

Notes On Fundamentals Of Management (FOM)

Syllabus:

- Unit 1 (Complete)
- Unit 2 (Planning)
- Unit 3 (Staffing)
- Unit 4 (Controlling)

UNIT 1

➤ **Management:**

According to *Harold Koontz*, "Management is an art of getting things done through and with the people in formally organized groups. It is an art of creating an environment in which people can perform and individuals can co-operate towards attainment of group goals". According to *F.W. Taylor*, "Management is an art of knowing what to do, when to do and see that it is done in the best and cheapest way".

Management is a purposive activity. It is something that directs group efforts towards the attainment of certain pre - determined goals.

Management can be defined in detail in following categories :

- Management as a Process
- Management as an Activity
- Management as a Discipline
- Management as a Group
- Management as a Science
- Management as an Art
- Management as a Profession

• **Management as an Art:**

1. **Practical Knowledge:** Every art requires practical knowledge therefore learning of theory is not sufficient. It is very important to know practical application of theoretical principles. E.g. to become a good painter, the person may not only be knowing different colour and brushes but different designs, dimensions, situations etc to use them appropriately. A manager can never be successful just by obtaining degree or diploma in management; he must have also know how to apply various principles in real situations by functioning in capacity of manager.
2. **Personal Skill:** Although theoretical base may be same for every artist, but each one has his own style and approach towards his job. That is why the level of success and quality of performance differs from one person to another. E.g. there are several qualified painters but M.F. Hussain is recognized for his style. Similarly management as an art is also personalized. Every manager has his own way of managing things based on his knowledge, experience and personality, that is why some managers are known as good managers (like Aditya Birla, Rahul Bajaj) whereas others as bad.
3. **Creativity:** Every artist has an element of creativity in line. That is why he aims at producing something that has never existed before which requires combination of intelligence & imagination. Management is also creative in nature like any other art. It combines human and non-human resources in useful way so as to achieve desired results. It tries to produce sweet music by combining chords in an efficient manner.
4. **Perfection through practice:** Practice makes a man perfect. Every artist becomes more and more proficient through constant practice. Similarly managers learn through an art of trial and error initially but application of management principles over the years makes them perfect in the job of managing.

5. **Goal-Oriented:** Every art is result oriented as it seeks to achieve concrete results. In the same manner, management is also directed towards accomplishment of pre-determined goals. Managers use various resources like men, money, material, machinery & methods to promote growth of an organization.

Thus, we can say that management is an art therefore it requires application of certain principles rather it is an art of highest order because it deals with moulding the attitude and behaviour of people at work towards desired goals.

- **Management as a Science:**

Science is a systematic body of knowledge pertaining to a specific field of study that contains general facts which explains a phenomenon. It establishes cause and effect relationship between two or more variables and underlines the principles governing their relationship. These principles are developed through scientific method of observation and verification through testing.

Science is characterized by following main features:

1. **Universally acceptance principles** - Scientific principles represents basic truth about a particular field of enquiry. These principles may be applied in all situations, at all time & at all places. E.g. - law of gravitation which can be applied in all countries irrespective of the time.

Management also contains some fundamental principles which can be applied universally like the Principle of Unity of Command i.e. one man, one boss. This principle is applicable to all type of organization - business or non business.

2. **Experimentation & Observation** - Scientific principles are derived through scientific investigation & researching i.e. they are based on logic. E.g. the principle that earth goes round the sun has been scientifically proved.

Management principles are also based on scientific enquiry & observation and not only on the opinion of Henry Fayol. They have been developed through experiments & practical experiences of large no. of managers. E.g. it is observed that fair remuneration to personal helps in creating a satisfied work force.

3. **Cause & Effect Relationship** - Principles of science lay down cause and effect relationship between various variables. E.g. when metals are heated, they are expanded. The cause is heating & result is expansion.

The same is true for management, therefore it also establishes cause and effect relationship. E.g. lack of parity (balance) between authority & responsibility will lead to ineffectiveness. If you know the cause i.e. lack of balance, the effect can be ascertained easily i.e. in effectiveness. Similarly if workers are given bonuses, fair wages they will work hard but when not treated in fair and just manner, reduces productivity of organization.

4. **Test of Validity & Predictability** - Validity of scientific principles can be tested at any time or any number of times i.e. they stand the test of time. Each time these tests will give same result. Moreover future events can be predicted with reasonable accuracy by using scientific principles. E.g. H_2 & O_2 will always give H_2O .

Principles of management can also be tested for validity. E.g. principle of unity of command can be tested by comparing two persons - one having single boss and one having 2 bosses. The performance of 1st person will be better than 2nd.

- **Management as an Art and Science:**

Management is both an art and a science. The above mentioned points clearly reveals that management combines features of both science as well as art. It is considered as a science because it has an organized body of knowledge which contains certain universal truth. It is called an art because managing requires certain skills which are personal possessions of managers. Science provides the knowledge & art deals with the application of knowledge and skills.

A manager to be successful in his profession must acquire the knowledge of science & the art of applying it. Therefore management is a judicious blend of science as well as an art because it proves the principles and the way these principles are applied is a matter of art. Science teaches to 'know' and art teaches to 'do'. E.g. a person cannot become a good singer unless he has knowledge about various ragas & he also applies his personal skill in the art of singing. Same way it is not sufficient for manager to first know the principles but he must also apply them in solving various managerial problems that is why, science and art are not mutually exclusive but they are complementary to each other (like tea and biscuit, bread and butter etc.).

The old saying that "Manager are Born" has been rejected in favor of "Managers are Made". It has been aptly remarked that management is the oldest of art and youngest of science. To conclude, we can say that science is the root and art is the fruit.

- **Management As a Profession:**

A profession may be defined as an occupation that requires specialized knowledge and intensive academic preparations to which entry is regulated by a representative body. The essentials of a profession are:

1. **Specialized Knowledge** - A profession must have a systematic body of knowledge that can be used for development of professionals. Every professional must make deliberate efforts to acquire expertise in the principles and techniques. Similarly a manager must have devotion and involvement to acquire expertise in the science of management.
2. **Formal Education & Training** - There are no. of institutes and universities to impart education & training for a profession. No one can practice a profession without going through a prescribed course. Many institutes of management have been set up for imparting education and training. For example, a CA cannot audit the A/C's unless he has acquired a degree or diploma for the same but no minimum qualifications and a course of study has been prescribed for managers by law. For example, MBA may be preferred but not necessary.
3. **Social Obligations** - Profession is a source of livelihood but professionals are primarily motivated by the desire to serve the society. Their actions are influenced by social norms and values. Similarly a manager is responsible not only to its owners but also to the society and therefore he is expected to provide quality goods at reasonable prices to the society.

4. **Code of Conduct** - Members of a profession have to abide by a code of conduct which contains certain rules and regulations, norms of honesty, integrity and special ethics. A code of conduct is enforced by a representative association to ensure self discipline among its members. Any member violating the code of conduct can be punished and his membership can be withdrawn. The AIMA has prescribed a code of conduct for managers but it has no right to take legal action against any manager who violates it.
5. **Representative Association** - For the regulation of profession, existence of a representative body is a must. For example, an institute of Chartered Accountants of India establishes and administers standards of competence for the auditors but the AIMA however does not have any statutory powers to regulate the activities of managers.

➤ **Features Of Management:**

Management is an activity concerned with guiding human and physical resources such that organizational goals can be achieved. Nature of management can be highlighted as:

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1. **Management is Goal-Oriented:** The success of any management activity is assessed by its achievement of the predetermined goals or objective. Management is a purposeful activity. It is a tool which helps use of human & physical resources to fulfill the pre-determined goals. For example, the goal of an enterprise is maximum consumer satisfaction by producing quality goods and at reasonable prices. This can be achieved by employing efficient persons and making better use of scarce resources.
2. **Management integrates Human, Physical and Financial Resources:** In an organization, human beings work with non-human resources like machines. Materials, financial assets, buildings etc. Management integrates human efforts to those resources. It brings harmony among the human, physical and financial resources.
3. **Management is Continuous:** Management is an ongoing process. It involves continuous handling of problems and issues. It is concerned with identifying the problem and taking appropriate steps to solve it. E.g. the target of a company is maximum production. For achieving this target various policies have to be framed but this is not the end. Marketing and Advertising is also to be done. For this policies have to be again framed. Hence this is an ongoing process.
4. **Management is all Pervasive:** Management is required in all types of organizations whether it is political, social, cultural or business because it helps and directs various efforts towards a definite purpose. Thus clubs, hospitals, political parties, colleges, hospitals, business firms all require management. When ever more than one person is engaged in working for a common goal, management is necessary. Whether it is a small business firm which may be engaged in trading or a large firm like Tata Iron & Steel, management is required everywhere irrespective of size or type of activity.
5. **Management is a Group Activity:** Management is very much less concerned with individual's efforts. It is more concerned with groups. It involves the use of

group effort to achieve predetermined goal of management of ABC & Co. is good refers to a group of persons managing the enterprise.

➤ **Levels of Management:**

The term “**Levels of Management**” refers to a line of demarcation between various managerial positions in an organization. The number of levels in management increases when the size of the business and work force increases and vice versa. The level of management determines a chain of command, the amount of authority & status enjoyed by any managerial position. The levels of management can be classified in three broad categories:

1. **Top level / Administrative level**
2. **Middle level / Executory**
3. **Low level / Supervisory / Operative / First-line managers**

Managers at all these levels perform different functions. The role of managers at all the three levels is discussed below:



1. Top Level of Management:

- It consists of board of directors, chief executive or managing director. The top management is the ultimate source of authority and it manages goals and policies for an enterprise. It devotes more time on planning and coordinating functions.
- The role of the top management can be summarized as follows -
- Top management lays down the objectives and broad policies of the enterprise.
- It issues necessary instructions for preparation of department budgets, procedures, schedules etc.
- It prepares strategic plans & policies for the enterprise.
- It appoints the executive for middle level i.e. departmental managers.
- It controls & coordinates the activities of all the departments.
- It is also responsible for maintaining a contact with the outside world.
- It provides guidance and direction.
- The top management is also responsible towards the shareholders for the performance of the enterprise.

