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CONCEPTS OF ORGANIZATIONAL PLANNING

For an organisation to run successfully we require planning. A plan is a predetermined course of action. It represents goals and the activities necessary to achieve those goals. Every activity requires a control to be exerted upon that measures deviation and provides corrective measures.

A planning is an ongoing organisational function that always is running till the extensive of an organisation.

Some definitions of organizational planningare:

Mission -

Broad statement of the purpose of the organisation that may be final or continuous. An educational institute has a continuous mission to impart education whereas sending rocket on moon is a stated mission.

Goals

General statement of what is to be accomplished. Goals are partitions to be fulfilled to accomplish mission.

Strategies

Approaches for achieving goals.

Objectives

These are short term measurable outputs.

Plans and budgets

Layout of schedules and the monetary involvement.

Relations of terms used in planning

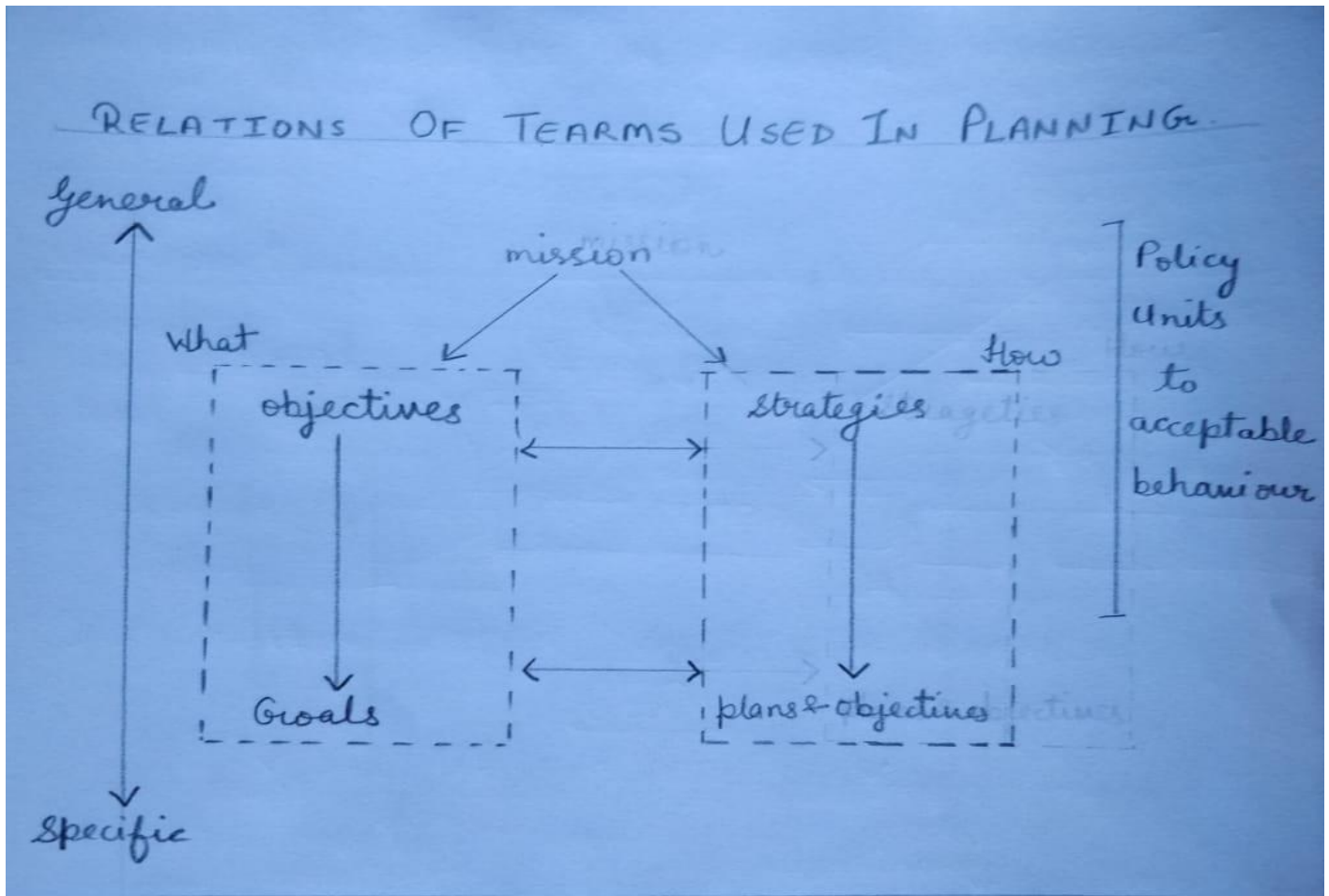


Figure illustrates a General relationship between various terms used in planning. The mission is most generalized statement of the purpose of the organization. What to do? Is defined as objectives and how to do? Specifies strategies. The policies are imposed upon Strategies and objectives for limiting to acceptable behavior. Objectives are stated into specific goals whereas strategies are specified through plans and budgets.

The hierarchy of planning comprises of:-

1. Strategic
2. Tactical
3. Operational
4. Scheduling and dispatching

What is specific operation would be performed right now to meet output requirement.

