

Technological Innovation Management and Entrepreneurship (18ES51)

Module: 1 Part A

According to Follet management is **‘the art of getting things done through people’**. This definition clearly distinguishes between manager and other personnel of the organization. A manager is a person who contributes to the organization’s goal indirectly by directing the efforts of others, not by performing the task by him. A person who is not a manager makes his contribution to the organization’s goal directly by performing the tasks by himself. Some times a person may play both roles simultaneously.

For example, a sales manager plays managerial role by directing the sales force to meet the organization’s goal and plays non-managerial role by contacting an important customer and negotiating deal with him. The principal of an institution plays the role of manager by directing the heads of the departments and plays non-managerial role by teaching a subject. There are two weaknesses of this definition. The first weakness is that the definition states that management is an art. Art deals with application of knowledge. But management is not merely application of knowledge. It also involves acquisition of knowledge i.e., Science. Managing using intuition or thumb rule is not correct management. The second weakness of this definition is that it does not explain the various functions of management.

A better definition is given by George R Terry who defines management as “a process consisting of planning, organizing, actuating and controlling performed to determine and accomplish the objectives by the use of people and resources”. According to him, management is a process-a systematic way of doing thing using four managerial functions namely planning, organizing, actuating and controlling. ‘Planning’ means thinking of the manager’s action in advance. The actions of the managers are based on logic, plan or some method rather than hunch. ‘Organizing’ means coordinating machines, materials and human resources of the organization. ‘Actuating’ means motivating, directing the subordinates. ‘Controlling’ means that manager must ensure that there is no deviations from plans. This definition also indicates that managers use people, materials and other resources to accomplish the organizations objectives. The objectives may vary with each organization. For example the objective of a technical or management institute might be to provide quality education according to the needs of the industry. The objective of a hospital might be to provide medical care to the community at reasonable price. Whatever may be the objectives of the organization management is a process by which the objectives are achieved.

From the view point of economics, sociology, psychology, statistics and anthropology management has different meanings. There are four views of management:

- (1) Management is a process.
- (2) Management is a discipline.
- (3) Management is a human activity.

(4) Management is a career.

Management is a process: A process is defined as systematic method of handling activities. Often we hear the statements “that company is well managed” or “the company is miss-managed”. These statements imply that management is some type of work or set of activities, these activities sometimes performed quite well and some times not so well. These statements imply that management is a process involving certain functions and activities that managers perform.

Management is a discipline: Discipline refers to the field of study having well defined concepts and principles. Classifying management as discipline implies that it is an accumulated body of knowledge that can be learnt. Thus, management is a subject with principles and concepts. The purpose of studying management is to learn how to apply these principles and concepts at right circumstances at the right time to produce desired result.

Management is a human activity: If you say that “the restaurant has an entirely new management” or “He is the best manager I have worked for”, you are referring to the people who guide, direct and thus manage organizations. The word ‘management’ used here refers to the people who engage in the process of management. Managers are responsible for seeing that work gets done in organization.

Management is a career: Today management is developed as a career focused on specialization. Marketing management, finance management, personal management, Industrial management, production management, quality management are some of the specializations in management. Specialists are appointed at various positions of the organizational hierarchy. Hence, management is career.

According to Ralph C Devis, “Management is the executive leadership anywhere”. According to William Spriegal, “Management is that function of an enterprise which concerns itself with the direction and control of various activities to attain business activities”.

Ross Moore states “Management means decision-making”.

According to Donald J Clough, “Management is the art and science of decision-making and leadership”.

Joseph L Massie defines as “Management is the process by which a cooperative group directs actions towards common goals”.

According to F.W. Taylor, “Management is the art of knowing what you want to do and then seeing that it is done in the best and cheapest way”.

John F Mee states “Management is the art of securing maximum results with minimum efforts so as to secure maximum prosperity for employer and employee and give the public the best possible service”.

According to Koontz and O'Donnel, **“Management is the direction and main-tenance of an internal environment in an enterprise where individuals working in groups can perform efficiently and effectively towards the attainment of group goals”**. It is the art of getting the work done through and with people in formally organized groups.

