



Final-Term – Semester Assignment

- Subject : Information System and Data processing
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Q1) What are systems? Explain in detail. Take a daily life example of system (any organization or company) and explain its component one by one in detail.

Answer:

System:

A system is a group of elements that are integrated with the common purpose of achieving an objective. Organization having common goal for the achievement are functionally interactive units. All systems have inputs, outputs, and feedback, and maintain a basic level of equilibrium. For example, in the human body the heart functions to support the circulatory system, which is vital to the survival of the entire body.

There are different type of system that are mention below: • Open system(such as book store).

- Closed system.(school library only students and staff are allowed)
- Open loop system.
- closed loop system. (I have taken the example from daily life is Purchase system now I am explaining it in detail with its components. Following are the main components of any system
- input element
- Process
- output elements
- control mechanism
- feedback system

- Objectives

(1) **Input elements of purchase system:-** The information entered into a system the input elements of purchase system include Orders for the purchase of various materials that some one wants to purchase it. for example purchasing a mobile from any online selling website.

(2) **Process/processing of purchase system:-** Processing include all the detail that how you can receive your purchasing mobile from the online website you purchase such that Status of deliveries received against specific orders. Any specific treatment defined in the system to be performed on the data entered into the system, for instance, computation, analysis, application of any product for purchasing.

(3) **Output elements of purchase system:-** the output elements is the changes that you wants in the delivery of the things that you have purchase as change in order quantity, changing the time , changing the day or some other information that you wants to change in the system. And the given by the system after the process has been performed on the data being input to the system.

(4) **control mechanism of purchase system:-**control mechanism of a system describe the inspection in the quality that the quality is good or bad that you have purchase. And also control mechanism of the system includes the communication among the seller and the purchaser about the quality inspection of the purchase product. This comparison of actual with expected output is done with the help of control mechanism.

(5) **feedback system purchase system:-** The feedback is very important for any system and also for selling and purchase system because in the result of feedback the purchasing product status can easily updated.

And after the control mechanism has been devised, it needs to a reporting mechanism, which should respond with a corrective action, if required.

(6) **Objectives of purchase system:-** The main objectives of a system is Ensuring that what you buy has high value for the company is a key purchasing function, buy what constitutes value depends on your strategic business goals. For example improving in quality of the product etc.

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Q.2:- What is Management information system? Take an example of MIS of any organization and elaborate in your own words.

Ans:- A management information system (MIS) is a computer system consisting of hardware and software that serves as the backbone of an organization's operations. An MIS gathers data from multiple online systems, analyzes the information, and reports data to aid in management decision-making.

MIS is also the study of how such systems work.

Nadra Management Information System

In order to improve civil registration system, CRMS was introduced by NADRA at Union Council Level.

Under this system event of Birth, Marriage, Divorce and Death are captured, which very vital in nature.

The pilot projects were launched in 100 UCs of Lahore and till today more than 4,192 UCs are onboard.

NADRA has provided software, certificate paper and also imparting training to UCs Secretaries.

The project is up-and-running for last 3 years.

Converting data into meaningful information for better and timely decision

480 computer touch screen kiosks have been installed all over Pakistan to facilitate the citizens providing them with following offerings

1. Utility bills payment
2. Cell phone scratch cards
3. CNIC verifications

It is probably the largest fully integrated database in the world that is having both an Automatic Finger

Identification System (AFIS) & a Facial Recognition System.

National Data Warehouse

Storage Capacity of 60 Terabytes

Processing Speed of 18 Trillion Instructions/ Sec

Multilingual Support of English/ Urdu/ Sindhi AFIS

with a matching speed of 16 million/sec

World largest Facial Library of 47 million images (ICAO)

Network Infrastructure

Highly redundant, scalable and mission critical

Connected with more than 8000 computers
Equipped Terrestrial, VSAT, and DVB RCS/2 WAN Links

Electronic tickets are issued and data is written on the RFID chip directly using handheld.

Points based ticketing system can be implemented using this technology.

Payment of fines will be made through Kiosk.

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Q3) Explain Marketing Information system and its types in detail.
Note: You should make your answer understandable by taking a proper example.

Answer: Marketing Information System

Marketing Information Systems (MKIS) :-

MKIS is a type of Information System that helps the firm to achieve following objectives:

- Identification of customers for firm's products and services.
- Development of those products and services to meet customers' needs
- Promotion of the products and services, and

- Provision of after sale customer support

Types of Marketing Information

Every information system is designed to capture some sort of information. Information requirements need to be defined before the systems are made. While designing marketing information system, following types of information should be designed.

- Marketing Intelligence – information flowing from environment into the environment
- Internal Information – gathered within the firm
- Marketing Communication – Info flowing from firm to external environment An MKIS help in proper management and dissemination of all three kinds of information.

Benefits of Marketing information system

1. MKIS helps organizations in efficient channel management. Following can be identified as some of the benefits of MKIS.
2. Customer profiles need to be maintained focusing on their habits and spending patterns. MKIS helps in maintaining these profiles.
3. Information on what competitors have been upto

is also a critical marketing information. This should not be taken as espionage on competitors.

4. Forecasts of demand is also a critical part of marketing analysis. MKIS helps in achieving this as well.
5. Field sales can also be monitored where sales agents are used to market products.
6. Customers can be quickly updated based on their information kept in MKIS.
7. Dealers involved in sale of product can also be monitored to help enhance reven

Management Levels in MKIS :-

MKIS should cater for information requirements at each level, for instance

Strategic Level

- a. Formulation of new sales products, and identifying new sales opportunities.
- b. Planning support for new products and services

Knowledge Level

Market analysis based on demographics and customer behavior

Management level

1. Sales performance analysis is required to monitor how to enhance sales and address related issues.
2. Sales staff analysis is important to see how much of the sales portion has been contributed by each of the employees.

Operational Level

1. Tracking sales, processing orders and customer support.

Example of MKIS

Most platforms (social media sites like Facebook, LinkedIn and Instagram and advertising options like Google Adwords) provide information on usage so these are also examples of marketing information systems. However, unlike Google Analytics their primary purpose is for raising awareness and not reporting.

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Q.4 :-Why Decision Making is an important factor to run an organization. Explain your answer with the help of a proper example.

Ans:- Decision making is related to planning, organizing, directing

and controlling functions of a manager. Decision making is important to achieve the organizational goals/objectives within given time and budget. Decision-making is a pervasive function of managers aimed at achieving organizational goals. It searches the best alternative, utilizes the resources properly and satisfies the employees at the workplace. As a result, organizational goals or objectives can be achieved as per the desired result.

Some Important points:-

- Lead to optimum utilization of resource
- Core of Planning
- Helps to attain objectives
- Improves efficiency
- Means to problem solving
- Helps to face challenges
- Leads to motivated and dedicated employees

Example:- When choosing place to establish a new business, the criteria might include rental costs, availability, access to transportation and means of distribution, and proximity to customer. Based on the relative importance of these factors, a business owner makes a decision that best meets the criteria.

THE END

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