Computational support for planning

There are four types of computational support needed for the analysis preparatory to planning, the preparation of plan, and the output of results:

1. An analysis of historical data to obtain relationships useful for projections.
2. Various projections and forecasts for estimate future values.
3. Computations internal to the plan and computations required for outputs
4. Output of results in a meaningful planning forecast.

Historical data analysis technique

Historial data is analysed to discover patterns and relations that will be useful in projecting the future values of significant variable .For Ex: to launch a new product its history should be studied in terms of:

- 1) How many companies are developing or producing the product.
- 2) With what features product is available.
- 3) What is the strategy of marketing of competitors etc.

The historical data collection thus gives potential information for planning out a new product.

Historical extrapolation techniques

Although historical data describes the past but are key to future. A properly collected data provides a trend graph about the item / process selected. The trend can be extended over time that is can be extrapolated to predict some futuristic values for planning.

Financial Planning Computations

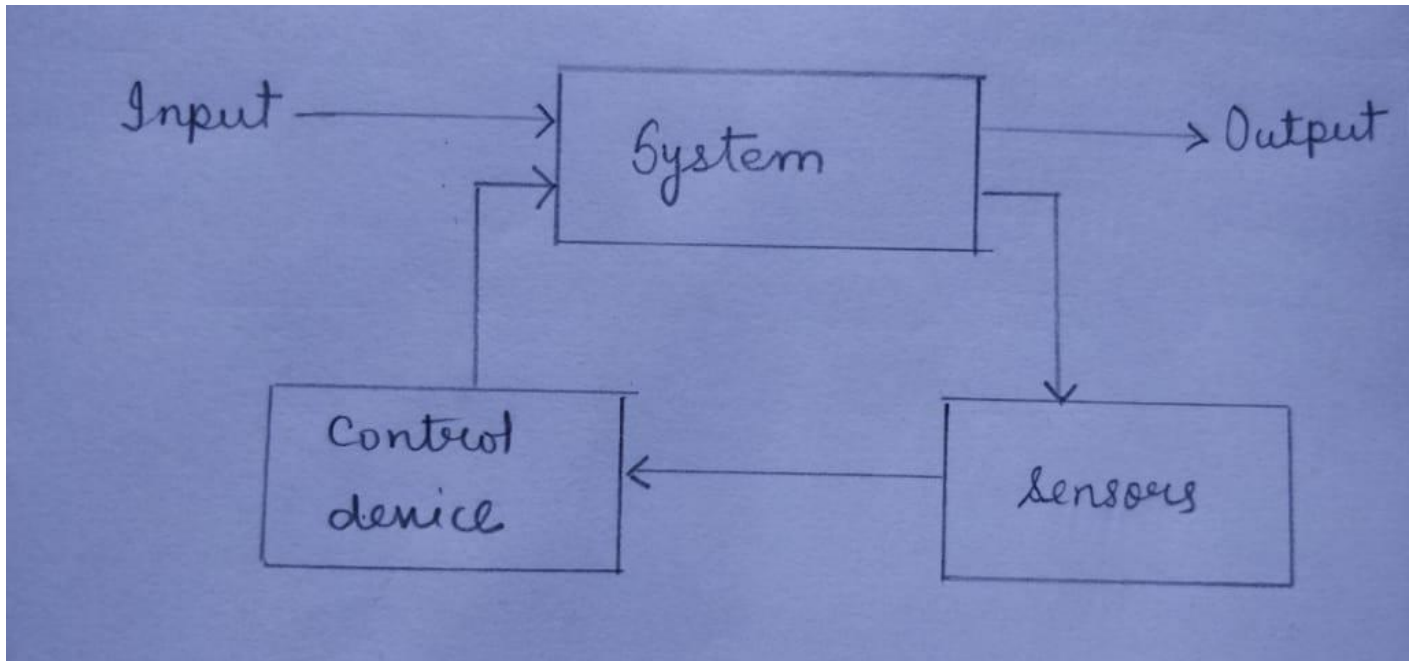
Finance is considered to be the most important aspect of planning various computations and analysis are required for measuring and evaluating profitability. A computational system with software models can be of great help. It can provide depreciation computations, tax benefits, rate of return analysis break even analysis etc.