2. Middle Level of Management

- The branch managers and departmental managers constitute middle level. They are responsible to the top management for the functioning of their department. They devote more time to organizational and directional functions. In small organization, there is only one layer of middle level of management but in big

enterprises, there may be senior and junior middle level management. Their role can be emphasized as -

- They execute the plans of the organization in accordance with the policies and directives of the top management.
- They make plans for the sub-units of the organization.
- They participate in employment & training of lower level management.
- They interpret and explain policies from top level management to lower level.
- They are responsible for coordinating the activities within the division or department.
- It also sends important reports and other important data to top level management.
- They evaluate performance of junior managers.
- They are also responsible for inspiring lower level managers towards better performance.

3. Lower Level of Management

- Lower level is also known as supervisory / operative level of management. It consists of supervisors, foreman, section officers, superintendent etc. According to *R.C. Davis*, "Supervisory management refers to those executives whose work has to be largely with personal oversight and direction of operative employees". In other words, they are concerned with direction and controlling function of management. Their activities include -
 - Assigning of jobs and tasks to various workers.
 - They guide and instruct workers for day to day activities.
 - They are responsible for the quality as well as quantity of production.
 - They are also entrusted with the responsibility of maintaining good relation in the organization.
 - They communicate workers problems, suggestions, and recommendatory appeals etc to the higher level and higher level goals and objectives to the workers.
 - They help to solve the grievances of the workers.
 - They supervise & guide the sub-ordinates.
 - They are responsible for providing training to the workers.
 - They arrange necessary materials, machines, tools etc for getting the things done.
 - They prepare periodical reports about the performance of the workers.
 - They ensure discipline in the enterprise.
 - They motivate workers.
 - They are the image builders of the enterprise because they are in direct contact with the workers.

➤ Objectives of Management:

The main objectives of management are:

1. **Getting Maximum Results with Minimum Efforts** - The main objective of management is to secure maximum outputs with minimum efforts & resources. Management is basically concerned with thinking & utilizing human, material &

financial resources in such a manner that would result in best combination. This combination results in reduction of various costs.

2. **Increasing the Efficiency of factors of Production** - Through proper utilization of various factors of production, their efficiency can be increased to a great extent which can be obtained by reducing spoilage, wastages and breakage of all kinds, this in turn leads to saving of time, effort and money which is essential for the growth & prosperity of the enterprise.
3. **Maximum Prosperity for Employer & Employees** - Management ensures smooth and coordinated functioning of the enterprise. This in turn helps in providing maximum benefits to the employee in the shape of good working condition, suitable wage system, incentive plans on the one hand and higher profits to the employer on the other hand.
4. **Human betterment & Social Justice** - Management serves as a tool for the upliftment as well as betterment of the society. Through increased productivity & employment, management ensures better standards of living for the society. It provides justice through its uniform policies.

➤ **Importance of Management:**

1. **It helps in Achieving Group Goals** - It arranges the factors of production, assembles and organizes the resources, integrates the resources in effective manner to achieve goals. It directs group efforts towards achievement of pre-determined goals. By defining objective of organization clearly there would be no wastage of time, money and effort. Management converts disorganized resources of men, machines, money etc. into useful enterprise. These resources are coordinated, directed and controlled in such a manner that enterprise work towards attainment of goals.
2. **Optimum Utilization of Resources** - Management utilizes all the physical & human resources productively. This leads to efficacy in management. Management provides maximum utilization of scarce resources by selecting its best possible alternate use in industry from out of various uses. It makes use of experts, professional and these services leads to use of their skills, knowledge, and proper utilization and avoids wastage. If employees and machines are producing its maximum there is no under employment of any resources.
3. **Reduces Costs** - It gets maximum results through minimum input by proper planning and by using minimum input & getting maximum output. Management uses physical, human and financial resources in such a manner which results in best combination. This helps in cost reduction.
4. **Establishes Sound Organization** - No overlapping of efforts (smooth and coordinated functions). To establish sound organizational structure is one of the objective of management which is in tune with objective of organization and for fulfillment of this, it establishes effective authority & responsibility relationship i.e. who is accountable to whom, who can give instructions to whom, who are superiors & who are subordinates. Management fills up various positions with right persons, having right skills, training and qualification. All jobs should be cleared to everyone.

5. **Establishes Equilibrium** - It enables the organization to survive in changing environment. It keeps in touch with the changing environment. With the change in external environment, the initial co-ordination of organization must be changed. So it adapts organization to changing demand of market / changing needs of societies. It is responsible for growth and survival of organization.
6. **Essentials for Prosperity of Society** - Efficient management leads to better economical production which helps in turn to increase the welfare of people. Good management makes a difficult task easier by avoiding wastage of scarce resource. It improves standard of living. It increases the profit which is beneficial to business and society will get maximum output at minimum cost by creating employment opportunities which generate income in hands. Organization comes with new products and researches beneficial for society.

Management and Administration:

According to *Theo Haimann*, "Administration means overall determination of policies, setting of major objectives, the identification of general purposes and laying down of broad programmes and projects". It refers to the activities of higher level. It lays down basic principles of the enterprise. According to Newman, "Administration means guidance, leadership & control of the efforts of the groups towards some common goals".

Whereas, management involves conceiving, initiating and bringing together the various elements; coordinating, actuating, integrating the diverse organizational components while sustaining the viability of the organization towards some pre-determined goals. In other words, it is an art of getting things done through & with the people in formally organized groups.

The difference between Management and Administration can be summarized under 2 categories: -

1. **Functions**
2. **Usage / Applicability**

On the Basis of Functions: -

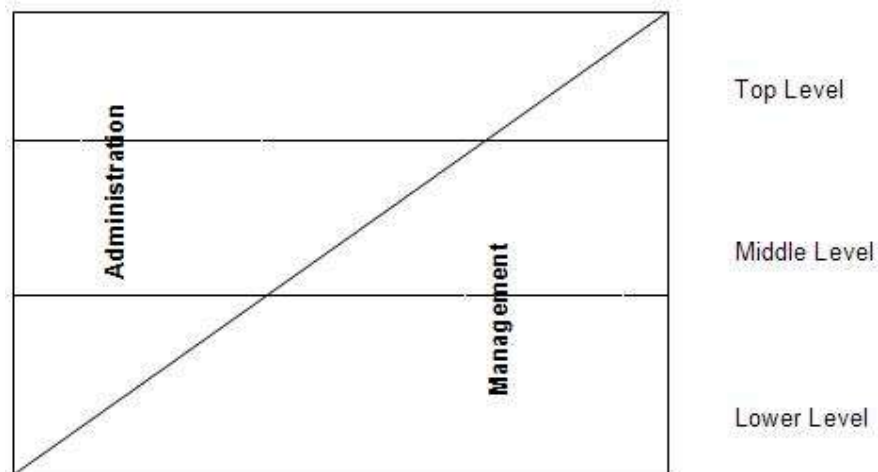
Basis	Management	Administration
Meaning	Management is an art of getting things done through others by directing their efforts towards achievement of pre-determined goals.	It is concerned with formulation of broad objectives, plans & policies.
Nature	Management is an executing function.	Administration is a decision-making function.
Process	Management decides who should do it & how should he do it.	Administration decides what is to be done & when it is to be done.

Function	Management is a doing function because managers get work done under their supervision.	Administration is a thinking function because plans & policies are determined under it.
Skills	Technical and Human skills	Conceptual and Human skills
Level	Middle & lower level function	Top level function

On the Basis of Usage: -

Basis	Management	Administration
Applicability	It is applicable to business concerns i.e. profit-making organization.	It is applicable to non-business concerns i.e. clubs, schools, hospitals etc.
Influence	The management decisions are influenced by the values, opinions, beliefs & decisions of the managers.	The administration is influenced by public opinion, govt. policies, religious organizations, customs etc.
Status	Management constitutes the employees of the organization who are paid remuneration (in the form of salaries & wages).	Administration represents owners of the enterprise who earn return on their capital invested & profits in the form of dividend.

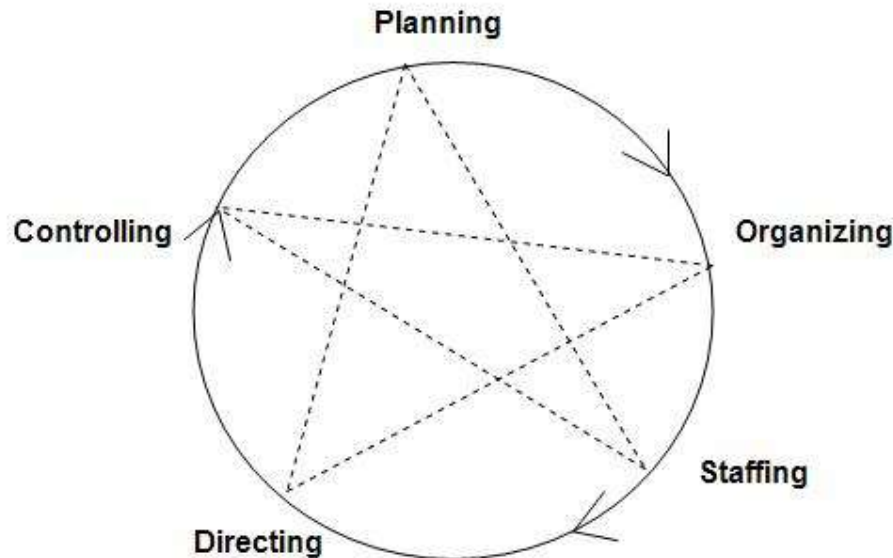
Practically, there is no difference between management & administration. Every manager is concerned with both - administrative management function and operative management function as shown in the figure. However, the managers who are higher up in the hierarchy denote more time on administrative function & the lower level denote more time on directing and controlling worker's performance i.e. management.