1.2 CHARACTERISTICS OF MANAGEMENT

The critical analysis of the above definitions, the following characteristics of management evolve.

(1) **Management is a continuous process:** The process of management consists of planning, organizing, directing and controlling the resources to ensure that resources are used to the best advantages of the organization. A single function alone cannot produce the desired results. Management involves continuous planning, organizing, directing and controlling.

(2) **Management is an art as well as science:** Management is an art in the sense of possessing managing skill by a person. Management is science because certain principles, laws are developed which are applicable in place where group activities are coordinated. This will be discussed in detail later in this chapter.

(3) **Management aims at achieving predetermined objectives:** All organizations have objectives that are laid down. Every managerial activity results in achievement of these predetermined objectives.

(4) **Management is a factor of production:** An enterprise produce goods or services using resources like land, labour, capital, machines etc. These resources themselves cannot realize the organizations goals. The goals are achieved when these are effectively coordinated by the entrepreneur. In case of small enterprises an individual can do such type of job where as in large enterprises the coordination job is done by management. Therefore, management is a factor of production.

(5) **Management is decision-making:** Decision-making is selecting the best among alternative courses. Decision-making is an important function of a manager. Whatever a manager does, he does it by making decisions. The success or failure of an organization depends upon the quality of decision. A manager must make a right decision at right time.

(6) **Universal application:** The principles and concepts of management are applicable to every type of industry. The practice of management is different from one organization to another according to their nature.

(7) **Management is needed at all levels:** The functions of management are common to all levels of organization. The functions of planning, organizing, directing, controlling, decision-making are performed by top level as well as lower level supervisors.

(8) **Management aims at maximum profit:** The resources are properly utilized to maximize profit. Maximizing the profit is the economic function of a manager.

(9) **Dynamic:** Management is not static. Over a period of time new principles, concepts and techniques are developed and adopted by management. Management is changed accordingly to the social change.

(10) **Management as a career:** Today management is developed as a career focused on specialization. Marketing management, finance management, personal management, industrial management, production management, quality management are some of the specializations in management. Specialists are appointed at various positions of the organizational hierarchy. Hence management is career.

(11) **Management is a profession:** Management is a profession because it possesses the qualities of a profession. The knowledge is imported and transferred. The established principles of management are applied in practice. This is discussed in detail later in this chapter.

(12) **Management is a discipline:** Discipline refers to the field of study having well defined concepts and principles. Classifying management as disciplines implies that it is an accumulated body of knowledge that can be learnt. Thus, management is a subject with principles and concepts. The purpose of studying management is to learn how to apply these principles and concepts at right circumstances, at the right time to produce desired result.

1.3 NATURE OF MANAGEMENT

The principles, concepts and techniques of management have changed over the period of time. Various contributions to the field of management have changed its nature. The nature of management can be described as follows:

(1) **Multidisciplinary:** Management is multidisciplinary. It draws freely ideas and concepts from the disciplines like economics, sociology, psychology, statistics, operations research etc. Management integrates the ideas taken from various disciplines and presents newer concepts which can be put into practice. The integration of these ideas is the major contribution of management.

(2) **Dynamic nature of principles:** A principle is truth which establishes cause and effect relationships of a function. Principles are developed by integration of ideas from various disciplines supported by practical evidence. These principles are flexible and change with the environment in which organization works. Continuous researches are being carried on to establish new principles; many older principles are changed by new principles. There is nothing permanent in management.

(3) **Relative not absolute principles:** Management principles are relative and not absolute. They must be applied according to the need of the organization. Each organization is different from other. The principles of management should be applied in the light of prevailing conditions.

(4) **Management – science or art:** There is controversy whether management is science or art. Earlier management was regarded as art but now it is both science and art. This aspect has been discussed in detail in this chapter.

(5) **Universality of management:** Management is universal phenomena. Though universal yet management principles are not universally applicable but are to be modified according to the needs of the situation.

1.4 MANAGEMENT FUNCTIONS OR THE PROCESS OF MANAGEMENT

A function is a group of similar activities. There is divergence of view on “What functions are undertaken by managers in organizations?” Some management experts classify these functions into four types and others classify into five types and some others classify them as seven items. The Table 1.1 presents the management functions identified by various writers. The Table 1.2 gives the combined list of management functions.