Output of planning results

The output of planning process will be plans in the format suited to the needs of their various users. The generated planning model can be tested for providing a stimulation of actual work. Trials and errors can be followed in iteration changing variables of the plans to get the best model.

NATURE OF CONTROL IN ORGANISATION

Control consists of procedures to determine deviations from plans and indicate corrective actions.



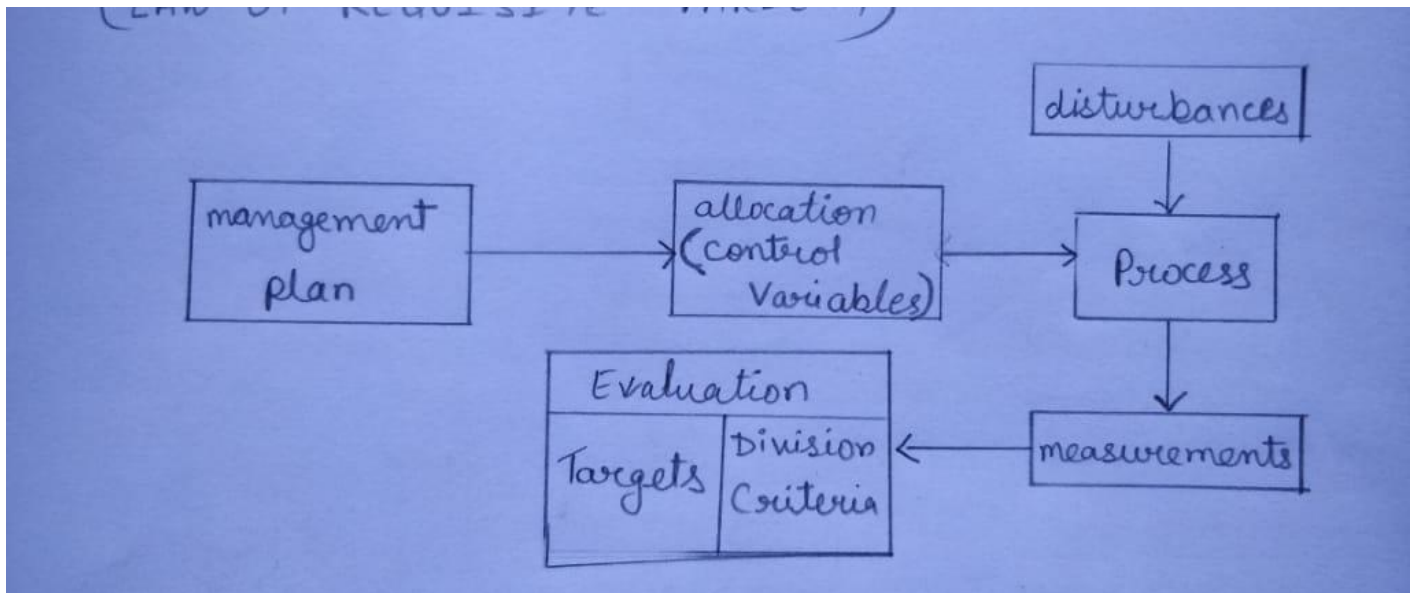
The control is carried out by feedback over the inputs or process. For a given system the outputs are sensed and compared against standards. If a deviation is found corrective measures are taken in form of positive or negative feedback. It is called control.