The Figure above clearly shows the degree of administration and management performed by the different levels of management.

➤ **Functions of Management:**

According to Henry Fayol, “To manage is to forecast and plan, to organize, to command, & to control”. Whereas Luther Gullick has given a keyword '**POSDCORB**' where P stands for Planning, O for Organizing, S for Staffing, D for Directing, Co for Co-ordination, R for reporting & B for Budgeting. But the most widely accepted are functions of management given by KOONTZ and O'DONNEL i.e. **Planning, Organizing, Staffing, Directing and Controlling**.



1. Planning

It is the basic function of management. It deals with chalking out a future course of action & deciding in advance the most appropriate course of actions for achievement of pre-determined goals. According to KOONTZ, “Planning is deciding in advance - what to do, when to do & how to do. It bridges the gap from where we are & where we want to be”. A plan is a future course of actions. It is an exercise in problem solving & decision making. Planning is determination of courses of action to achieve desired goals. Thus, planning is a systematic thinking about ways & means for accomplishment of pre-determined goals. Planning is necessary to ensure proper utilization of human & non-human resources. It is all pervasive, it is an intellectual activity and it also helps in avoiding confusion, uncertainties, risks, wastages etc.

2. Organizing

It is the process of bringing together physical, financial and human resources and developing productive relationship amongst them for achievement of organizational goals. According to Henry Fayol, “To organize a business is to provide it with everything useful or its functioning i.e. raw material, tools, capital and personnel’s”. To organize a business involves determining & providing human and non-human resources to the organizational structure. Organizing as a process involves:

- Identification of activities.
- Classification of grouping of activities.
- Assignment of duties.
- Delegation of authority and creation of responsibility.

- Coordinating authority and responsibility relationships.

3. Staffing

It is the function of manning the organization structure and keeping it manned. Staffing has assumed greater importance in the recent years due to advancement of technology, increase in size of business, complexity of human behavior etc. The main purpose of staffing is to put right man on right job i.e. square pegs in square holes and round pegs in round holes. According to Kootz & O'Donell, "Managerial function of staffing involves manning the organization structure through proper and effective selection, appraisal & development of personnel to fill the roles designed in the structure". Staffing involves:

- Manpower Planning (estimating man power in terms of searching, choose the person and giving the right place).
- Recruitment, Selection & Placement.
- Training & Development.
- Remuneration.
- Performance Appraisal.
- Promotions & Transfer.

4. Directing

It is that part of managerial function which actuates the organizational methods to work efficiently for achievement of organizational purposes. It is considered life-spark of the enterprise which sets it in motion the action of people because planning, organizing and staffing are the mere preparations for doing the work. Direction is that inert-personnel aspect of management which deals directly with influencing, guiding, supervising, motivating sub-ordinate for the achievement of organizational goals.

Direction has following elements:

- Supervision
- Motivation
- Leadership
- Communication

Supervision- implies overseeing the work of subordinates by their superiors. It is the act of watching & directing work & workers.

Motivation- means inspiring, stimulating or encouraging the sub-ordinates with zeal to work. Positive, negative, monetary, non-monetary incentives may be used for this purpose.

Leadership- may be defined as a process by which manager guides and influences the work of subordinates in desired direction.

Communications- is the process of passing information, experience, opinion etc from one person to another. It is a bridge of understanding.

5. Controlling

It implies measurement of accomplishment against the standards and correction of deviation if any to ensure achievement of organizational goals. The purpose of controlling is to ensure that everything occurs in conformity with the standards. An efficient system of control helps to predict deviations before they actually occur.

According to *Theo Haimann*, "Controlling is the process of checking whether or not proper progress is being made towards the objectives and goals and acting if necessary, to correct any deviation". According to Koontz & O'Donell "Controlling is the measurement & correction of performance activities of subordinates in order to make

sure that the enterprise objectives and plans desired to obtain them as being accomplished". Therefore controlling has following steps:

- a. Establishment of standard performance.
- b. Measurement of actual performance.
- c. Comparison of actual performance with the standards and finding out deviation if any.
- d. Corrective action.

➤ **Henry Fayol's 14 Principles of Management:**

A principle refers to a fundamental truth. It establishes cause and effect relationship between two or more variables under given situation. They serve as a guide to thought & actions. Therefore, management principles are the statements of fundamental truth based on logic which provides guidelines for managerial decision making and actions.

These principles are derived: -

- a. On the basis of observation and analysis i.e. practical experience of managers.
- b. By conducting experimental studies.

There are 14 Principles of Management described by Henri Fayol.

1. Division of Labor

- a. Henri Fayol has stressed on the specialization of jobs.
- b. He recommended that work of all kinds must be divided & subdivided and allotted to various persons according to their expertise in a particular area.
- c. Subdivision of work makes it simpler and results in efficiency.
- d. It also helps the individual in acquiring speed, accuracy in his performance.
- e. Specialization leads to efficiency & economy in spheres of business.

2. Party of Authority & Responsibility

- a. Authority & responsibility are co-existing.
- b. If authority is given to a person, he should also be made responsible.
- c. In a same way, if anyone is made responsible for any job, he should also have concerned authority.
- d. Authority refers to the right of superiors to get exactness from their subordinates whereas responsibility means obligation for the performance of the job assigned.
- e. There should be a balance between the two i.e. they must go hand in hand.
- f. Authority without responsibility leads to irresponsible behavior whereas responsibility without authority makes the person ineffective.

3. Principle of One Boss

- a. A sub-ordinate should receive orders and be accountable to one and only one boss at a time.
- b. In other words, a sub-ordinate should not receive instructions from more than one person because -

- It undermines authority
- Weakens discipline
- Divides loyalty
- Creates confusion
- Delays and chaos
- Escaping responsibilities

- Duplication of work
- Overlapping of efforts
 - c. Therefore, dual sub-ordination should be avoided unless and until it is absolutely essential.
 - d. Unity of command provides the enterprise a disciplined, stable & orderly existence.
 - e. It creates harmonious relationship between superiors and sub-ordinates.

4. Unity of Direction

- a. Fayol advocates one head one plan which means that there should be one plan for a group of activities having similar objectives.
- b. Related activities should be grouped together. There should be one plan of action for them and they should be under the charge of a particular manager.
- c. According to this principle, efforts of all the members of the organization should be directed towards common goal.
- d. Without unity of direction, unity of action cannot be achieved.
- e. In fact, unity of command is not possible without unity of direction.

Basis	Unity of command	Unity of direction
Meaning	It implies that a sub-ordinate should receive orders & instructions from only one boss.	It means one head, one plan for a group of activities having similar objectives.
Nature	It is related to the functioning of personnel's.	It is related to the functioning of departments, or organization as a whole.
Necessity	It is necessary for fixing responsibility of each subordinates.	It is necessary for sound organization.
Advantage	It avoids conflicts, confusion & chaos.	It avoids duplication of efforts and wastage of resources.
Result	It leads to better superior sub-ordinate relationship.	It leads to smooth running of the enterprise.

Therefore it is obvious that they are different from each other but they are dependent on each other i.e. unity of direction is a pre-requisite for unity of command. But it does not automatically comes from the unity of direction.

5. Equity

- a. Equity means combination of fairness, kindness & justice.
- b. The employees should be treated with kindness & equity if devotion is expected of them.
- c. It implies that managers should be fair and impartial while dealing with the subordinates.
- d. They should give similar treatment to people of similar position.

- e. They should not discriminate with respect to age, caste, sex, religion, relation etc.
- f. Equity is essential to create and maintain cordial relations between the managers and sub-ordinate.
- g. But equity does not mean total absence of harshness.
- h. Fayol was of opinion that, "at times force and harshness might become necessary for the sake of equity".

6. Order

- a. This principle is concerned with proper & systematic arrangement of things and people.
- b. Arrangement of things is called material order and placement of people is called social order.
- c. Material order- There should be safe, appropriate and specific place for every article and every place to be effectively used for specific activity and commodity.
- d. Social order- Selection and appointment of most suitable person on the suitable job. There should be a specific place for every one and everyone should have a specific place so that they can easily be contacted whenever need arises.

7. Discipline

- a. According to Fayol, "Discipline means sincerity, obedience, respect of authority & observance of rules and regulations of the enterprise".
- b. This principle applies that subordinate should respect their superiors and obey their order.
- c. It is an important requisite for smooth running of the enterprise.
- d. Discipline is not only required on path of subordinates but also on the part of management.
- e. Discipline can be enforced if -
 - There are good superiors at all levels.
 - There are clear & fair agreements with workers.
 - Sanctions (punishments) are judiciously applied.

8. Initiative

- a. Workers should be encouraged to take initiative in the work assigned to them.
- b. It means eagerness to initiate actions without being asked to do so.
- c. Fayol advised that management should provide opportunity to its employees to suggest ideas, experiences & new method of work.
- d. It helps in developing an atmosphere of trust and understanding.
- e. People then enjoy working in the organization because it adds to their zeal and energy.
- f. To suggest improvement in formulation & implementation of place.
- g. They can be encouraged with the help of monetary & non-monetary incentives.

