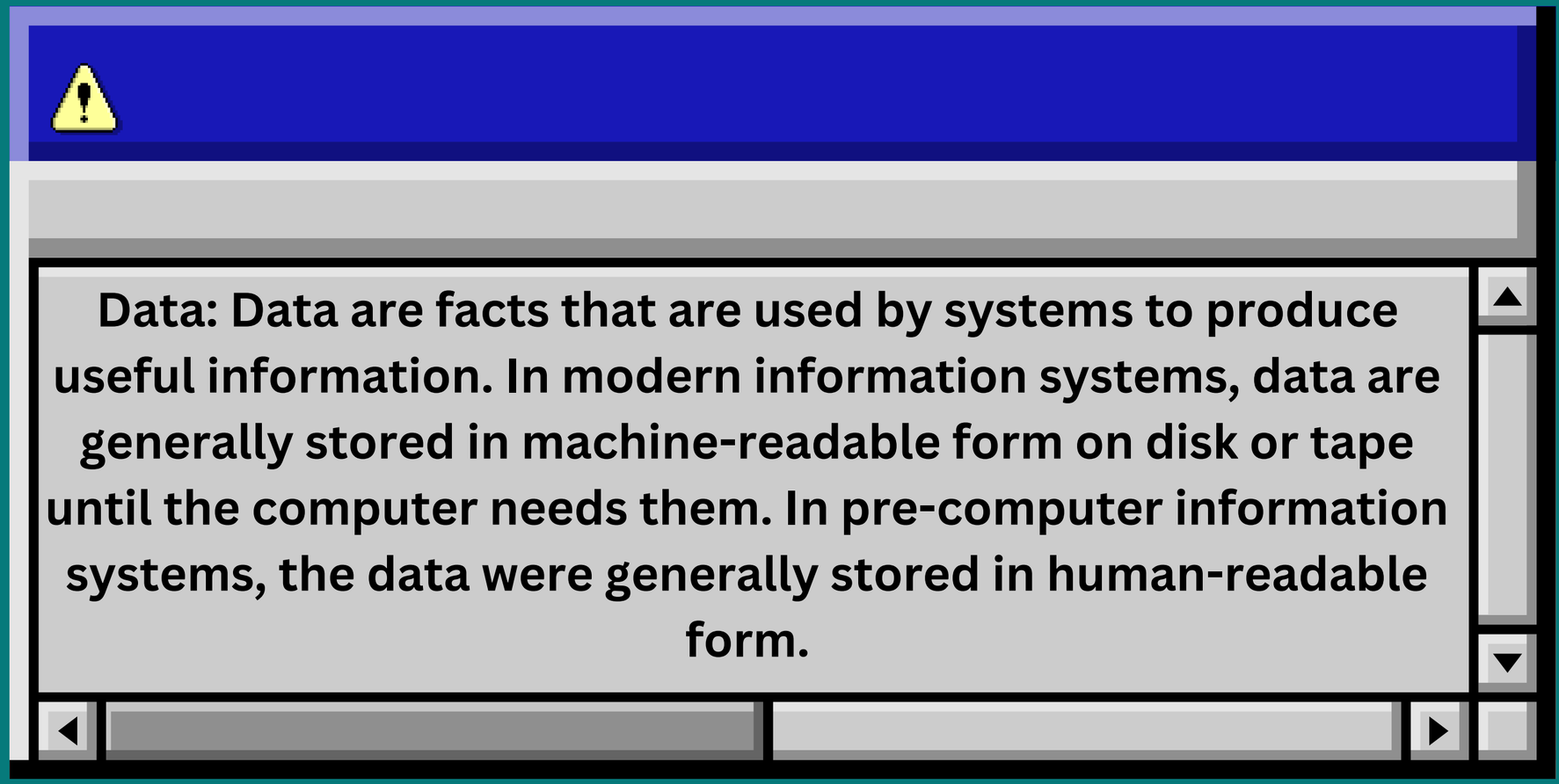
INFORMATION SYSTEM



Data: Data are facts that are used by systems to produce useful information. In modern information systems, data are generally stored in machine-readable form on disk or tape until the computer needs them. In pre-computer information systems, the data were generally stored in human-readable form.

