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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Q2) What is Management information system? Take an example of MIS of any organization and elaborate in your   own words.

Answer: **Management Information Systems:**

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.

Improved Decision-Making

The purpose of an MIS is improved decision-making, by providing up-to-date, accurate data on a variety of organizational assets, including:

- Financials
- Inventory
- Personnel
- Project timelines
- Manufacturing
- Real estate
- Marketing
- Raw materials
- R&D

The MIS collects the data, stores it, and makes it accessible to managers who want to analyze the data by running reports.

Example:

Honda – A manufacturing organization

Honda is the world largest producer of the motorcycles and internal combustion engines that are measurable by volume mainly producing more than fourteen million internal combustion engines each year.

With the progress of Honda in the manufacturing sector, it has also generated astounding amount of data. Even though IT departments have an advantage over the improvement in the hardware components for

storing large amount of data, but still the "fact gap" exists in the Honda to met the needs of useful data at aright time to make effective and efficient decisions.

For Honda, getting right kind of information is important in today's environment which it was not required before, therefore reducing costs, enhanced productivity and maximization of profits.

Managers of Honda have to administer the intricacy of the supply chain, internal control and manufacturing as well as meeting the customer and distribution demands. In today's business environment manufacturers are forced to make effective decisions on a regular basis with the limited information system. Honda has to face mounting globalization, increased competition than before and customers whose needs are reflected in their own facts and opportunities of a global market.

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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.

<u>Example of MKIS</u>

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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Q4)Why Decision Making is an important factor to run an organization. Explain your answer with the help of a proper example.

Answer:

Decision making has a very huge role in an organization there for, the organizations created a system for such decision taking purposes known as decision support system (DSS) where the system is used to support managerial decisions. Usually DSS involves the analysis of many units of data in a heuristic fashion. As a rule, DSS processing does not involve the update of data.

For any scenario all the related factors with their ranges of variability are entered into DSS, which helps guide managers for any new scenario that emerges. DSS can stimulate innovation in decision making by helping managers to existing decision-making procedures.

Example

An outfit store maintains readymade garments and stitched clothes for various classes of society. Due to fluctuating changes in fashion trends, pre-seasonal planning becomes critical.

A Planning and forecasting software can be used by management to

Measure customer reactions to re-pricing

When to initiate clearance sales for old stock

Deciding about discount percentages

When to order new stock for the season

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