9. Fair Remuneration

- a. The quantum and method of remuneration to be paid to the workers should be fair, reasonable, satisfactory & rewarding of the efforts.

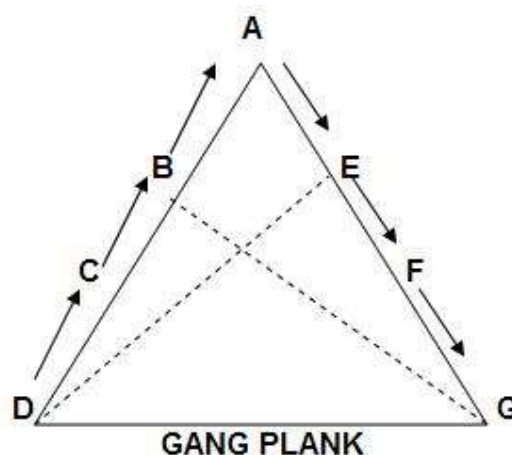
- b. As far as possible it should accord satisfaction to both employer and the employees.
- c. Wages should be determined on the basis of cost of living, work assigned, financial position of the business, wage rate prevailing etc.
- d. Logical & appropriate wage rates and methods of their payment reduce tension & differences between workers & management creates harmonious relationship and pleasing atmosphere of work.
- e. Fayol also recommended provision of other benefits such as free education, medical & residential facilities to workers.

10. **Stability of Tenure**

- a. Fayol emphasized that employees should not be moved frequently from one job position to another i.e. the period of service in a job should be fixed.
- b. Therefore employees should be appointed after keeping in view principles of recruitment & selection but once they are appointed their services should be served.
- c. According to Fayol. "Time is required for an employee to get used to a new work & succeed to doing it well but if he is removed before that he will not be able to render worthwhile services".
- d. As a result, the time, effort and money spent on training the worker will go waste.
- e. Stability of job creates team spirit and a sense of belongingness among workers which ultimately increase the quality as well as quantity of work.

11. **Scalar Chain**

- a. Fayol defines scalar chain as "The chain of superiors ranging from the ultimate authority to the lowest".
- b. Every orders, instructions, messages, requests, explanation etc. has to pass through Scalar chain.
- c. But, for the sake of convenience & urgency, this path can be cut short and this short cut is known as Gang Plank.
- d. A **Gang Plank** is a temporary arrangement between two different points to facilitate quick & easy communication as explained below:



In the figure given, if D has to communicate with G he will first send the communication upwards with the help of C, B to A and then downwards with the help of E and F to G

which will take quite some time and by that time, it may not be worth therefore a gang plank has been developed between the two.

- e. **Gang Plank** clarifies that management principles are not rigid rather they are very flexible. They can be moulded and modified as per the requirements of situations

12. Sub-Ordination of Individual Interest to General Interest

- a. An organization is much bigger than the individual it constitutes therefore interest of the undertaking should prevail in all circumstances.
- b. As far as possible, reconciliation should be achieved between individual and group interests.
- c. But in case of conflict, individual must sacrifice for bigger interests.
- d. In order to achieve this attitude, it is essential that -

- Employees should be honest & sincere.
- Proper & regular supervision of work.
- Reconciliation of mutual differences and clashes by mutual agreement. For example, for change of location of plant, for change of profit sharing ratio, etc.

13. Espirit De' Corps (can be achieved through unity of command)

- a. It refers to team spirit i.e. harmony in the work groups and mutual understanding among the members.
- b. Spirit De' Corps inspires workers to work harder.
- c. Fayol cautioned the managers against dividing the employees into competing groups because it might damage the moral of the workers and interest of the undertaking in the long run.
- d. To inculcate Espirit De' Corps following steps should be undertaken -
 - There should be proper co-ordination of work at all levels
 - Subordinates should be encouraged to develop informal relations among themselves.
 - Efforts should be made to create enthusiasm and keenness among subordinates so that they can work to the maximum ability.
 - Efficient employees should be rewarded and those who are not up to the mark should be given a chance to improve their performance.
 - Subordinates should be made conscious of that whatever they are doing is of great importance to the business & society.
- e. He also cautioned against the more use of Britain communication to the subordinates i.e. face to face communication should be developed. The managers should infuse team spirit & belongingness. There should be no place for misunderstanding. People then enjoy working in the organization & offer their best towards the organization.

14. Centralization & De-Centralization

- a. Centralization means concentration of authority at the top level. In other words, centralization is a situation in which top management retains most of the decision making authority.
- b. Decentralization means disposal of decision making authority to all the levels of the organization. In other words, sharing authority downwards is decentralization.

- c. According to Fayol, “Degree of centralization or decentralization depends on no. of factors like size of business, experience of superiors, dependability & ability of subordinates etc.
- d. Anything which increases the role of subordinate is decentralization & anything which decreases it is centralization.
- e. Fayol suggested that absolute centralization or decentralization is not feasible. An organization should strike to achieve a lot between the two.

➤ **Features of Principles of Management:**

1. Principles of Management are *Universal*

- a. Management principles are applicable to all kinds of organizations - business & non business.
- b. They are applicable to all levels of management.
- c. Every organization must make best possible use by the use of management principles.
- d. Therefore, they are universal or all pervasive.

2. Principles of Management are *Flexible*

- a. Management principles are dynamic guidelines and not static rules.
- b. There is sufficient room for managerial discretion i.e. they can be modified as per the requirements of the situation.
- c. Modification & improvement is a continuous phenomenon in case of principles of management.

3. Principles of Management have a *Cause & Effect Relationship*

- a. Principles of management indicate cause and effect relationship between related variables.
- b. They indicate what will be the consequence or result of certain actions. Therefore, if one is known, the other can be traced.

4. Principles of Management - *Aims at Influencing Human Behavior*

- a. Human behavior is complex and unpredictable.
- b. Management principles are directed towards regulating human behavior so that people can give their best to the organization.
- c. Management is concerned with integrating efforts and harmonizing them towards a goal.
- d. But in certain situations even these principles fail to understand human behavior.

5. Principles of Management are of *Equal Importance*

- a. All management principles are equally important.
- b. No particular principle has greater importance than the other.
- c. They are all required together for the achievement of organizational goals.

➤ **Importance of Management Principles:**

Following are the main importance of the Principles of Management.

- 1. Improves Understanding.**
- 2. Direction for Training of Managers.**
- 3. Role of Management.**
- 4. Guide to Research in Management.**

1. **Improves Understanding** - From the knowledge of principles managers get indication on how to manage an organization. The principles enable managers to decide what should be done to accomplish given tasks and to handle situations which may arise in management. These principles make managers more efficient.
2. **Direction for Training of Managers** - Principles of management provide understanding of management process what managers would do to accomplish what. Thus, these are helpful in identifying the areas of management in which existing & future managers should be trained.
3. **Role of Management** - Management principles makes the role of managers concrete. Therefore these principles act as ready reference to the managers to check whether their decisions are appropriate. Besides these principles define managerial activities in practical terms. They tell what a manager is expected to do in specific situation.
4. **Guide to Research in Management** - The body of management principles indicate lines along which research should be undertaken to make management practical and more effective. The principles guide managers in decision making and action. The researchers can examine whether the guidelines are useful or not. Anything which makes management research more exact & pointed will help improve management practice.

➤ **Scientific Management by Taylor:**

Fredrick Winslow Taylor (March 20, 1856 - March 21, 1915) commonly known as '**Father of Scientific Management**' started his career as an operator and rose to the position of chief engineer. He conducted various experiments during this process which forms the basis of scientific management. It implies application of scientific principles for studying & identifying management problems.

According to Taylor, "Scientific Management is an art of knowing exactly what you want your men to do and seeing that they do it in the best and cheapest way". In Taylors view, if a work is analysed scientifically it will be possible to find *one best way* to do it. Hence scientific management is a thoughtful, organized, dual approach towards the job of management against hit or miss or Rule of Thumb.

According to *Drucker*, "The cost of scientific management is the organized study of work, the analysis of work into simplest element & systematic management of worker's performance of each element".

➤ **Principles of Scientific Management:**

1. **Development of Science for each part of men's job (replacement of rule of thumb)**

- a. This principle suggests that work assigned to any employee should be observed, analyzed with respect to each and every element and part and time involved in it.
- b. This means replacement of odd rule of thumb by the use of method of enquiry, investigation, data collection, analysis and framing of rules.
- c. Under scientific management, decisions are made on the basis of facts and by the application of scientific decisions.

2. **Scientific Selection, Training & Development of Workers**

- a. There should be scientifically designed procedure for the selection of workers.
- b. Physical, mental & other requirement should be specified for each and every job.
- c. Workers should be selected & trained to make them fit for the job.
- d. The management has to provide opportunities for development of workers having better capabilities.
- e. According to Taylor efforts should be made to develop each employee to his greatest level and efficiency & prosperity.

3. Co-operation between Management & workers or Harmony not discord

- a. Taylor believed in co-operation and not individualism.
- b. It is only through co-operation that the goals of the enterprise can be achieved efficiently.
- c. There should be no conflict between managers & workers.
- d. Taylor believed that interest of employer & employees should be fully harmonized so as to secure mutually understanding relations between them.

4. Division of Responsibility

- a. This principle determines the concrete nature of roles to be played by different level of managers & workers.
- b. The management should assume the responsibility of planning the work whereas workers should be concerned with execution of task.
- c. Thus planning is to be separated from execution.