Feedback control loops are open or closed. An automated system is closed whereas if the random disturbances are there then it is an open control.

LAW OF REQUISITE VARIETY

One of the basic notion of control theory is law of requisite variety. It states that to control each possible state of the system elements there must be a corresponding control state. for example: to control a 100 states of system elements there must be 100 different states of control.

THE NATURE OF CONTROL IN ORGANISATION



Every organisation has a set of processes associated with process components 4m. All these components work together in accordance with a plan to carry out the set objectives.

A plan provides control to be exerted upon for successful process run. Every process thus requires a control to be entered over it. The control thus requires measurement of performance and a standard for comparison.

Measurement is base to human experience, we think, move and act in terms of measured amounts of time, distance and value. Performance is expressed as measured units of input activity and output.

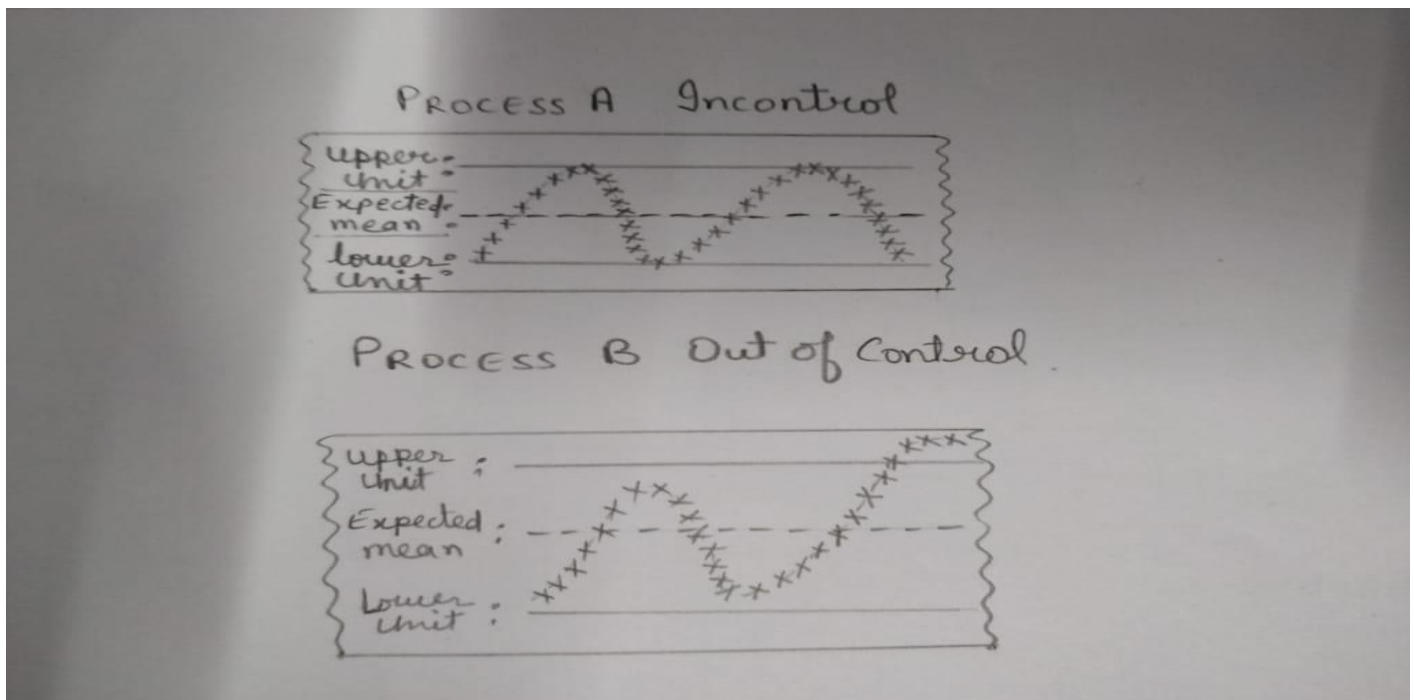
For control purposes performance standards are established. A performance standard is always a planned value that is needed to be achieved by the system for which it is established. The activity of the system is continuously monitored and is compared against standards. Variations are used to change the control parameters.

