# Functional MIS

(A) MIS for Marketing: In order to pursue market opportunities as well as anticipate marketing problem, manager need to collect comprehensive and reliable information. Managers cannot carryout marketing analysis, planning, implementation and control without monitoring and researching customers, competitors, dealers and their sales and cost data. Every firm has many information flows of interest to marketing management. Many companies are studying their executive's information needs and design information system for marketing to meet these needs. Instead of plethora of unrelated data, an MIS combines various inputs and present integrated reports.

Definition: Marketing Information System is a continuing and interacting structure of people, equipment and procedures to gather, sort, analyze, evaluate, and distribute pertinent, timely and accurate information for use by marketing decision makers to improve their marketing planning, implementation and control activities.

Components of Marketing Information System: As shown in figure below, the box on the left shows components of the marketing environment that manager must monitor. Trends in the marketing environment are picked up and analyzed through four subsystems making up the marketing information system- Internal Accounting System, Marketing Intelligence System, Marketing Research System and Analytical Marketing System.
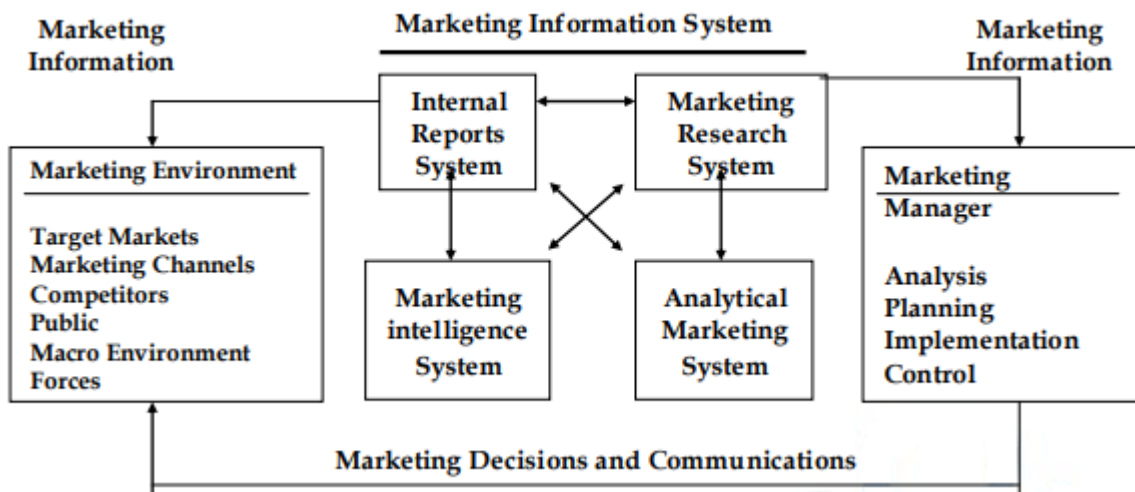
Internal Accounting System is the most basic information system used by marketing executives. It is the system that reports orders, sales inventory levels, receivable, payable. By analyzing the information, marketing managers can spot important opportunities and problems.

- **The Order Shipping Cycle:** Sales representatives, dealers and customers dispatch orders to the firm. The order department prepares multi-copy invoice and sends them to various departments. Out of stock items are back ordered. Shipped items are accompanied and sent to various departments. The company wants to carryout these steps quickly and accurately. The computer is harnessed to expedite the order shipping billing cycle.

- **Improving the Timeliness or Sales Reports:** Marketing executives receive sales reports some times, after the sales have taken place. Many companies complain that sales are not reported fast enough in their company. Marketing information system can improve these things rapidly.

- **Designing a User Oriented Report System:** In designing an advanced sales information system, the company should avoid certain pitfalls.

The marketing information system should represent a cross between what Managers think they need, what managers really need and what is economically feasible. Management information system should provide the reports for all marketing departments. Information system can delete the unwanted system from the survey and from other departments and prepare reports which are required by different persons of marketing department.

(B) MIS for Personnel Management: Personnel management has the primary objective of providing suitable manpower in number and with certain ability, skills and knowledge, as the business organization demands from time to time. Its goal is to control personnel cost through continuous increase in manpower productivity resorting to the following techniques:

a) Motivation through Leadership and Job Enrichment

b) Grievance Handling

c) Structuring the Organization

d) Promotion and Rewards through Performance Appraisal

e) HRM through Training and Upgrading the Skills

The information and scope of personnel function have resulted in greater complexity in field. There is need to cope with incredible volume of information and maintaining it. There is need to classify, reclassify and cross this information. This can be achieved by computerized personnel system which enables personnel management to manage more efficiently and effectively and to provide more positive services to the organization.