5. Mental Revolution

- a. The workers and managers should have a complete change of outlook towards their mutual relation and work effort.
- b. It requires that management should create suitable working condition and solve all problems scientifically.
- c. Similarly workers should attend their jobs with utmost attention, devotion and carefulness. They should not waste the resources of enterprise.
- d. Handsome remuneration should be provided to workers to boost up their moral.
- e. It will create a sense of belongingness among worker.
- f. They will be disciplined, loyal and sincere in fulfilling the task assigned to them.
- g. There will be more production and economical growth at a faster rate.

6. Maximum Prosperity for Employer & Employees

- a. The aim of scientific management is to see maximum prosperity for employer and employees.
- b. It is important only when there is opportunity for each worker to attain his highest efficiency.
- c. Maximum output & optimum utilization of resources will bring higher profits for the employer & better wages for the workers.
- d. There should be maximum output in place of restricted output.
- e. Both managers & workers should be paid handsomely.

➤ **Techniques of Scientific Management:**

Time Study

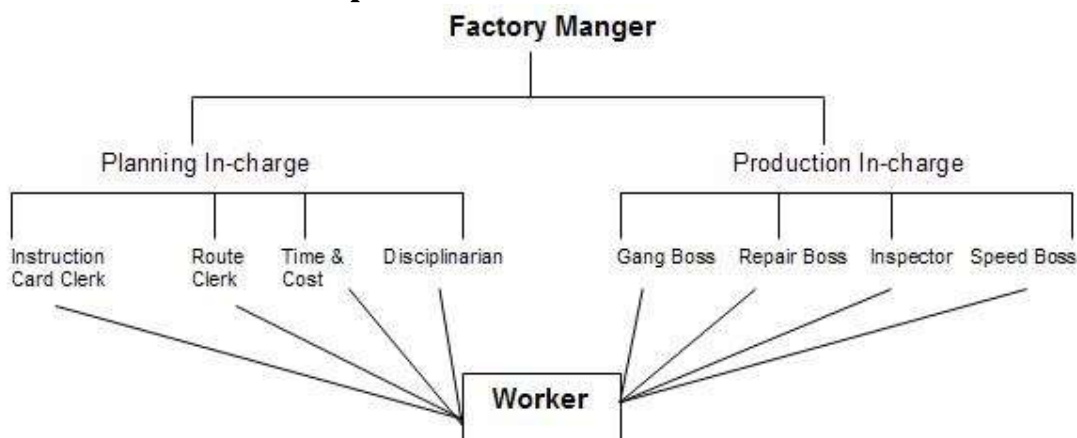
- a. It is a technique which enables the manager to ascertain standard time taken for performing a specified job.
- b. Every job or every part of it is studied in detail.
- c. This technique is based on the study of an average worker having reasonable skill and ability.
- d. Average worker is selected and assigned the job and then with the help of a stop watch, time is ascertained for performing that particular job.
- e. Taylor maintained that Fair day's work should be determined through observations, experiment and analysis by keeping in view an average worker.

Standard Time × Working Hours = Fair Day's Work

f. Motion Study

- a. In this study, movement of body and limbs required to perform a job are closely observed.
- b. In other words, it refers to the study of movement of an operator on machine involved in a particular task.
- c. The purpose of motion study is to eliminate useless motions and determine the best way of doing the job.
- d. By undertaking motion study an attempt is made to know whether some elements of a job can be eliminated combined or their sequence can be changed to achieve necessary rhythm.
- e. Motion study increases the efficiency and productivity of workers by cutting down all wasteful motions.

g. Functional Foremanship



- a. Taylor advocated functional foremanship for achieving ultimate specification.
- b. This technique was developed to improve the quality of work as single supervisor may not be an expert in all the aspects of the work.
- c. Therefore workers are to be supervised by specialist foreman.
- d. The scheme of functional foremanship is an extension of principle of specialization at the supervisory level.
- e. Taylor advocated appointment of 8 foremen, 4 at the planning level & other 4 at implementation level.

- f. The names & function of these specialist foremen are: -
- Instruction card clerk concerned with tagging down of instructions according to which workers are required to perform their job
 - Time & cost clerk is concerned with setting a time table for doing a job & specifying the material and labor cost involved in it.
 - Route clerk determines the route through which raw materials has to be passed.
 - Shop Disciplinarians are concerned with making rules and regulations to ensure discipline in the organization.
 - Gang boss makes the arrangement of workers, machines, tools, workers etc.
 - Speed boss concerned with maintaining the speed and to remove delays in the production process.
 - Repair boss concerned with maintenance of machine, tools and equipments.
 - Inspector is concerned with maintaining the quality of product.

h. Standardization

- a. It implies the physical attitude of products should be such that it meets the requirements & needs of customers.
- b. Taylor advocated that tools & equipments as well as working conditions should be standardized to achieve standard output from workers.
- c. Standardization is a means of achieving economics of production.
- d. It seems to ensure -
 - The line of product is restricted to predetermined type, form, design, size, weight, quality. Etc
 - There is manufacture of identical parts and components.
 - Quality & standards have been maintained.
 - Standard of performance are established for workers at all levels.

i. Differential Piece Wage Plan

- a. This tech of wage payment is based on efficiency of worker.
- b. The efficient workers are paid more wages than inefficient one.
- c. On the other hand, those workers who produce less than standard no. of pieces are paid wages at lower rate than prevailing rate i.e. worker is penalized for his inefficiency.
- d. This system is a source of incentive to workers who improving their efficiency in order to get more wages.
- e. It also encourages inefficient workers to improve their performance and achieve their standards.
- f. It leads to mass production which minimizes cost and maximizes profits.

j. Other Techniques

- a. Various other techniques have been developed to create ordeal relationship between management and workers and also to create better understanding on part of works.
- b. Those includes use of instruction cards, strict rules & regulations, graphs, slides, charts etc, so as to increase efficiency of workers.

➤ **Criticism of Scientific Management:**

Although it is accepted that the scientific management enables the management to put resources to its best possible use and manner, yet it has not been spared of severe criticism.

Workers Viewpoint

1. **Unemployment** - Workers feel that management reduces employment opportunities from them through replacement of men by machines and by increasing human productivity less workers are needed to do work leading to chucking out from their jobs.
2. **Exploitation** - Workers feel they are exploited as they are not given due share in increasing profits which is due to their increased productivity. Wages do not rise in proportion as rise in production. Wage payment creates uncertainty & insecurity (beyond a standard output, there is no increase in wage rate).
3. **Monotony** - Due to excessive specialization the workers are not able to take initiative on their own. Their status is reduced to being mere cogs in wheel. Jobs become dull. Workers loose interest in jobs and derive little pleasure from work.
4. **Weakening of Trade Union** - To everything is fixed & predetermined by management. So it leaves no room for trade unions to bargain as everything is standardized, standard output, standard working conditions, standard time etc. This further weakens trade unions, creates a rift between efficient & in efficient workers according to their wages.
5. **Over speeding** - the scientific management lays standard output, time so they have to rush up and finish the work in time. These have adverse effect on health of workers. The workers speed up to that standard output, so scientific management drives the workers to rush towards output and finish work in standard time.

Employer's Viewpoint

1. **Expensive** - Scientific management is a costly system and a huge investment is required in establishment of planning dept., standardization, work study, training of workers. It may be beyond reach of small firms. Heavy fixed investment leads to increase in overhead costs.
2. **Time Consuming** - Scientific management requires mental revision and complete reorganizing of organization. A lot of time is required for work, study, standardization & specialization. During this overhauling of organization, the work suffers.
3. **Deterioration of Quality**

➤ **Study of Fayol and Taylor:**

Both the persons have contributed to development of science of management. The contribution of these two pioneers in the field of science of management has been reviewed as "The work of Taylor & Fayol was, of course, especially complementary. They both realized that problem of personnel & its management at all levels is the key to individual success. Both applied scientific method to this problem that Taylor worked primarily from operative level, from bottom to upward, while Fayol

concentrated on managing director and work downwards, was merely a reflection of their very different careers". They both differ from each other in following aspects: -

1. Taylor looked at management from supervisory viewpoint & tried to improve efficiency at operating level. He moved upwards while formulating theory. On the other hand, Fayol analyzed management from level of top management downward. Thus, Fayol could afford a broader vision than Taylor.
2. Taylor called his philosophy "Scientific Management" while Fayol described his approach as "A general theory of administration".
3. Main aim of Taylor - to improve labor productivity & to eliminate all type of waste through standardization of work & tools. Fayol attempted to develop a universal theory of management and stressed upon need for teaching the theory of management.
4. Taylor focused his attention on fact by management and his principles are applicable on shop floor. But Fayol concentrated on function of managers and on general principles of management which could be equally applied in all.

Similarity - Both emphasized mutual co-operation between employment and employees.

Spheres of Human Activity

Fayol's theory is more widely applicable than that of Taylor, although Taylor's philosophy has undergone a big change Under influence of modern development, but Fayol's principles of management have stood the test of time and are still being accepted as the core of management theory.

Psychologists View Point

According to Psychologists, Taylor's study had following drawbacks: -

1. Ignores human factors - Considers them as machines. Ignores human requirements, want and aspirations.
2. Separation of Planning and Doing.
3. Dissatisfaction - Comparing performance with others.
4. No best way - Scientific management does not give one best way for solving problems.

Basis	Taylor	Fayol
Human aspect	Taylor disregards human elements and there is more stress on improving men, materials and methods	Fayol pays due regards on human element. E.g. Principle of initiative, Espirit De' Corps and Equity recognizes a need for human relations
Status	Father of scientific management	Father of management principles
Efficiency & administration	Stressed on efficiency	Stressed on general administration

Approach	It has micro-approach because it is restricted to factory only	It has macro-approach and discusses general principles of management which are applicable in every field of management.
Scope of principles	These principles are restricted to production activities	These are applicable in all kinds of organization regarding their management affairs
Achievement	Scientific management	Administrative management

Henry Fayol's 14 Principles of Management

1. Division of Work: The work should be divided among the individuals on the basis of their specializations, so as to ensure their full focus on the effective completion of the task assigned to them.