Table 1.1: Management functions

	Writers	Management Functions
	Henry Fayol	Planning, organizing, commanding, coordinating, controlling
	Luther Gulick	Planning, organizing, staffing, directing, coordinating and budgeting (POSDCORB)
	Lyndall Urwick	Planning, organizing, commanding, coordinating, communicating, forecasting, and investigating.
	E.F.L. Brech	Planning, organizing, motivating, coordinating, controlling
	Koontz and O'Don	Planning, organizing, staffing, directing (leading), controlling

Table 1.2: Combined list of management functions

Planning	Directing	Controlling
Formulating purpose	Leading	Investigating
Decision making	Motivating	Evaluating
Innovating	Commanding	Coordinating
Organizing	Activating	Representing
Staffing	Securing Efforts	Administration
Appraising	Communicating	

The list of management functions is too long. However it can be shortened by combining some functions into one. For example, leading, motivating, communicating and commanding may be combined into a single function namely directing.

For our purpose we shall designate the following five as the functions of the manager. In addition we briefly refer to “Innovation and representation as two additional managerial functions considered important by Earnest Dale.

(1) **Planning:** Planning is the primary function of management. It is looking ahead and preparing for the future. It determines in advance what should be done. It is conscious determination of future course of action. This involves determining why to take action? What action? How to take action? When to take action? Planning involves determination of specific objectives, programs, setting policies, strategies, rules and procedures and preparing budgets. Planning is a function which is performed by managers at all levels – top, middle and supervisory. Plans made by top management for the organization as a whole may cover periods as

long as five to ten years, whereas plans made by low level managers cover much shorter periods. This “Planning” is discussed in detailed in Chapter–2.

(2) **Organizing:** Organizing is the distribution of work in group-wise or section-wise for effective performance. Once the managers have established objectives and developed plans to achieve them, they must design and develop a human organization that will be able to carry out those plans successfully. Organizing involves dividing work into convenient tasks or duties, grouping of such duties in the form of positions, grouping of various positions into departments and sections, assigning duties to individual positions and delegating authority to each position so that the work is carried out as planned.

According to Koonz O’Donnel, “**Organization consists of conscious coordination of people towards a desired goal**”. One has to note that different objectives require different kinds of organization to achieve them. For example, an organization for scientific research will have to be very different from one manufacturing automobiles.

(3) **Staffing:** Staffing involves managing various positions of the organizational structure. It involves selecting and placing the right person at the right position. Staffing includes identifying the gap between manpower required and available, identifying the sources from where people will be selected, selecting people, training them, fixing the financial compensation and appraising them periodically. The success of the organization depends upon the successful performance of staffing function.

(4) **Directing:** Planning, organizing and staffing functions are concerned with the preliminary work for the achievement of organizational objectives. The actual performance of the task starts with the function of direction. This function can be called by various names namely “leading”, “directing”, “motivating”, “activating” and so on. Directing involves these sub functions:

- (a) **Communicating:** It is the process of passing information from one person to another.
- (b) **Leading:** It is a process by which a manager guides and influences the work of his subordinates.
- (c) **Motivating:** It is arousing desire in the minds of workers to give their best to the enterprise.

(5) **Controlling:** Planning, organizing, staffing and directing are required to realize organizational objectives. To ensure that the achieved objectives confirm to the pre-planned objectives control function is necessary. Control is the process of checking to determine whether or not proper progress is being made towards the objectives and goals and acting if necessary to correct any deviations. Control involves three elements:

- (a) Establishing standards of performance.
- (b) Measuring current performance and comparing it against the established standard.
- (c) Taking action to correct any performance that does not meet those standards.

(6) **Innovation:** Innovation means creating new ideas which may be either results in the development of new products or finding new uses for the old ones. A manager who invents new products is an innovator. A salesman who persuades Eskimos to purchase refrigerator is an innovator. One has to note that innovation is not a separate function but a part of planning.