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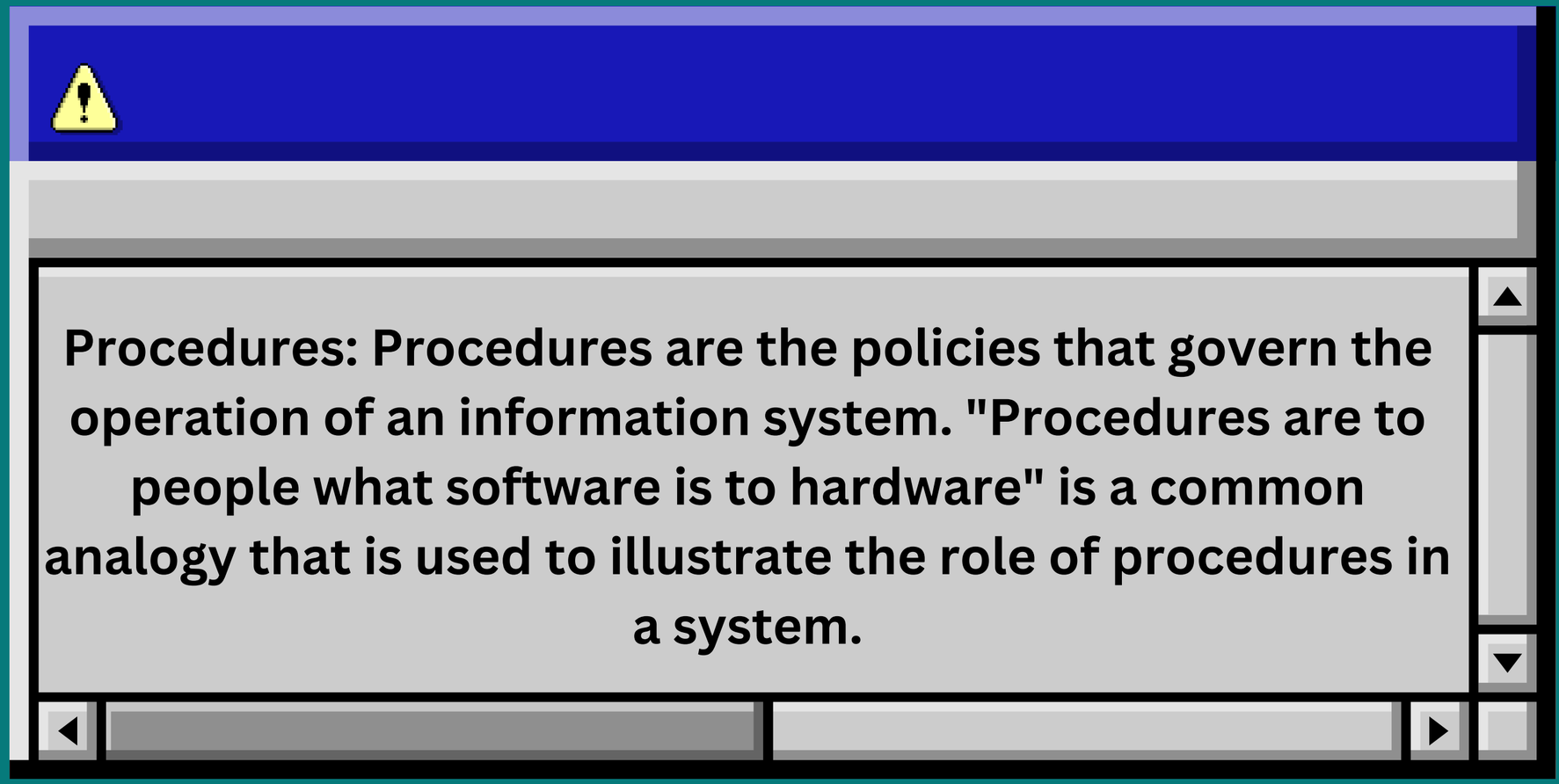
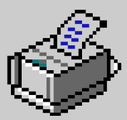
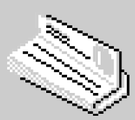
INFORMATION SYSTEM







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INFORMATION SYSTEM

People: Every system needs people if it is to be useful. Often the most overlooked element of the system is the people, probably the component that most influences the success or failure of information systems. This includes "not only the users, but those who operate and service the computers, those who maintain the data, and those who support the network of computers".