2. Authority and Responsibility: The authority and responsibility are related to each other. Authority means the right to give orders while the responsibility means being accountable. Thus, to whomsoever the authority is given to exact obedience must be held accountable for anything that goes wrong.

3. Discipline: The individuals working in the organization must be well-disciplined. The discipline refers to the obedience, behavior, respect shown by the employees towards others.

4. Unity of Command: According to this principle, an individual in the organization must receive orders from only one supervisor. In case an individual has the reporting relationship with more than one supervisor then there may be more conflicts with respect to whose instructions to be followed.

5. Unity of Direction: Unity of direction means, all the individual or groups performing different kinds of a task must be directed towards the common objective of the organization.

6. Subordination of Individual to General Interest: According to this principle, the individual and organizational interest must coincide to get the task accomplished. The individual must not place his personal interest over the common interest, in case there a conflict.

7. Remuneration of Personnel: The payment methods should be fair enough such that both the employees and the employers are satisfied.

8. Centralization: Fayol defines centralization as the means of reducing the importance of subordinate's role in the organization, and the extent to which the authority is centralized or decentralized depends on the organization type in which the manager is working.

9. Scalar Chain: This means there should be a proper hierarchy in the organization that facilitates the proper flow of authority and communication. It suggests that each individual must know from whom he shall get instructions and to whom he is accountable to. Also, the communication either going up or down must pass through each level of authority. In certain circumstances where the quick flow of communication

is required, the rigidity of a scalar chain can pose problems. Thus, Henry Fayol has suggested “gang plank” which means anybody in the hierarchy can interact with each other irrespective of their authority levels.

10. Order: This principle is related to the systematic arrangement of things and people in the organization. This means every material should be in its place, and there should be a place for every material. Likewise, in the case of people, a right man should be in the right job.

11. Equity: All the employees in the organization must be treated equally with respect to the justice and kindliness.

12. Stability of Tenure: The employees should be retained in the organization, as new appointments may incur huge selection and training cost.

13. Initiative: The manager must motivate his subordinates to think and take actions to execute the plan. They must be encouraged to take initiatives as this increases the zeal and energy among the individuals.

14. Esprit de Corps: This means “unity is strength”. Thus, every individual must work together to gain synergy and establish cordial relations with each other.

Thus, Henry Fayol emphasized on the managerial activities and classified these further into five sub-activities Viz. Planning, Organizing, Directing, coordinating and controlling and for the better understanding of these he had proposed 14 principles of management.

Administrative Theory

Definition: The Administrative Theory is based on the concept of departmentalization, which means the different activities to be performed for achieving the common purpose of the organization should be identified and be classified into different groups or departments, such that the task can be accomplished effectively.

Differences between Scientific Method and Administrative Method:

The administrative theory is given by Henri Fayol, who believed that more emphasis should be laid on organizational management and the human and behavioral factors in the management. Thus, unlike the scientific management theory of Taylor where more emphasis was on improving the worker’s efficiency and minimizing the task time, here the main focus is on how the management of the organization is structured and how well the individuals therein are organized to accomplish the tasks given to them. The other difference between these two is, the administrative theory focuses on improving the efficiency of management first so that the processes can be standardized and then moves to the operational level where the individual workers are made to learn the changes and implement those in their routine jobs. While in the case of the scientific management theory, it emphasizes on improving the efficiency of the workers at the operating level first which in turn improves the efficiency of the management. Thus, the administrative theory follows the top-down approach while the scientific management theory follows the bottom-up approach.

Bureaucratic Methods

Definition: The Bureaucratic Theory is related to the structure and administrative process of the organization and is given by Max Weber, who is regarded as the father of bureaucracy. What is Bureaucracy? The term bureaucracy means the rules and regulations, processes, procedures, patterns, etc. that are formulated to reduce the complexity of organization's functioning.

According to Max Weber, the bureaucratic organization is the most rational means to exercise a vital control over the individual workers. A bureaucratic organization is one that has a hierarchy of authority, specialized work force, standardized principles, rules and regulations, trained administrative personnel, etc.

The Weber's bureaucratic theory differs from the traditional managerial organization in the sense; it is impersonal, and the performance of an individual is judged through rule-based activity and the promotions are decided on the basis of one's merits and performance.

Also, there is a hierarchy in the organization, which represents the clear lines of authority that enable an individual to know his immediate supervisor to whom he is directly accountable. This shows that bureaucracy has many implications in varied fields of organization theory.

Thus, Weber's bureaucratic theory contributes significantly to the classical organizational theory which explains that precise organization structure along with the definite lines of authority is required in an organization to have an effective workplace.

Behavioural Approach

1. Classical Theory

Definition: The Classical Theory is the traditional theory, wherein more emphasis is on the organization rather than the employees working therein. According to the classical theory, the organization is considered as a machine and the human beings as different components/parts of that machine.

The classical theory has the following characteristics:

- It is built on an accounting model.
- It lays emphasis on detecting errors and correcting them once they have been committed.
- It is more concerned with the amount of output than the human beings.
- The human beings are considered to be relatively homogeneous and unmodifiable. Thus, labor is not divided on the basis of different kinds of jobs to be performed in an organization.
- It is assumed that employees are relatively stable in terms of the change, in an organization.
- It is assumed that the authority and control should be vested with the central authority only, in order to have a centralized and integrated system.

Some writers of the classical theory emphasized on the technological aspects of the organization and how the individuals can be made more efficient, while others emphasized on the structural aspects of an organization so that individuals collectively can be made more efficient. Thus, this purview of different writers resulted in the formation of two distinct streams:

- Scientific Management Stream
- Administrative Management Stream

Thus, according to this theory the human beings are just considered as a means of production.

2. NeoClassical theory

Definition: The NeoClassical Theory is the extended version of the classical theory wherein the behavioral sciences gets included into the management. According to this theory, the organization is the social system, and its performance does get affected by the human actions.

The classical theory laid emphasis on the physiological and mechanical variables and considered these as the prime factors in determining the efficiency of the organization. But, when the efficiency of the organization was actually checked, it was found out that, despite the positive aspect of these variables the positive response in work behavior was not evoked.

Thus, the researchers tried to identify the reasons for human behavior at work. This led to the formation of a NeoClassical theory which primarily focused on the human beings in the organization. This approach is often referred to as “behavioral theory of organization” or “human relations” approach in organizations.

The NeoClassical theory posits that an organization is the combination of both the formal and informal forms of organization, which is ignored by the classical organizational theory. The informal structure of the organization formed due to the social interactions between the workers affects and gets affected by the formal structure of the organization. Usually, the conflicts between the organizational and individual interest exist, thus the need to integrate these arises.

The NeoClassical theory asserts that an individual is diversely motivated and wants to fulfill certain needs. The communication is an important yardstick to measure the efficiency of the information being transmitted from and to different levels of the organization. The teamwork is the prerequisite for the sound functioning of the organization, and this can be achieved only through a behavioral approach, i.e. how individual interact and respond to each other.

Human Relation Movement

The first management theory, Frederick Taylor's scientific management theory, dates back to 1880. From there, many others were born, like Max Weber's bureaucratic theory and Mary Parker Follett's theory of organizational management. Among the countless theorists and theories, the human relations movement was born. It represents a crucial shift in management that encouraged a more personal type of management. Here are the basics of the movement, and how it affected today's style of management.

Theory X: Negative outlook on workers

- Management is responsible for organizing company components in the interest of economic ends.
- Managers should direct workers' efforts, motivate them, control their actions and modify their behavior to suit organizational needs.

- Managers must persuade, reward, punish and control workers to stop passiveness and resistance.

Theory Y: Positive outlook on workers

- Management is responsible for organizing company components in the interest of economic ends.
- Passiveness or resistance to organizational needs develop with experience in organizations.
- Motivation, potential for development, capacity for assuming responsibility, and readiness to direct behavior toward organizational goals are naturally instilled in people.
- Above all, management should focus on creating a system where workers can achieve their own goals in line with company objectives.

Theory Y shared similarities with the human relations movement, noting that workers can be trusted and are naturally motivated and efficient. However, American psychologist Abraham Maslow had developed a theory of hierarchical needs, which McGregor referred to in his book, to indicate employee incentives to perform well. From lowest to highest in the hierarchy, those are physiological needs, safety needs, social needs, ego needs and self-fulfillment needs.

The two theories were important additions to management studies, and the human relations movement progressed by aligning individual needs with organizational needs.

The results

The human relations movement was a crucial event in management history and a major contribution to today's style of leading. The behavioral sciences helped managers and theorists understand how to increase productivity by ditching the primary focus on organizations over their workers. Contemporary theories, like the contingency theory and systems theory, focus more on the importance and effect of every individual in a company – and how they can achieve their own goals while benefiting their organization.

Behavioural Science Approach

The behavioral science approach to management focuses on the psychological and sociological processes (attitude, motivations, group dynamics) that influence employee performance. While the classical approach focuses on the job of workers, the behavioral approach focuses on the workers in these jobs. Workers desisted the formal and impersonal approach of classical writers. Behavioral approach started in 1930. This gave rise to the Behavioral science approach to management. Two branches contributed to the Behavioral approach.

1. Human Relations Movements: The human relations movement refers to the approach to management and worker productivity that takes into account a person's motivation, satisfaction, and relationship with others in the workplace. The human relations movement grew from the Hawthorne studies.