Figure illustrates a typical management control cycle. For every process, a management plan is stated, according to plan control variables are developed and are assigned initial values. These control variables are upon process controlling it. Since all the processes are open in nature, there output deviates by some values with reference to the disturbances internal or external to process.

The output of process is continuously measured with reference to define parameters. These measurements are evaluated against target objectives in accordance with decision criteria and are submitted to management plan. The management plan then changes the control variables in accordance with the stated values such that process becomes more stable and it is less affected by disturbances or another word the control variables are modified in such a way that they reduce the effect of disturbances to minimum.

When the object of control system is individual performance, the individual activities are evaluated with respect to standards because experiments have indicated that individual reject standards that are too easy or too hard. Thus a motivation is required for better performance. This is basic principle of management by objective.

INFORMATION SYSTEM SUPPORT FOR CONTROL



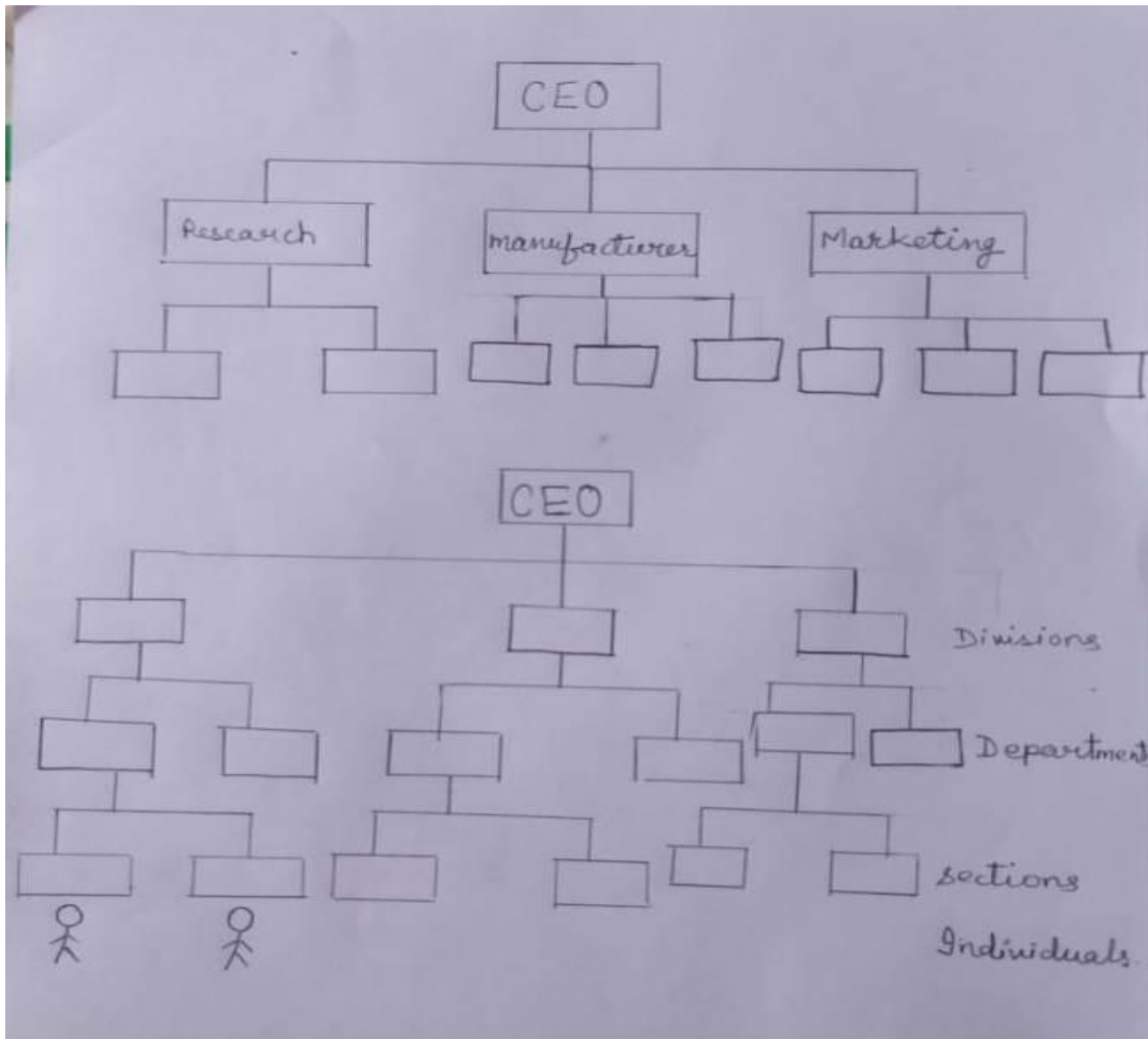
IS are used extensively for control purposes, primarily in reporting variances from a standard system, corrections can be performed by programmable decision rules, but IS mainly serves the purpose of notifying human decision maker when corrective action is required. A control feedback loop is basic to system design. Given processes or activities, their outcome is defined. This is called expected mean. Every process is also defined with an upper and lower limit between which the process output can vary called the normal range. The process samples are computed at fixed time interval or randomly calculating its output. If the output is within limits, no measure is taken else if it crosses the limits, control is suggested full.