(7) **Representation:** A manager has to spend a part of his time in representing his organization before various groups which have some stake in the organization. A manager has to be act as representative of a

company. He has dealings with customers, suppliers, government officials, banks, trade unions and the like. It is the duty of every manager to have good relationship with others.

1.5 FUNCTIONAL AREAS OF MANAGEMENT

Management process involves several functions. A distinction should be maintained between management functions (planning, organizing, staffing, directing and controlling) and the organizational functions (productions, finance etc.) Organizational functions differ from organization to organization depending upon their nature while management functions are common to all. A manager may be put either in production or finance or marketing, he performs all the managerial functions. These organization functions are called functional areas of management. There are four functional areas of management namely production, finance, marketing and finance and personnel. Each functional area may have a number of sub-activities.

Production: This is generally put under production manager and he is responsible for all production related activities.

This area has a number of activities, few of them are given below:

- (1) **Purchasing:** Which is related with the purchase of various materials required by the organization. Purchasing involves procuring right quantity of materials at the right quality, at the right time and at the right price from the right supplier.
- (2) **Materials management:** This involves storing of materials, issue of materials to various departments.
- (3) **Research and Development:** It deals with improving the existing products and process and developing new products and process.

Marketing: This area involves the distribution of organizations' products to the buyers. The sub-activities are:

- (1) **Advertising:** Involves giving information about products to buyers.
- (2) **Marketing research:** It is related with the systematic collection, analysis of data relating to the marketing of goods and services.
- (3) **Sales management:** It involves management efforts directed towards movement of products and services from producers to consumers.
- (4) -keeping of various transactions. The various sub-functions are

Finance and accounting: It deals with intelligent investment of financial resources and record

- (1) **Financial Accounting:** Deals with record keeping of various transactions.
- (2) **Management Accounting:** Deals with analysis and interpretation of financial records so that management can take certain decision.
- (3) **Costing:** It deals with recording of costs, their classification and analysis for cost control.
- (4) **Investment Management:** Takes care of how financial resources can be invested in various alternatives to maximize returns.
- (5) **Taxation:** Deals with various direct and indirect taxes to be paid by the organization.

Personnel: It deals with the management of human resources with the following sub-activities:

- (1) **Recruitment and Selection:** It deals with recruitment and selection of employees.
- (2) **Training and Development:** It deals with training of employees and making them more efficient.
- (3) **Wage and Salary Administration:** Deals with fixing of salaries, job evaluation, promotion, incentives etc.
- (4) **Industrial Relations:** Deals with maintenance of good employee relations.

1.6 MANAGEMENT: A SCIENCE OR ART?

There is great controversy whether management is science or art. It is an art in the sense of possessing of managing skill by a person. It is a science also because of developing principles or laws which are applicable in a place where a group of activities are coordinated. In fact management is both science and art as it clear from the following discussion.

Management as science: Science is a systematized body of knowledge. We call a discipline scientific if its

- (1) Methods of inquiry are systematic and empirical.
- (2) Information can be ordered and analyzed; and
- (3) Results are cumulative and communicable.

‘Systematic’ means, being orderly and unbiased. Moreover, enquiry must be empirical and not merely an armchair speculation. Scientific information collected in the raw form is finally ordered and analyzed with statistical tools. It is communicable which permits repetition of study. When study is replicated then the second try produces the results similar to the original. Science is also cumulative in that what is discovered is added to that which has been found before. We build upon the base that has been left by others.

Science denotes two types of systematic knowledge; natural or exact and behavioural or inexact. In exact or natural science (such as physics and chemistry) we can study the effect of any one of many factors affecting a phenomenon. For example, we can study in the laboratory, the effect of heat on density by holding other factors (like humidity, pressure etc.) constant, whereas in behavioural or in exact science it is not possible. In management we have to study man and number of factors affecting him. For example, we cannot study the effect of monetary incentives on workers productivity, because in addition to monetary incentives other inseparable factors like leadership styles, workers need hierarchy and leadership styles will also have simultaneous effect on productivity. At the most we may get only rough idea of the relationship between monetary incentives and productivity. Therefore, management is in the category of behavioural science.

