



Final-Term

Information system and data processing

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BSSE (6th Semester)

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Date: 27/06/2020

Question No: 01

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.

Ans:

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.

Simply put, a system is an organized collection of parts (or subsystems) that are highly integrated to accomplish an overall goal. The system has various inputs, which go through certain processes to produce certain outputs, which together, accomplish the overall desired goal for the system.

So a system is usually made up of many smaller systems, or subsystems. For example, an organization is made up of many administrative and management functions, products, services, groups and individuals. If one part of the system is changed, the nature of the overall system is changed, as well

Example

banking system

The structural network of institutions that offer financial services within a county. The members of the banking system and the functions they typically perform include:

- commercial banks that take deposits and make loans,
- investment banks which specialize in capital market issues and trading, and
- national central banks that issue currency and set monetary policy.

Components of a system

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

- 1. Input elements:** The information entered into a system. For instance raw data input to the computer system.
- 2. 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.
- 3. Output elements:** The results given by the system after the process has been performed on the data being input to the system.
- 4. 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.
- 5. Feedback:** system Once the control mechanism has been devised, it needs to a reporting mechanism, which should respond with a corrective action, if required.
- 6. 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.



Question No: 02

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

Ans:

Management information system:

A management information system (MIS) is a computerized database of financial information organized and programmed in such a way that it produces regular reports on operations for every level of management in a company. It is usually also possible to obtain special reports from the system easily. The main purpose of the MIS is to give managers feedback about their own performance; top management can monitor the company as a whole. Information displayed by the MIS typically shows “actual” data over against “planned” results and results from a year before; thus it measures progress against goals. The MIS receives data from company units and functions. Some of the data are collected automatically from computer-linked check-out counters; others are keyed in at periodic intervals. Routine reports are preprogrammed and run at intervals or on demand while others are obtained using built-in query languages; display functions built into the system are used by managers to check on status at desk-side computers connected to the MIS by networks. Many sophisticated systems also monitor and display the performance of the company’s stock.

Example

A **financial MIS** provides financial information for managers to make daily decisions on operations within the organization. Most systems provide these functions:

- Integrate financial information from multiple sources
- Provide easy access to financial information in summarized form
- Enable financial analysis using easy-to-use tools
- Compare historic and current financial activity

A financial MIS often has a number of subsystems, depending on the type of organization. These include systems to analyze revenues, costs and profits, auditing systems for both internal and external purposes and systems to manage funds. A financial MIS can also be used to prepare reports for third parties, such as external auditors or shareholders.



Question No: 03

Explain Marketing Information system and its types in detail.

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

Ans:

Marketing information system:

A marketing information system is a continuing and interacting system of people, equipment's, and procedures to gather, sort, analyze, evaluate, and distribute the pertinent, timely, and accurate information for use by marketing decision-makers to improve their marketing planning, implementation, and control." Philip Kotler gives alternative definition, such as: "A marketing information system (MIS) consists of people, equipment's, and procedures to gather, sort, analyze, evaluate, and distribute the needed, timely, and accurate information to marketing decision makers.

We can say:

Marketing Information System (MIS) is a permanent arrangement (system or setup) for provision of regular availability of relevant, reliable, adequate, and timely information for making marketing decisions.

Example:

Google Analytics is a good example of a marketing information system. Once set up it gathers data on traffic to your website and then provides the information in ways that are easier to digest.

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.

Types of Marketing Information

1. Marketing Intelligence:

The Market intelligence pertains to overall demand in the market, the potential of the market, competitors in the market etc. Generally a lot of marketing intelligence is gathered from internal sources itself such as customers, suppliers and distributors. Marketing intelligence from these sources is important to grasp any day to day changes happening in the business environment. For example – A television company will expect lots of sales in a festive environment and your distributors will probably inform you that they will be needing discount in this time. Thus during a festive environment you have to use Price discounts as a sales promotion tactic and at the same time ensure having a higher inventory of televisions.

For example, different airlines like Jet Airways, Spice Jet, Indigo, etc. use competitive intelligence to remain in a competitive market. These companies keep on changing prices of flight tickets as per the external information of prices of other airline competitors. Once any competitor increases airfare for a specific route or destination then other flight companies may get benefit by flowing suit to gain higher margins.

2. Internal Information:

It would be the strength and capability of the organization to expand. Planning an expansion without having the capacity of it is a waste of time. Thus marketing managers need to have an internal analysis to determine where does their own company stand. For these they need regular sales reports, purchase reports, margin reports, costing, customer service expenses etc. All these can be obtained through MIS and it is the first type of information a marketing manager looks for.

For example, 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.

3. Marketing Communication:

The marketer uses the tools of marketing communication to create the brand awareness among the potential customers, which means some image of the brand gets created in their minds that help them to make the purchase decision.

Marketing communication offer solutions to the following questions:

- Why shall the product be used?
- How can the product be used?
- Who can use the product?
- Where can the product be used? And
- When can the product be used?

Marketing communication includes Advertising, Sales Promotion, Events and Experiences (sponsorship), Public Relations and Publicity, Direct Marketing, Interactive Marketing, Word-of-Mouth Marketing, Personal Selling. These tools of communication are collectively called as Marketing Communication Mix.



Question No: 04

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 an important factor in achieving the goals / objectives within the stipulated time and budget. It seeks the best alternatives, uses resources wisely and satisfies employees in the workplace. As a result, organizational goals or objectives can be achieved according to the desired results.

Decision-making and problem-solving are ongoing processes of reviewing situations or issues, considering alternatives, making choices, and following them with the necessary steps. Sometimes the decision-making process is very short, and the mental reflection must be immediate. In other cases, the process can take weeks or months. The whole decision-making process depends on the right information being available to the right people at the right time.

As we have to make our career & choices it is very important to make a 'final' & 'good' decision. it is the decision which make an organization successful. it is only us who can make" good" or" bad" decisions. we have to overcome the decisions, so we have to aware and confident. in the poem the poet was in a dilemmabut at last he decided what he wanted.

Example:

You must collaborate with your coworkers at some point to make a sound decision. For example, you may have to work with your marketing manager on the best way to work with the client and improve the results of their marketing campaign last quarter.

Here, you use reasoning to break down options to help the client improve their campaign, so a status report can give you applicable data. After, you can weigh the possible key performance indicators that can measure its success going forward. Overall, your ability to work with a team determines the results you earn and the number of people affected by the decision your team made.

Thank You!