For example, considering a production unit with an expected mean of 100 items and ± 5 variance, if the production is between 95-105 it is considered normal. If it crosses 105 it is called over production and if it goes below 95, it is under production. In both cases control is needed.

A computer system can play a significant role to provide information for control.

- 1) It can continuously monitor the process without intervention.
- 2) Offline as well as online calculation (complex) can be done easily.
- 3) Proper reporting can be done providing requisite control information.

THE BASIC MODEL OF ORGANIZATIONAL STRUCTURE



Arrangement of organization subsystem is tuned organizational structure differs from organization to organization for a variety of reasons thus there is no specific organizational structure but every organizational do follow some kind of hierarchy thus every organization has a specific hierarchical structure where its components are integrated in accordance with the structural definition some common dimension of organizational structure are

- 1) Hierarchy of authority
- 2) Specialization
- 3) Formalization
- 4) Centralization

HIERARCHY OF AUTHORITY

The traditional organizational structure follows a pyramidal or hierarchical structure of position. Each position has authority to command in terms of control over resources, rewards, task assignment decision making etc.

Higher the position, greater its authority that is in the pyramid structure as we move up the span of control describing the immediate subordinates to be supervised

SPECIALIZATION

It refers to division of labour. The organizational structure is divided along functional lines defining various components such as marketing, production etc.

Depending on work functionality the staff is also classified into special groups.

FORMALIZATION

It is the set of rules and procedures defined to handle the organizational activities. The degree of formalization varies from level to level.

CENTRALIZATION

It basically refers to levels in organization where decisions are taken. If decision power is distributed power is distributed it is termed decentralization.

INFORMATION PROCESSING MODEL OF ORGANIZATION STRUCTURE

Information processing is basic to MIS. The information processing model considers various facts of the organizational structure to define the processing requirement.

Amount of information processing by organizations

The need for organization to process information that is the amount of information exchanged within the organization is a function of following factors.

1) Task Uncertainty

The greater the uncertainty for a given task the greater the amount of information processing . If a task is unplanned or confusing changes may be there during task performance leading to high processing (a state of confusion always requires high processing)

2) Number of units relevant for decision

If a decision making is dependent on a number of departments division, clients etc, the greater the need to process information

3) Interdependence of organizational units

If the organizational units are interdependent or inter related then conflicts do occur. To generate a combined information value the amount of information processing increases.