2. Development of Organisational Behavior: Pioneers of the human relation movement stressed inter-personal relations and neglected the group behavior patterns. This led to the development of field of organisational behavior. It respects a more. Interdisciplinary and multi-dimensional approach to worker behavior organisation behavior involves the study of the attitudes, behavior patterns and performance of individuals and group in an organisational setting. It says that:

- Man is not a social individual, he is a complex individual.
- The role and contribution of organisation behavior in workers.
- It discussed the psychological variables like motivations, leading etc.
- Man is a self-actualizing being.

Modern Approach to Management:

System Approach:

In the 1960, an approach to management appeared which try to unify the prior schools of thought. This approach is commonly known as 'Systems Approach'. Its early contributors include Ludwing Von Bertalanffy, Lawrence J. Henderson, W.G. Scott, Deniel Katz, Robert L. Kahn, W. Buckley and J.D. Thompson.

They viewed organisation as an organic and open system, which is composed of interacting and interdependent parts, called subsystems. The system approach is top took upon management as a system or as "an organised whole" made up of sub-systems integrated into a unity or orderly totality.

Systems approach is based on the generalization that everything is inter-related and inter-dependent. A system is composed of related and dependent element which when in interaction, forms a unitary whole. A system is simply an assemblage or combination of things or parts forming a complex whole.

One its most important characteristic is that it is composed of hierarchy of sub-systems. That is the parts forming the major system and so on. For example, the world can be considered-to be a system in which various national economies are sub-systems. In turn, each national economy is composed of its various industries, each industry is composed of firms' and of course a firm can be considered a system composed of sub-systems sudi as production, marketing, finance, accounting and so on.

Features of Systems Approach:

- (i) A system consists of interacting elements. It is set of inter-related and inter-dependent parts arranged in a manner that produces a unified whole.
- (ii) The various sub-systems should be studied in their inter-relationships rather, than in isolation from each other.
- (iii) An organisational system has a boundary that determines which parts are internal and which are external.
- (iv) A system does not exist in a vacuum. It receives information, material and energy from other systems as inputs. These inputs undergo a transformation process within a system and leave the system as output to other systems.
- (v) An organisation is a dynamic system as it is responsive to its environment. It is vulnerable to change in its environment.

Contingency Approach:

The contingency approach is a management theory that suggests the most appropriate style of management is dependent on the context of the situation and that adopting a single, rigid style is inefficient in the long term. Contingency managers typically pay attention to both the situation and their own styles and make efforts to ensure both interact efficiently.

The contingency approach contrasts with other forms of leadership, such as trait-based management, whereby personality and individual make-up predict patterns of management and responses to given situations over time. Another management approach is style-based app

Contingency theory is beneficial to organisations because of the potential for learning from specific situations and using these lessons to influence future management of the same or similar situations. The ability to adapt to external pressures and changes is also an advantage. Contingency theory may also produce more well-rounded leaders who are able to develop their skills in multiple areas.

Difference between Systems and Contingency Approach**Systems Approach:**

1. The emphasis is on interdependence and interaction among sub-systems.
2. The focus is on the internal environment and sub-systems of the organisation.
3. It treats all organisations alike and the background of the organisation is not taken into account.
4. The organisation interacts with the environment and adjusts as per the changes.
5. It provides a theoretical model of understanding the organisation and its sub-systems.
6. It is silent on the validity of classical principles of management.

Contingency Approach:

1. It emphasises the impact of environment on organisational design and managerial style.
2. The focus is on external environment of the organisation.
3. Each organisation is taken as unique entity. Different organisations have different nature and face different situations.
4. The impact of the environment on organisation structure and managerial style is the major concern of contingency approach.
5. It suggests practical solutions to organisational problems.
6. It rejects the blind application of classical principles of management.

UNIT 2

Planning

Planning means looking ahead and chalking out future courses of action to be followed. It is a preparatory step. It is a systematic activity which determines when, how and who is going to perform a specific job. Planning is a detailed programme regarding future courses of action.

It is rightly said “Well plan is half done”. Therefore planning takes into consideration available & prospective human and physical resources of the organization so as to get effective co-ordination, contribution & perfect adjustment. It is the basic management function which includes formulation of one or more detailed plans to achieve optimum balance of needs or demands with the available resources.

According to Urwick, “Planning is a mental predisposition to do things in orderly way, to think before acting and to act in the light of facts rather than guesses”. Planning is deciding best alternative among others to perform different managerial functions in order to achieve predetermined goals.

According to Koontz & O'Donell, “Planning is deciding in advance what to do, how to do and who is to do it. Planning bridges the gap between where we are to, where we want to go. It makes possible things to occur which would not otherwise occur”.

Steps in Planning Function

Planning function of management involves following steps:-

Establishment of objectives

- Planning requires a systematic approach.
- Planning starts with the setting of goals and objectives to be achieved.
- Objectives provide a rationale for undertaking various activities as well as indicate direction of efforts.
- Moreover objectives focus the attention of managers on the end results to be achieved.
- As a matter of fact, objectives provide nucleus to the planning process. Therefore, objectives should be stated in a clear, precise and unambiguous language. Otherwise the activities undertaken are bound to be ineffective.
- As far as possible, objectives should be stated in quantitative terms. For example, Number of men working, wages given, units produced, etc. But such an objective cannot be stated in quantitative terms like performance of quality control manager, effectiveness of personnel manager.
- Such goals should be specified in qualitative terms.
- Hence objectives should be practical, acceptable, workable and achievable.

Establishment of Planning Premises

- Planning premises are the assumptions about the likely shape of events in future.
- They serve as a basis of planning.
- Establishment of planning premises is concerned with determining where one tends to deviate from the actual plans and causes of such deviations.
- It is to find out what obstacles are there in the way of business during the course of operations.

- Establishment of planning premises is concerned to take such steps that avoids these obstacles to a great extent.
- Planning premises may be internal or external. Internal includes capital investment policy, management labour relations, philosophy of management, etc. Whereas external includes socio- economic, political and economical changes.
- Internal premises are controllable whereas external are non- controllable.

Choice of alternative course of action

- When forecast are available and premises are established, a number of alternative course of actions have to be considered.
- For this purpose, each and every alternative will be evaluated by weighing its pros and cons in the light of resources available and requirements of the organization.
- The merits, demerits as well as the consequences of each alternative must be examined before the choice is being made.
- After objective and scientific evaluation, the best alternative is chosen.
- The planners should take help of various quantitative techniques to judge the stability of an alternative.

Formulation of derivative plans

- Derivative plans are the sub plans or secondary plans which help in the achievement of main plan.
- Secondary plans will flow from the basic plan. These are meant to support and expediate the achievement of basic plans.
- These detail plans include policies, procedures, rules, programmes, budgets, schedules, etc. For example, if profit maximization is the main aim of the enterprise, derivative plans will include sales maximization, production maximization, and cost minimization.
- Derivative plans indicate time schedule and sequence of accomplishing various tasks.

Securing Co-operation

- After the plans have been determined, it is necessary rather advisable to take subordinates or those who have to implement these plans into confidence.
- The purposes behind taking them into confidence are :-
 1. Subordinates may feel motivated since they are involved in decision making process.
 2. The organization may be able to get valuable suggestions and improvement in formulation as well as implementation of plans.
 3. Also the employees will be more interested in the execution of these plans.

Follow up/Appraisal of plans

- After choosing a particular course of action, it is put into action.
- After the selected plan is implemented, it is important to appraise its effectiveness.

- This is done on the basis of feedback or information received from departments or persons concerned.
- This enables the management to correct deviations or modify the plan.
- This step establishes a link between planning and controlling function.
- The follow up must go side by side the implementation of plans so that in the light of observations made, future plans can be made more realistic.

Characteristics of Planning

Planning is goal-oriented.

- Planning is made to achieve desired objective of business.
- The goals established should general acceptance otherwise individual efforts & energies will go misguided and misdirected.
- Planning identifies the action that would lead to desired goals quickly & economically.
- It provides sense of direction to various activities. E.g. Maruti Udyog is trying to capture once again Indian Car Market by launching diesel models.

Planning is looking ahead.

- Planning is done for future.
- It requires peeping in future, analyzing it and predicting it.
- Thus planning is based on forecasting.
- A plan is a synthesis of forecast.
- It is a mental predisposition for things to happen in future.

Planning is an intellectual process.

- Planning is a mental exercise involving creative thinking, sound judgement and imagination.
- It is not a mere guesswork but a rotational thinking.
- A manager can prepare sound plans only if he has sound judgement, foresight and imagination.
- Planning is always based on goals, facts and considered estimates.

Planning involves choice & decision making.

- Planning essentially involves choice among various alternatives.
- Therefore, if there is only one possible course of action, there is no need planning because there is no choice.
- Thus, decision making is an integral part of planning.
- A manager is surrounded by no. of alternatives. He has to pick the best depending upon requirements & resources of the enterprises.

Planning is the primary function of management / Primacy of Planning.

- Planning lays foundation for other functions of management.
- It serves as a guide for organizing, staffing, directing and controlling.
- All the functions of management are performed within the framework of plans laid out.

- Therefore planning is the basic or fundamental function of management.

Planning is a Continuous Process.

- Planning is a never ending function due to the dynamic business environment.
- Plans are also prepared for specific period of time and at the end of that period, plans are subjected to revaluation and review in the light of new requirements and changing conditions.
- Planning never comes into end till the enterprise exists issues, problems may keep cropping up and they have to be tackled by planning effectively.

Planning is all Pervasive.