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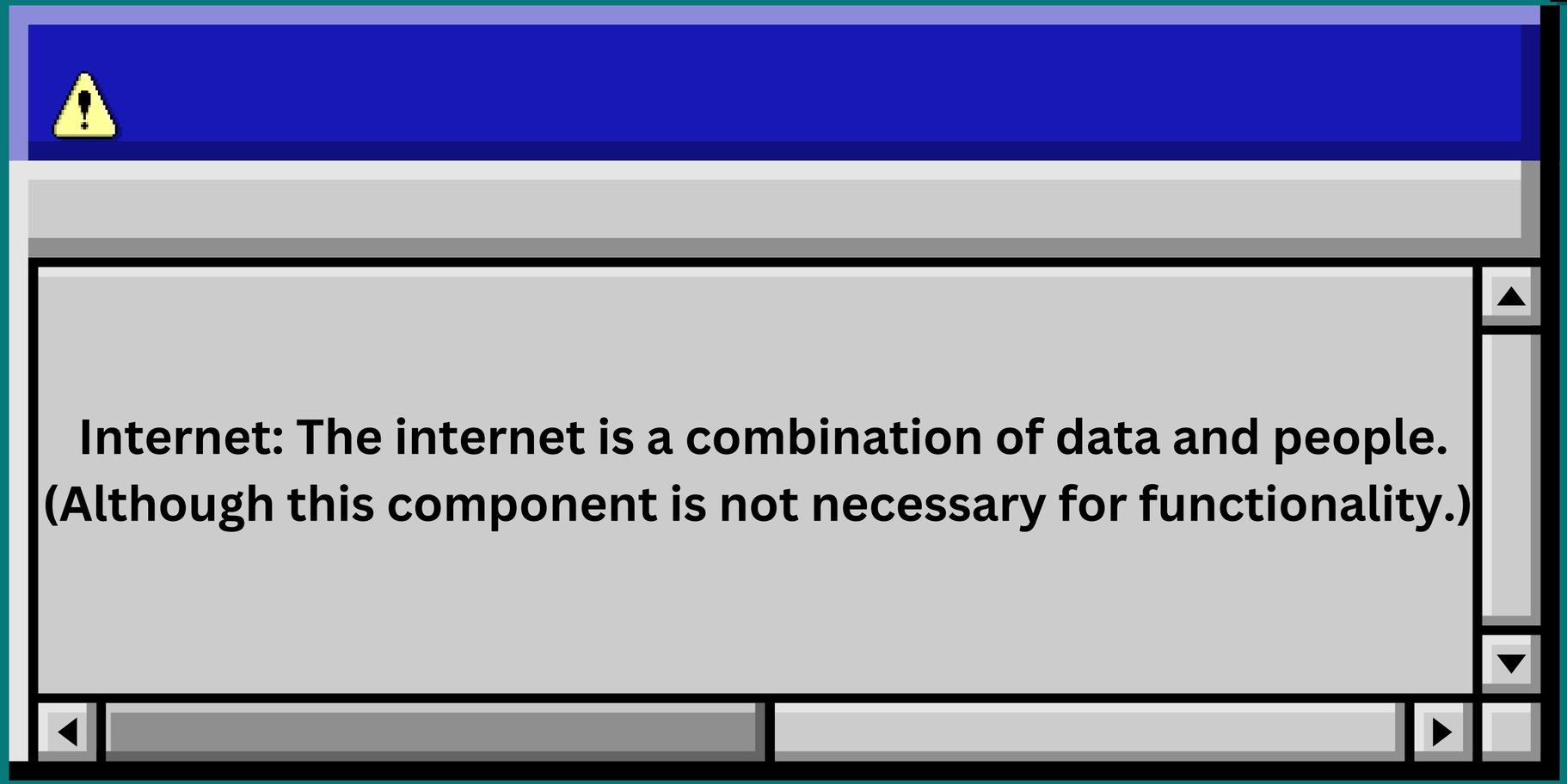
INFORMATION SYSTEM



Internet: The internet is a combination of data and people. (Although this component is not necessary for functionality.)

