Republic of the Philippines
Department of Education
REGION III
SCHOOLS DIVISION OFFICE OF NUEVA ECIJA

LEARNING ACTIVITY SHEET
SPECIAL PROGRAM IN ICT 10
INFORMATION SYSTEM AND RESEARCH 10
Third Quarter, Week 2

Name of Learner: _____ Date:_____

Grade Level /Section: _____

WHAT IS AN INFORMATION SYSTEM?

BACKGROUND INFORMATION FOR LEARNERS

Defining Information System:

- "Information system is the study of complementary networks of hardware and software that people and organizations use to collect, filter, process, create, and distribute data."
- "Information systems are combinations of hardware, software, and telecommunications networks that people build and use to collect, create, and distribute useful data, typically in organizational settings."
- "Information systems are interrelated components working together to collect, process, store, and disseminate information to support decision making, coordination, control, analysis, and visualization in an organization."

As you can see, these definitions focus on two different ways of describing information systems: the *components* that make up an information system and the *role* that those components play in an organization.

Components of Information System

1. Hardware- everything in the physical layer of an information system. Moore's Law accurately predicted that computer processing power would double every 18 to 24 months.
2. Software-refers to the programs that control the hardware and produce the desired information or results. Software is not tangible – it cannot be touched. When programmers create software programs, what they are really doing is simply typing out lists of instructions that tell the hardware what to do. There are several categories of software, with the two main categories being operating-system software, which makes the hardware usable, and application software, which does something useful. Examples of operating systems include Microsoft Windows on a personal computer and Google's Android on a mobile phone. Examples of application software are Microsoft Excel and Kinemaster.
3. Data- The raw material that an information system transforms into useful information. Like software, data is also intangible. By themselves, pieces of data are not very useful. But aggregated, indexed and organized together into a database, data can become a powerful tool for businesses.
4. Process- a series of steps undertaken to achieve a desired outcome or goal. It is the building blocks of an information system
5. People- users or end users who interact with an information system, both inside and outside the company. The primary purpose of an information system is to provide valuable information to users.

Types of an Information System

1. Executive Support System- a software that allows users to transform enterprise data into quickly accessible and executive-level reports, such as those used by billing, accounting and staffing departments.
2. Decision Support System- A decision support system (DSS) is a computerized program used to support determinations, judgments, and courses of action in an organization or a business. A DSS sifts through

and analyzes massive amounts of data, compiling comprehensive information that can be used to solve problems and in decision-making.

3. Management Information System- an information system used for decision-making and for the coordination, control, analysis and visualization of information in an organization. It involves people, processes and technology in an organizational context. It evolved from transaction processing systems as a way to organize information for managers. Management Information System can produce detailed reports that list transactions, summary reports that consolidate data or exception reports that identify data outside normal conditions.

4. Transaction Processing System- an information system for business transactions, involving the collection, modification and retrieval of all transaction data. It processes the data generated by day-to-day business operations.

LEARNING COMPETENCY

Explain what an information system is by identifying its major components

ACTIVITIES

ACTIVITY 1

Direction: Answer the following questions briefly.

1. Define information system in your own words.

_____

_____

2. Explain how interrelated the components of information system to one another.

_____

_____

_____

ACTIVITY 2

A. Give at least 2 examples of the following:

Application Software

1. _____
2. _____

Hardware

1. _____
2. _____

Data

1. _____
2. _____

Systems Software

1. _____
2. _____

Transaction Processing System

1. _____
2. _____

REFLECTION:

_____

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REFERENCES

Chapter 1: What Is an Information System? – Information Systems for Business and Beyond (pressbooks.com)

IT in Dairy Industry: Lesson 3. TYPES OF INFORMATION SYSTEMS (iasri.res.in)

Systems Analysis and Design

Decision Support System (DSS) - Overview, Components, Types (corporatefinanceinstitute.com)

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