Management is an art: Management is the art of getting things done through others in dynamic situations. A manager has to coordinate various resources against several constraints to achieve predetermined objectives in the most efficient manner. Manager has to constantly analyze the existing situation, determine objectives, seek alternatives, implement, and control and make decision. The theoretical lessons on principles, concepts and techniques learnt by a manager in classroom is not enough to get the aimed results unless he possess the skill (or art) of applying such principles to the problems. The knowledge has to be applied and practised. It is like the art of musician or painter who achieves the desired results with his own skill which comes by practice. A comparison between science and art is given in table 1.3.

Table 1.3: Comparison between science and art

Science	Art
Advances by knowledge	Advances by policies
Process	Feels
Predicts	Guesses
Defines	Describes
Measures	Opines
Impresses	Expresses

Management uses both scientific knowledge and art in managing an organization. As the science of management increases so should the art of management. A balance between the two is needed.

1.7 MANAGEMENT: A PROFESSION

According to McFarland, “**Profession**” possesses the following characteristics:

- (1) Existence of an organized knowledge.
- (2) Formalized method of acquiring training and expertise.
- (3) Existence of professional association.
- (4) Existence of an ethical code to regulate the behaviour.
- (5) Charging of fees based on service with due regard to social interest.

Management does not possess all the above characteristics of profession. Management has no fixed norms for managerial behaviour. There is no uniform code of conduct or licensing of managers. There are no restrictions to individuals to possess an academic degree. Unlike medical or legal professionals, a manager need not possess an academic degree. In the light of absence of these characteristics, management cannot be called as profession. However, ‘professionalization’ of management started and it is essential nowadays to acquire some professional knowledge or training. In this regard government of India has started six national institutes of management and a number of universities and institutions are offering MBA programmes.

1.8 MANAGEMENT AND ADMINISTRATION

The term administration and management are used synonymously. Some writers urge that running of a business requires skills, which is known as management and functioning of government departments and non-profit institutions requiring skill is known as administration. Various views expressed by thinkers of management led to the emergence of there approaches:

- (1) Administration is above management.
- (2) Administration is a part of management.
- (3) Management and administration are same.

According to classical thinkers, Administration is above management so far as different in the organization are concerned. According to Spreigal, “Administration is that phase of business enterprise that concerns itself with the overall determination of institutional objectives and the policies necessary to be followed in achieving those objectives. Management on the other hand is an executive function which is primarily concerned with carrying of broad policies laid down by the administration”. This implies that administration deals with establishing objectives and policies and is done by the top level whereas management is the execution of these policies by the middle and lower organizational level. Table 1.4 shows the distinction between administration and management.

Table: 1.4: Differences between administration and management

Basis of difference	Administration	Management
1 . Level of organization	Top Level	Middle and Lower Level
2 . Major focus	Policies formulation and objective determination	Policies execution for objectives achievements
3 . Nature of function	Determinative	Executive
4 . Scope of functions	Broad & Conceptual	Narrow & Operational
5. Factors affecting decision	Mostly external	Mostly internal
6 . Employer – Employee relation	Entrepreneurs & Owners	Employee
7 . Qualities required	Administrative	Technical

E. El. Brech urges that administration is a part of management. According to Brech, “Management is a generic name for the total process of executive control in industry or commerce. It is a social process entailing responsibility for the effective and economical planning and regulation of the operation of an enterprise in the fulfilment of a given purpose or risk. Administration is that part of management which is concerned with the installation and carrying out of procedures by which it is laid down and communicated, and the process of activities regulated and checked against plans. According to this view, administration become a subordinate function to overall management function. According to the third approach which is the most popular and practical one, management and administration are same. Both involve the same functions, principles and objectives. The term administrator found its origin in bureaucratic structure of government or in regulation of some laws. The government often uses the terms administrator who is supposed to execute broad policies laid down by government.

The basic point of controversy between management and administration lies in forms of coverage of activities. The content of policy formulation is higher at higher levels; it is lower at lower levels, while executive is more at lower levels and lower at higher levels. Hence, it becomes unimportant whether policy formulation function is known as administration or management.