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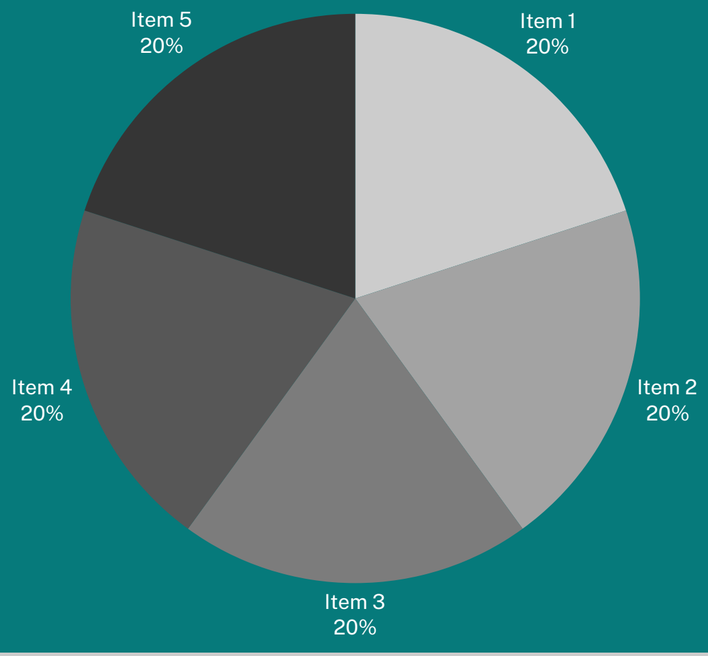
Different Types of Support Systems in Information Systems



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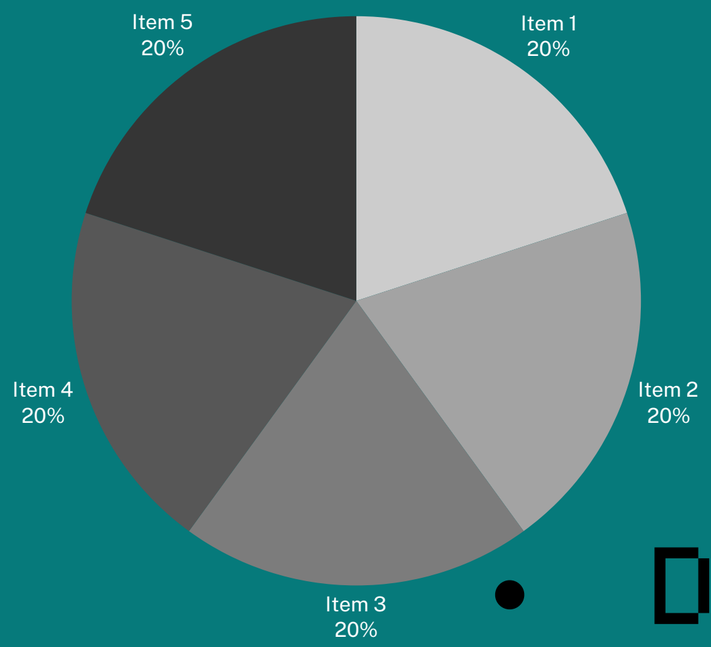

Decision Support System (DSS)

Decision Support Systems use different decision models to analyze or summarize large amounts of data into an easy-to-use form that makes it easier for managers to compare and analyze information. Often, these summaries take the form of charts and tables