Management Theories

Every aspect of life requires a motivation to be generated regarding a work to be carried out. The motivation may be internal or external. Similarly an information system design is also related to theories of human motivation, leadership style and job design.

A) Human motivation

Every employee of an organization requires a motivation in terms of psychological value, satisfaction value. Motivation leads to a better work condition generation where the employee performs at his best. The motivation is necessary component required in an organization to run in a better way. The principles of scientific management states that motivation is the reason s person carries out certain activities. It is usually explained in terms of person drive or needs.

Human needs are not fixed and they change over time with the stage of his career and the satisfaction level also changes. A useful classification of human needs is given by Abraham Maslow sighting 5 basic needs. It states of:

If the lower needs are somewhat satisfied upto an extent, the higher needs become activated or the level of need changes as the basic needs are fulfilled. As the higher needs starts to fulfill the lower needs are not considered much.

1. Physiological:

Physical needs such as satisfaction of hunger or thirst.

2. Safety

Protection against danger, threat and deprivation

3. Love

Satisfactory associations with other, friendship and affection

4. Esteem

Self respect and respect of others

5. Self actualization

Self fulfillment, creativity, self development, self expression

B) Readership Style

Leadership is inter-personnel influence which persuades or motivates a group toward the attainment of a specific goal. There are two extremes of leadership style.

i) Autocratic

The leader determines policy and directs it. MIS commands and enforced by the power to reward or punish.

ii) Supportive/democratic

The leader solicits suggestions and consults with the subordinates. A consensus is drawn for an activity to be carried out.

C) Job Design

It is an approach to improving motivation and satisfaction through the diagnosis and design of job. There are 5 dimensions affecting the motivation.

i) Skill variety

The degree to which a job requires employees to perform activities challenging their skills and abilities

ii) Task Identity

The degree to which job requires completion of whole and identifiable piece of work.

iii) Task Significance

The perceivable input (in degrees) within or outside the organization

iv) Autonomy

The degree of freedom or independence given for scheduling and determining how it will be done.

v) Feedback from the job

The degree of information the employees get from his efforts.

DECISION SUPPORT SYSTEM (DSS)

DSS refers to a class of systems which support the process of decision making the emphasis is on support rather than on automation of decisions.

Characteristics

- 1) The computer must support manager providing answers and analysis output but not replace his judgement thus the computer is an information tool.
- 2) A computer support is for semi-structured problem providing an analysis in a systematic way
- 3) Effective problem solving is interactive with the help of dialogue between user and system.

Classes of Decision Support System

The classes of DSS are

1) File Drawer Systems:

Online mechanized version of manual filing system

2) Data Analysis Systems

Tailored software or standard ones for analysis

3) Analysis Information System

They provide a series of databases and small models giving informational values.

4) Accounting Model

This calculates consequences of planned action on the basis of accounting definitions.

5) Representational Model

It estimates the consequences of actions (probability occurrences)