1.9 ROLE OF MANAGEMENT

A manager performs planning, organizing, directing and controlling to achieve the organizational objectives. It has been questioned whether these functions provide an adequate description of the

management process. As against these management functions Henry Mintzberg has defined the role of managers to identify what managers do in the organizations. Mintzberg has identified ten roles of manager which are classified into three broad categories as shown in fig. 1.1.

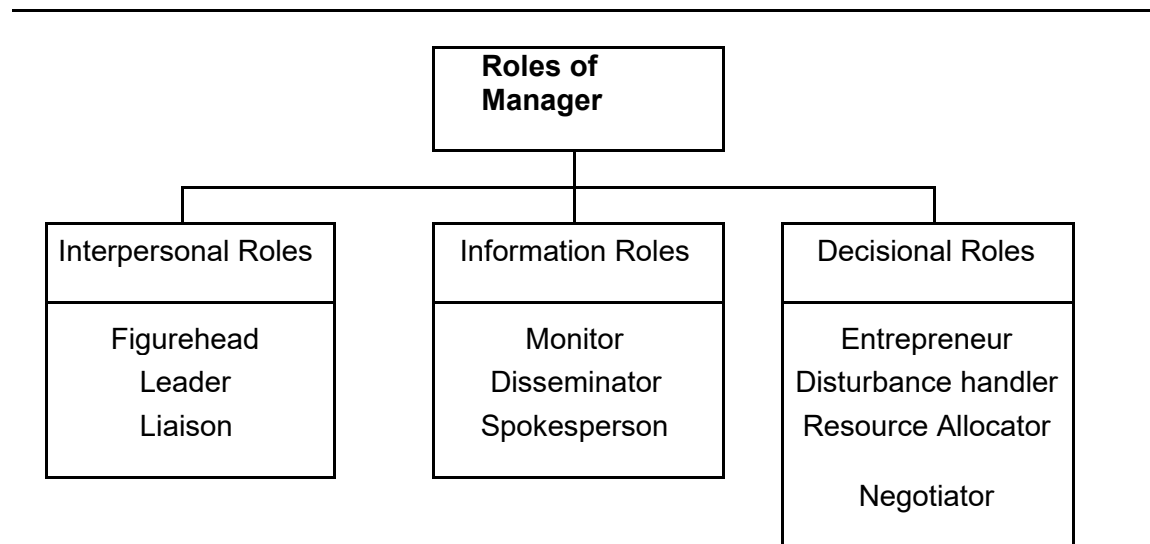


Fig. 1.1: Roles of manager

Interpersonal role: This role is concerned with his interacting with people both organizational members and outsiders. There are three types of interpersonal roles:

- (1) **Figure head role:** In this role manager has to perform duties of ceremonial nature such as attending social functions of employees, taking an important customer to lunch and so on.
- (2) **Leader role:** Manager's leader role involves leading the subordinates motivating and encouraging them.
- (3) **Liaison:** In liaison role manager serves as a connecting link between his organization and outsiders. Managers must cultivate contacts outside his vertical chain to collect information useful for his organization.

Information roles: It involves communication. There are three types of informational roles:

- (1) **Monitor:** In his monitoring role, manager continuously collects information about all the factors which affects his activities. Such factors may be within or outside organization.
- (2) **Disseminator:** In the disseminator role, manager possesses some of his privileged information to his subordinates who otherwise not be in a position to collect it.
- (3) **Spokesperson:** As a spokesperson manager represents his organization while interacting with outsiders like customers, suppliers, financiers, government and other agencies of the society.

Decisional roles: Decisional role involves choosing most appropriate alternative among all so that organizational objectives are achieved in an efficient manner. In his decisional role manager perform four roles:

1. **Entrepreneur:** As an entrepreneur, a manager assumes certain risks in terms of outcome of an action. A manager constantly looks out for new ideas and seeks to improve his unit by adopting it to dynamic environment.
2. **Disturbance handler:** In this role manager works like a fire-fighter manager contains forces and events which disturb normal functioning of his organization. The forces and events may be employee complaints and grievances, strikes, shortage of raw materials etc.
3. **Negotiator:** In his role of negotiator, manager negotiates with various groups in the organization. Such groups are employees, shareholders and other outside agencies.