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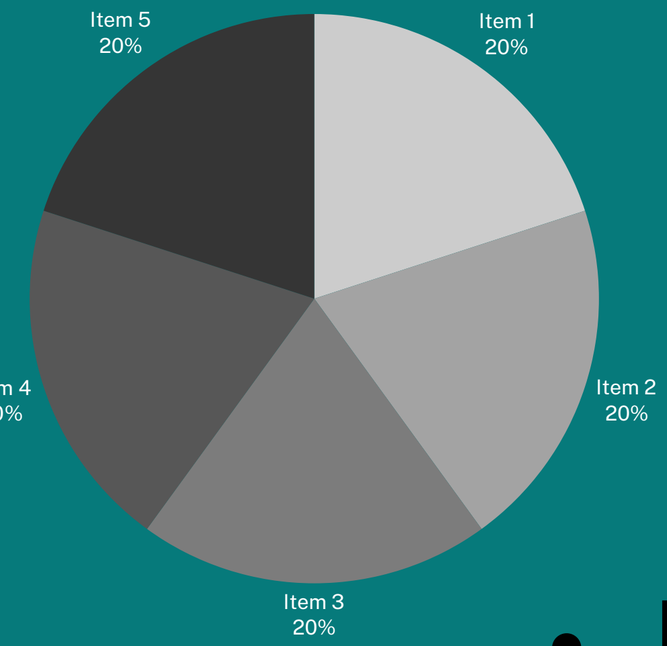

• Executive Support System (ESS)

The ESS provides greater telecommunication, better computing capabilities, and more efficient display options than the DSS. Executives use ESS to make effective decisions based on summarized internal data taken from DSS, MIS, and external sources. In addition, executive support systems help monitor performances, track competitors, spot opportunities and forecast future trends.

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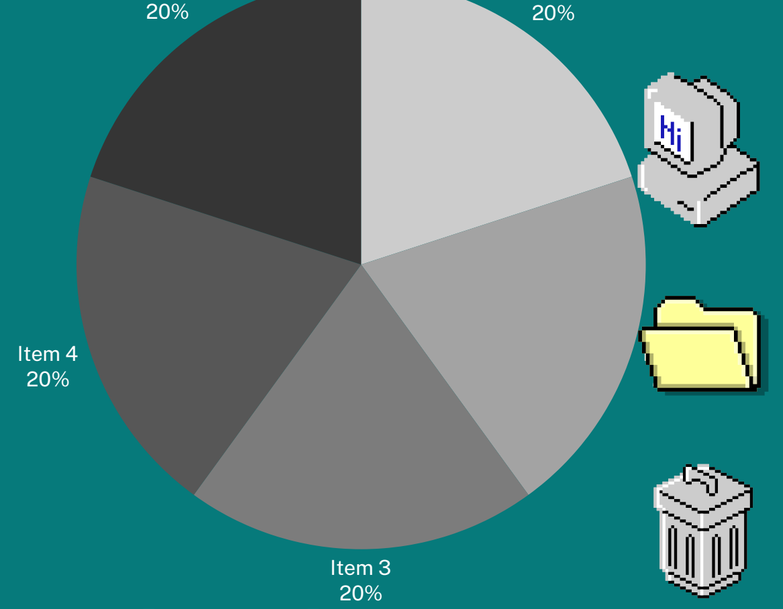

- # Management Information System (MIS)

Middle managers handle much of the administrative chores for day-to-day routines and performance monitoring, ensuring that all the work is aligned with the organization's needs. That's why MIS is such a valuable tool. Management Information Systems are designed to help middle managers and supervisors make decisions, plan, and control the workflow. The MIS pulls transactional data from various Transactional Processing Systems, compiles the information, and presents it in reports and displays.