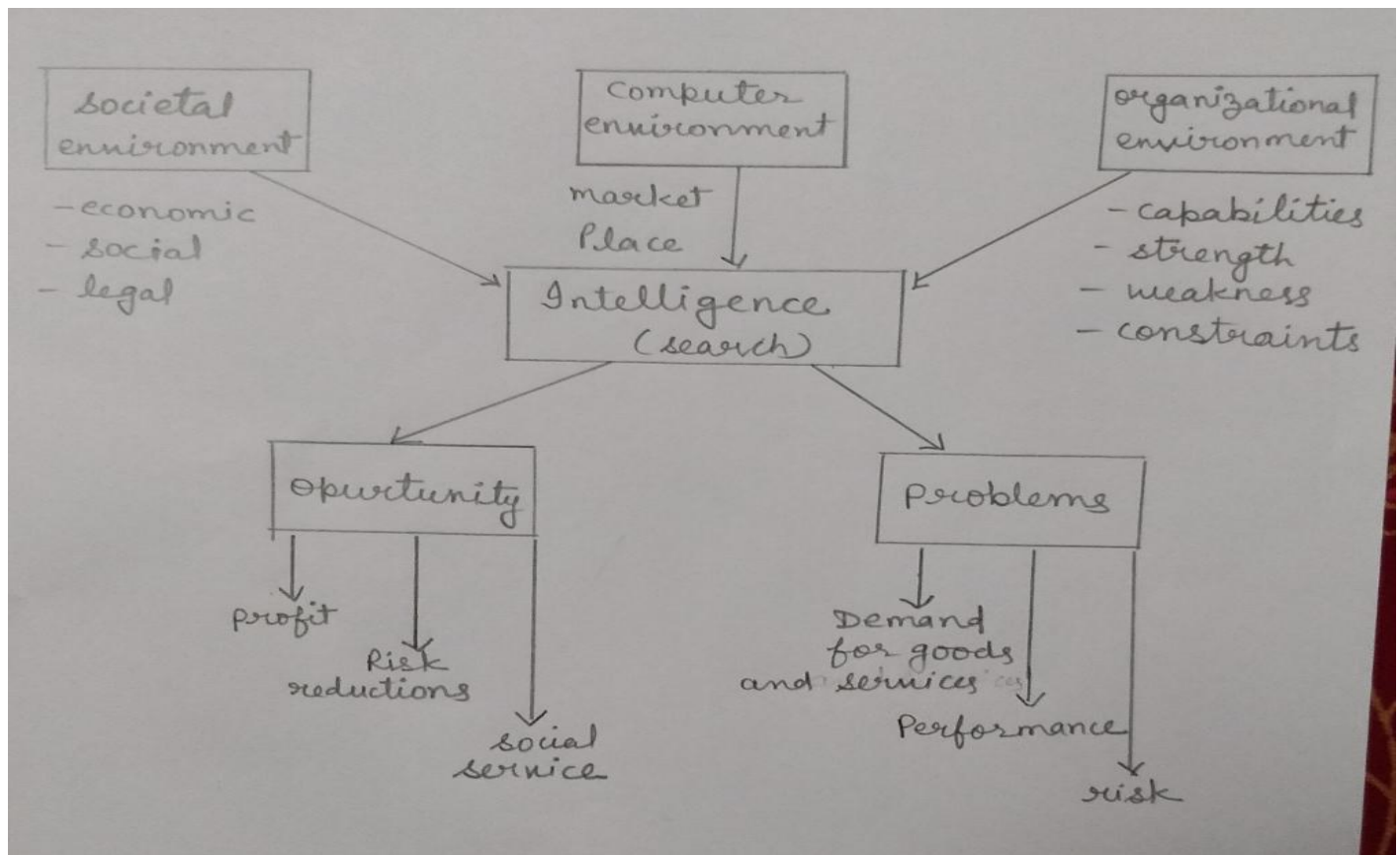
6) Optimization Model

Provide guidelines to generate optimal solutions.

7) Suggestion Model

Performs calculations and suggests decision for a fairly structured and repetitive decisions

Support for Decision Making Phases



The SIMON model of decision making has 3 phases

Intelligence, Design and Choice

Information support system provides many values for decision making. A decision system accepts inputs from 3 basic environmental values: **Societal**, **Competitive**, and **Organizational**.

The collected information is then searched for opportunities and problems. The search is carried out by a continuous analysis of the gathered information. This analysis requires intelligence better the decisions or in other words exhaustive the search, opportunity and problem finding are better. Depending on opportunity and problems decisions can be taken.

APPROACHES TO DEVELOPMENT OF DSS

A computer system is one of the most important tool in modern times helping in taking the decisions. The need of computer based model arises from the following:

- 1) Complex manipulation of data
- 2) Several Iterations
- 3) Frequent need of free analysis

Thus the DSS model requires a great amount of computing to have better decisions. The programming of model may be done using 4 general approaches.

- a) Programming Language

Coding of needed modules

- b) Spreadsheet Processors

Good for voluminous business mathematics

- c) Analysis Package

Some standard software accepting the input data of organization and providing an analysis in form of statistical processing

- d) Model Generator

It provides a model that is the overall structures of decision steps given the information of various fields. This model can simulate the changes that are to be incorporated as decisions.