Readers are advised to note that management functions and roles do not exist opposite to each other but these are two ways of interpreting what managers do. All these roles can be integrated with earlier classification of management which is presented in fig. 1.2.

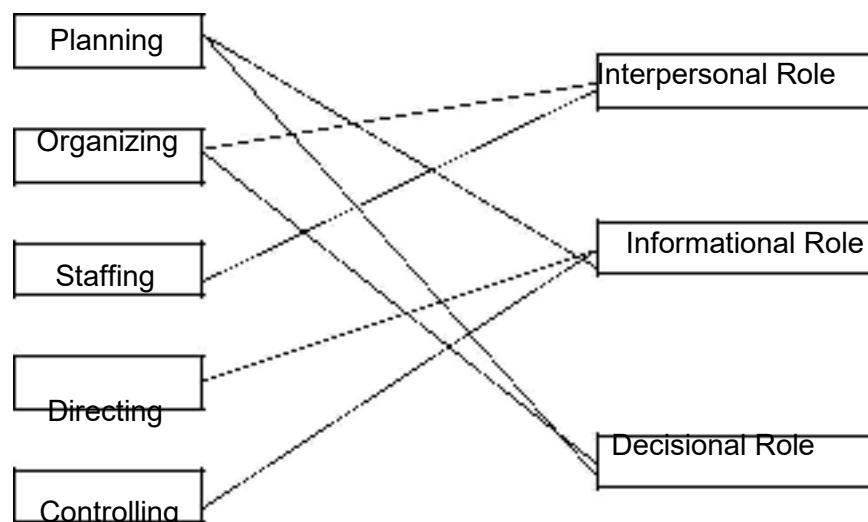


Fig. 1.2: Functions and roles of manager

In planning a manager performs informational and decisional role as he has to collect information on the basis in which he makes decisions. Similarly in performing other functions some or the other roles are performed by manager.

1.10 LEVELS OF MANAGEMENT

People in an organization are arranged in an hierarchy and they all have the relationship of superior-subordinates. Every manager in an organization performs all five management functions. The relative importance of these functions varies along the managerial levels. There may be as many levels in the organization as the number of superiors in a line of command. Some of these levels are merged into one on the basis

of nature of functions performed and authority enjoyed. E.F.L. Brech has classified management levels into three categories – Top Management, Middle Management and Supervisory/Lower Level as shown in fig 1.3.

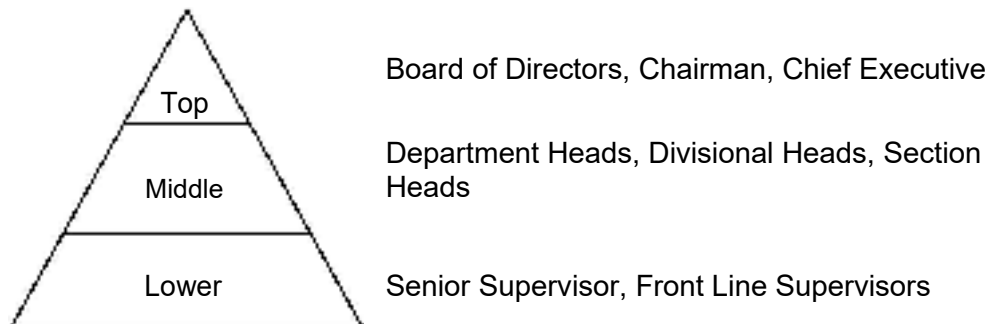


Fig. 1.3: Levels of management

Top management of an organization consists board of directors, chairman and chief executive officer. Top level management determines goals and objectives. It performs overall planning, organizing, staffing, directing and controlling. It integrates organization with environment, balances the interest groups and is responsible for overall results. Middle management stands between top management and supervisory management level. Middle level management establishes programs for department and carries out functions for achieving specific goals. The other functions of middle level management are training and development of employees, integrating various parts of the department. Supervisory management is concerned with efficiency in using resources of the organization. A supervisor is an executor of policies and procedures making a series of decisions with well-defined and specified premises.