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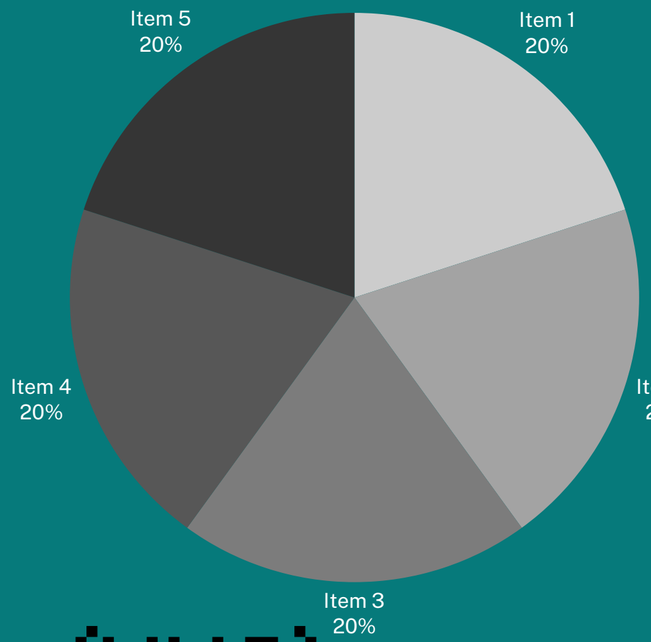

Knowledge Work System (KWS)

The KWS is a specialized system that expedites knowledge creation and ensures the business's technical skills and knowledge are correctly applied. The Knowledge Work System aids workers in creating and disseminating new information using graphics, communication, and document management tools.

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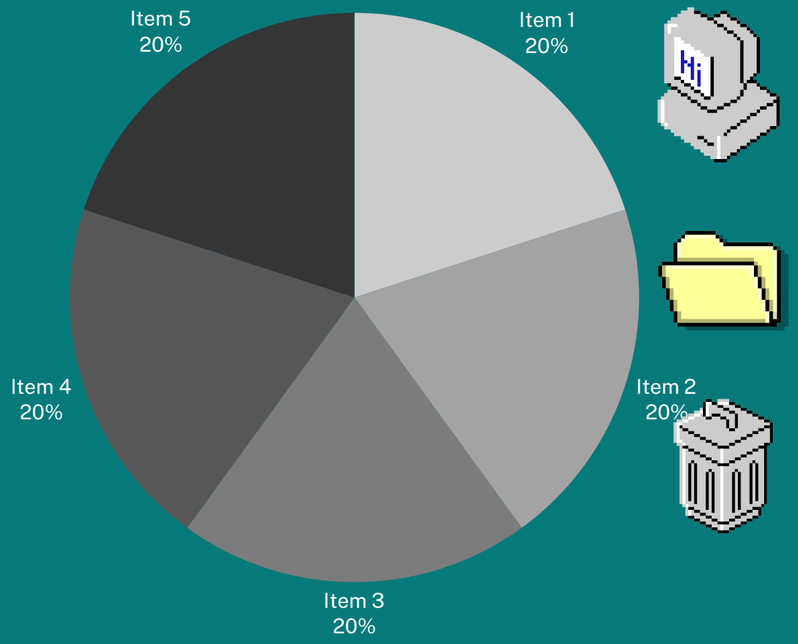

Office Automation System (OAS)

OAS comprises computers, communication-related technology, and personnel assigned to perform official tasks. It covers office transactions and supports official activity at every level in the organization, subdivided into managerial and clerical activities.

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ANALYSIS \ REACTION

awareness contemporary organizational dynamics requires an awareness of the interplay of data, information, and information systems. The fundamental component from which information is derived is data. By itself, raw data is meaningless and devoid of context. Data's value is revealed through processing and analysis that turns it into valuable information. This shift is essential because data-derived information can boost operational effectiveness, influence strategic decision-making, and give an advantage over competitors.

Information Systems (IS) are essential to the use and management of data and information. The purpose of these systems is to help organizations make better decisions and manage their operations by gathering, storing, processing, and sharing information. The several kinds of information systems, such as Decision Support Systems (DSS), Management Information Systems (MIS), and Transaction Processing Systems (TPS),

At the core of any information system is data, which, when processed, becomes information that supports decision-making. Data management and quality are fundamental, as highlighted by Date (2004) and Watson (2011), who emphasize the importance of accurate data for effective database systems. Sharma and Kumar (2018) further illustrate how quality data translates into actionable information, which is critical for business intelligence and operational efficiency.