Input for Personnel Development: The following documents serve as the input in personnel information system:

- Productivity Data on the Job

- Industry Data on Manpower, Skills, Qualification

- Bio-Data of Self and Family

- Personnel Application Form

- Attendance and Leave Record

- Appraisal Form

- Appointment Letter

- Wage/ Agreement

- Record Sources of Manpower, University, Institutes, and Companies

Components of Personnel Information: A computer based personnel information system is designed to support the operational, managerial and decision making functions of the personnel division in an organization. Following are the components of the personnel management information system:

i)   **Establishment Records:** Establishment relates to the setting up of budgets for appropriate staff levels and grades throughout the organization. The system should encompass these budgeted posts and report on variations between actual staff numbers and the budget numbers.

ii)   **Recruitment Records:** Details of all vacancies and applicants should be held by the system. These should show the status of each vacancy and of each applicant and should perform as much as possible of the administrative process. This will generally mean that the system should interface with a word processing system.

iii)   **Personnel Records:** These relate to identification data, current and historical salary and allowances data and various employees attributes such as grades and key dates.

iv)   **Pensions Records:** The system maintains all details of service entitlements of employees, contribution by both the employee and the organization to pension scheme, details of dependents, spouse and children, data required for actuarial purpose to verify the availability of the scheme and details and entitlements of employees who have become pensioners.

v)   **Training Records:** These include data relating to each employees qualification, skills and experience. The system would also hold details of internal and external training courses and its relevant details.

vi)   **Absence Records:** The system should allow for the recording of various absence types like sick leave, special leave etc. Input of this sub-system should be automatically reflected in the establishment sub-system.

vii) **Industrial relations Records:** The system should hold data to assist management in negotiations and planning for alternative strategies. Much of this would be held for normal administrative purpose. It is the facility to extract the data in meaningful terms, to able to project forward and to test the impact of applying various rules and scenarios.

(C) MIS for Financial Management:

(C) MIS for Financial Management: Financial management function has a primary objective of meeting the financial needs of the business. The second objective of FM is to meet the statutory compliance by way of declaring the auditing financial result, submitting reports and returns to the govt. and Tax authorities and fulfill the obligations to the shareholders. FM uses variety of tools and techniques like Break Even Analysis, ABC Analysis, Ratio Analysis, Management Accounting and Cost Analysis.

Input Documents:

o   Receipts from customers, authorities, employees, share holders, financial institution and others.

o   Payment to suppliers, authorities, share holders, financial institutions and others.

o   Data from stock exchange on the shares prices consolidated financial results of the other companies etc.

Transactions are payments and receipts and they are documented through journal vouchers, bills, debit notes, credit notes, receipts and transfer documents.

Application of Financial Management Information System: The major application of financial management information system includes financial accounting system, which accounts for the financial transactions of the company and produces financial results for the company. It produces balance sheet for the company where the performance of the company is published in standard format prescribed by the govt. The system is made so comprehensive that it not only collects financial data but also collects data on different matters such as job, department, and division and so on. It forms a basis for certain reports which are required by the top level management. The users of the financial data base are finance managers, cost controller, auditors, material managers, marketing managers, company secretaries and the top management.

(D) MIS for Production Management:

(D) MIS for Production Management: The objective of production management function is to provide manufacturing services to the organization. This involves the manufacturing of products of a certain specified quality and within certain costs in a stipulated time, fulfilling the promises given to the customer.

The production management function is supported by other functions like production, planning and control, industrial engineering, maintenance and quality control. It has a very strong interface with materials management function. The organization of production management differs according to the types of production i.e. job shop or continuous. It also varies with the

production policy of the organization, like whether the production is initiated against a customer order or for stock.

The system methodology differs with respect to the manufacturing technology the organization has adopted. The goals of the production management are fuller utilization of the manufacturing capacity, minimal rejection, maximum uptime of plans and equipments meeting the delivery promises. The function is of key importance when business strength is in technology and manufacturing, and the market for product and services exist. The function is pegged with the responsibility of managing high investment in plant, equipment and machinery. It also has to control the large labour force at its disposal.

Inputs of Production Management Information System: The production management is conducted through innumerable transaction. They relate to planning, issuing and controlling the various task involved in the course of production.

i)   Process Planning Sheet

ii)   Quality Assurance Rating Form

iii)   Production Schedule

iv)   Process Planning Sheet

v)   Job Cards

vi)   Finished Goods Advice

vii)   Material Requisition

viii)   Customer Order

ix)   Breakdown Advice

x)   Material requirement

xi)   Production Programme

The production management also uses standards and norms extensively developed over a period of time as input in the system. These are generally known as production rate available capacity, labour components, material usage standards, rejection norms etc.

Documents mentioned above are indicative and may be more or less different, depending upon the type of production and nature of production of industry. The input data in each transaction would also vary from industry to industry as would the production methodology adopted by the organization. The system and procedures used by the organization in performing the production function also vary respectively.

Components of Production Management Information System: The components of production management information system include:

a) Sales department to find out what the customer wants and to compare this with what the firm can provide.

b) Design department to design new requirements and make modifications in established items either to bring them up to date or to make them meet a specific requirement of the customer.

c) Purchasing department buys the material required at the best possible price and on the most reliable delivery to make the various items either on one off basis for individual job or replenish material held in the stores on maximum and minimum levels

d) Manufacturing process sees that the parts are produced as economically as possible for delivery at the time required by the customer and to meet the standards set by the design department.