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Course: Information system and data processing

Program: BS (SE)

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Examination: Final paper

Date: June. 27, 2020

Q.1

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 :

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.

Example :

Purchase System

A simple example can be given of a purchase and sales system. In a typical purchase system information related to purchase of materials is kept, for instance,

1 Orders for the purchase of various materials

2 Status of deliveries received against specific orders

3 Changes in the order quantity, time, day or other information

4 Quality inspection reports and whether they need to be communicated to the supplier

5 Updated status report of stock

6 Issues made out of the stock

All and more of information is required to be linked and provided in an organized way.

Daily life example:

The modern world has numerous kinds of systems that influence daily life. Some examples include public

transport systems; solar systems; telephone systems; the Dewey Decimal System; weapons systems;

ecological systems; space systems;

Discuss any daily life Examples__public transport system:

include city buses, trolleybuses, trams (or light rail) and passenger trains, rapid transit (metro/subway/underground,

etc.) and ferries. Public transport between cities is dominated by airlines, coaches, and intercity rail. High-speed

rail networks are being developed in many parts of the world.

Most public transport systems run along fixed routes with set embarkation/disembarkation points to a prearranged

timetable, with the most frequent services running to a headway (e.g.: "every 15 minutes" as opposed to being

scheduled for any specific time of the day). However, most public transport trips include other modes of travel, such as

passengers walking or catching bus services to access train stations. Share taxis offer on-demand services in many parts

of the world, which may compete with fixed public transport lines, or complement them, by bringing passengers to

interchanges. Paratransit is sometimes used in areas of low demand and for people who need a door-to-door service.

Components of a system

Every system comprises of basic components which in a coordination formulate a system. These are as follows.

- **Input elements**

 The information entered into a system. For instance raw data input to the computer system.

- **Process**

 Any specific treatment defined in the system to be performed on the data entered into the system, for instance, computation, analysis, application of any model.

- **Output elements**

 The results given by the system after the process has been performed on the data being input to the system.

- **Control mechanism**

 Every system is expected to generate some sort of standardized output. Hence actual output needs to be compared with what it is supposed to generate. This comparison of actual with expected output is done with the help of control mechanism.

- **Feedback system**

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

- **Objectives**

We just mentioned that a control mechanism should compare actual output with expected/Ideal output. But before this is being done, there needs to be a list of specific objectives which define expected output.

Q.2

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

Answer :

Management Information System

MIRS makes information available to relevant users by producing pre-determined and pre-designed reports required by the management. Management information system helps middle level management planning, controlling and decision making. The data stored can be used or manipulated to produce differently defined reports from pre-defined reports. It can be presented graphically or pictorially. The reports generated by the MIS are used for analytical decision making by the management. The application software can construct projections, build scenarios, do what if analysis to enable better decision making.

For Example

MIS will use the TPS data to generate monthly and weekly summaries as per requirement (product, customer and salesperson. Major purpose is report generation. We would discuss major types of reports.

• Periodic reports – daily, weekly, monthly, annually, format is predefined and structured for convenience.

• Special – Management by Exception reports only when a special event occurs which needs to be monitored. For instance

• Report sequence to highlight- fast moving & slow moving

• Group the exceptions together – Aged accounts receivable

• Show variance from the norm – Sales analysis report

Example of management information system

Education information system

Bank information system

Railway information system

For example BANK , payment and loan functions at commercial banks allow us to deposit funds and use our checking

accounts and debit cards to pay our bills or make purchases. They can also help us finance our cars and homes. ...

Investment banks or systems conduct trades or deal with capital markets.

Examples of MIS software include Microsoft Dynamics, Fleetmatics WORK, Clarity Professional MIS, and

Tharstern Limited. MIS programs designed specifically for the graphics and print industry include Avanti

Slingshot, EFI Pace, and DDS Accura. Most MIS software programs are available as desktop applications,

though many solutions now include web-based interfaces and mobile apps as well.

Q.3

Explain Marketing Information system and its types in detail.

Note: You should make your answer understandable by taking a proper example.

Answer :

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.

The marketing department of an organization keeps track of the interest of prospective customers as well as the leads

generated from them. The information can be acquired for target market segmentation like gender, age, buying habits,

geographic area, etc. Other information i.e. visitors of website, web traffic or customer involvement activities, etc. are

also considered as useful internal data. Moreover, salespeople collect and record the information related to customers

who are purchasing products or services, their location, buying behavior, the success stories of customers, the

progression of prospective customers towards new customers, etc.

Q.4

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

Management is essentially a bundle of decision-making process. The managers of an enterprise are responsible for making decisions and ascertaining that the decisions made are carried out in accordance with defined objectives or goals.

Decision-making plays a vital role in management. Decision-making is perhaps the most important component of a manager's activities. It plays the most important role in the planning process. When the managers plan, they decide on many matters as what goals their organisation will pursue, what resources they will use, and who will perform each required task.

When plans go wrong or out of track, the managers have to decide what to do to correct the deviation.

In fact, the whole planning process involves the managers constantly in a series of decision-making situations. The quality of managerial decisions largely affects the effectiveness of the plans made by them. In organising process, the manager is to decide upon the structure, division of work, nature of responsibility and relationships, the procedure of establishing such responsibility and relationship and so on.

In co-ordination, decision-making is essential for providing unity of action. In control, it will have to decide how the standard is to be laid down, how the deviations from the standard are to be rectified, how the principles are to be established how instructions are to be issued, and so on.

The ability to make good decisions is the key to successful managerial performance. The managers of most profit-seeking firms are always required to take a wide range of important decision in the areas of

pricing, product choice, cost control, advertising, capital investments, dividend policy, personnel matters, etc. Similarly, the managers of non-profit seeking concerns and public enterprises also face the challenge of taking vital decisions on many important matters.

Decision-making is also a criterion to determine whether a person is in management or not. If he participates in decision-making, he is regarded as belonging to management staff. In the words of George Terry: "If there is one universal mark of a manager, it is decision-making.

Examples of daily life decision making :

 - **We are going on vacation.** This is a problem of everyday life very common. It is in itself a macro

process where many decisions are made, in some cases consequences ones of the other. Among other

aspects it is necessary to decide: how much to spend, on what date to take the holidays, who will make up

the group, one or more places, beach, mountain or another environment, the specific place.

- **We plan the work of the home.** This is a problem that is advisable to analyze it in a group, if there is

more than one person helping with household chores. But it can also be interesting to focus on as It goes

into the kitchen, through the prime numbers.

- **A day to exit a day to receive?** It is not a binary decision, since it can be several groups of friends, who

are not necessarily friends with each other. The problem to be solved is, when going to the street, to a

house of friends, or when friends are received at home. This problem can be interesting to focus on from

the multicriteria point of view.

- **It goes shopping.** This is a very common problem at home. And it is interesting to see it as a

multicriteria problem. To be able to make an illustration of it is going to be simplified in extreme and will

reduce to choose between two foods.