- It is required at all levels of management and in all departments of enterprise.
- Of course, the scope of planning may differ from one level to another.
- The top level may be more concerned about planning the organization as a whole whereas the middle level may be more specific in departmental plans and the lower level plans implementation of the same.

Planning is designed for efficiency.

- Planning leads to accomplishment of objectives at the minimum possible cost.
- It avoids wastage of resources and ensures adequate and optimum utilization of resources.
- A plan is worthless or useless if it does not value the cost incurred on it.
- Therefore planning must lead to saving of time, effort and money.
- Planning leads to proper utilization of men, money, materials, methods and machines.

Planning is Flexible.

- Planning is done for the future.
- Since future is unpredictable, planning must provide enough room to cope with the changes in customer's demand, competition, govt. policies etc.
- Under changed circumstances, the original plan of action must be revised and updated to make it more practical.

Advantages of Planning

Planning facilitates management by objectives.

- Planning begins with determination of objectives.
- It highlights the purposes for which various activities are to be undertaken.
- In fact, it makes objectives more clear and specific.
- Planning helps in focusing the attention of employees on the objectives or goals of enterprise.
- Without planning an organization has no guide.
- Planning compels manager to prepare a Blue-print of the courses of action to be followed for accomplishment of objectives.
- Therefore, planning brings order and rationality into the organization.

Planning minimizes uncertainties.

- Business is full of uncertainties.
- There are risks of various types due to uncertainties.
- Planning helps in reducing uncertainties of future as it involves anticipation of future events.
- Although future cannot be predicted with cent percent accuracy but planning helps management to anticipate future and prepare for risks by necessary provisions to meet unexpected turn of events.
- Therefore with the help of planning, uncertainties can be forecasted which helps in preparing standbys as a result, uncertainties are minimized to a great extent.

Planning facilitates co-ordination.

- Planning revolves around organizational goals.
- All activities are directed towards common goals.
- There is an integrated effort throughout the enterprise in various departments and groups.
- It avoids duplication of efforts. In other words, it leads to better co-ordination.
- It helps in finding out problems of work performance and aims at rectifying the same.

Planning improves employee's moral.

- Planning creates an atmosphere of order and discipline in organization.
- Employees know in advance what is expected of them and therefore conformity can be achieved easily.
- This encourages employees to show their best and also earn reward for the same.
- Planning creates a healthy attitude towards work environment which helps in boosting employees moral and efficiency.

Planning helps in achieving economies.

- Effective planning secures economy since it leads to orderly allocation of resources to various operations.
- It also facilitates optimum utilization of resources which brings economy in operations.
- It also avoids wastage of resources by selecting most appropriate use that will contribute to the objective of enterprise. For example, raw materials can be purchased in bulk and transportation cost can be minimized. At the same time it ensures regular supply for the production department, that is, overall efficiency.

Planning facilitates controlling.

- Planning facilitates existence of certain planned goals and standard of performance.
- It provides basis of controlling.
- We cannot think of an effective system of controlling without existence of well thought out plans.

- Planning provides pre-determined goals against which actual performance is compared.
- In fact, planning and controlling are the two sides of a same coin. If planning is root, controlling is the fruit.

Planning provides competitive edge.

- Planning provides competitive edge to the enterprise over the others which do not have effective planning. This is because of the fact that planning may involve changing in work methods, quality, quantity designs, extension of work, redefining of goals, etc.
- With the help of forecasting not only the enterprise secures its future but at the same time it is able to estimate the future motives of its competitor which helps in facing future challenges.
- Therefore, planning leads to best utilization of possible resources, improves quality of production and thus the competitive strength of the enterprise is improved.

Planning encourages innovations.

- In the process of planning, managers have the opportunities of suggesting ways and means of improving performance.
- Planning is basically a decision making function which involves creative thinking and imagination that ultimately leads to innovation of methods and operations for growth and prosperity of the enterprise.

Disadvantages of Planning

Internal Limitations

There are several limitations of planning. Some of them are inherent in the process of planning like rigidity and others arise due to shortcoming of the techniques of planning and in the planners themselves.

Rigidity

- Planning has tendency to make administration inflexible.
- Planning implies prior determination of policies, procedures and programmes and a strict adherence to them in all circumstances.
- There is no scope for individual freedom.
- The development of employees is highly doubted because of which management might have faced a lot of difficulties in future.
- Planning therefore introduces inelasticity and discourages individual initiative and experimentation.

Misdirected Planning

- Planning may be used to serve individual interests rather than the interest of the enterprise.

- Attempts can be made to influence setting of objectives, formulation of plans and programmes to suit one's own requirement rather than that of whole organization.
- Machinery of planning can never be freed of bias. Every planner has his own likes, dislikes, preferences, attitudes and interests which is reflected in planning.

Time consuming

- Planning is a time consuming process because it involves collection of information, its analysis and interpretation thereof. This entire process takes a lot of time specially where there are a number of alternatives available.
- Therefore planning is not suitable during emergency or crisis when quick decisions are required.

Probability in planning

- Planning is based on forecasts which are mere estimates about future.
- These estimates may prove to be inexact due to the uncertainty of future.
- Any change in the anticipated situation may render plans ineffective.
- Plans do not always reflect real situations in spite of the sophisticated techniques of forecasting because future is unpredictable.
- Thus, excessive reliance on plans may prove to be fatal.

False sense of security

- Elaborate planning may create a false sense of security to the effect that everything is taken for granted.
- Managers assume that as long as they work as per plans, it is satisfactory.
- Therefore they fail to take up timely actions and an opportunity is lost.
- Employees are more concerned about fulfillment of plan performance rather than any kind of change.

Expensive

- Collection, analysis and evaluation of different information, facts and alternatives involves a lot of expense in terms of time, effort and money
- According to Koontz and O'Donell, 'Expenses on planning should never exceed the estimated benefits from planning.'

External Limitations of Planning

- Political Climate- Change of government from Congress to some other political party, etc.
- Labour Union- Strikes, lockouts, agitations.
- Technological changes- Modern techniques and equipments, computerization.
- Policies of competitors- Eg. Policies of Coca Cola and Pepsi.
- Natural Calamities- Earthquakes and floods.
- Changes in demand and prices- Change in fashion, change in tastes, change in income level, demand falls, price falls, etc.

Types of Plans

1. Strategic Plans

- Strategic plans define the framework of the organization's vision and how the organization intends to make its vision a reality.
- It is the determination of the long-term objectives of an enterprise, the action plan to be adopted and the resources to be mobilized to achieve these goals.
- Since it is planning the direction of the company's progress, it is done by the top management of an organization
- It essentially focuses on planning for the coming years to take the organization from where it stands today to where it intends to be.
- The strategic plan must be forward looking, effective and flexible, with a focus on accommodating future growth.
- These plans provide the framework and direction for lower level planning.

2. Tactical Plans

- Tactical plans describe the tactics that the managers plan to adopt to achieve the objectives set in the strategic plan.
- Tactical plans span a short time frame (usually less than 3 years) and are usually developed by middle level managers.
- It details specific means or action plans to implement the strategic plan by units within each division.
- Tactical plans entail detailing resource and work allocation among the subunits within each division.

3. Operational Plans

- Operational plans are short-term (less than a year) plans developed to create specific action steps that support the strategic and tactical plans.
- They are usually developed by the manager to fulfill his or her job responsibilities.
- They are developed by supervisors, team leaders, and facilitators to support tactical plans.
- They govern the day-to-day operations of an organization.
- Operational plans can be –
 1. Standing plans – Drawn to cover issues that managers face repeatedly, e.g. policies, procedures, rules.
 2. Ongoing plans – Prepared for single or exceptional situations or problems and are normally discarded or replaced after one use, e.g. programs, projects, and budgets.

Strategies

Corporate Strategy

A corporate strategy entails a clearly defined, long-term vision that organizations set, seeking to create corporate value and motivate the workforce to implement the proper actions to achieve customer satisfaction. In addition, corporate strategy is a continuous process that requires a constant effort to engage investors in trusting the company with

their money, thereby increasing the company's equity. Organizations that manage to deliver customer value unfailingly are those that revisit their corporate strategy regularly to improve areas that may not deliver the aimed results.

Example

1. Corporate strategies may pertain to different aspects of a firm, yet the strategies that most organizations use are cost leadership and product differentiation.

Cost leadership is a strategy that organizations implement by providing their products and services as low as consumers are willing to pay, thereby being competitive and realizing a volume of sales that allows them to be the leaders in the industry. Typical examples of cost leaders are Wal-Mart in the retail industry, McDonalds in the restaurant industry, and Ikea, the furniture retailer that offers low-priced, yet good quality home equipment by sourcing its products in emerging markets, thereby having a high-profit margin.

Product differentiation refers to the effort of organizations to offer a unique value proposition to consumers. Typically, companies that manage to differentiate their products from the competition are gaining a competitive edge, thereby realizing higher profits. Often, competitors employ cost leadership to directly compete with these companies; yet, customer satisfaction and customer loyalty are the factors that eventually make or break a strategy.

2. Other examples of corporate strategies include the horizontal integration, the vertical integration, and the global product strategy, i.e. when multinational companies sell a homogenous product around the globe.

Corporate strategies are always growth-oriented, seeking to retain a company's existing customer base while attracting new customers.

Formulation of Strategies

Strategy formulation refers to the process of choosing the most appropriate course of action for the realization of organizational goals and objectives and thereby achieving the organizational vision. The process of strategy formulation basically involves six main steps. Though these steps do not follow a rigid chronological order, however they are very rational and can be easily followed in this order.

- **Setting Organizations' objectives** - The key component of any strategy statement is to set the long-term objectives of the organization. It is known that strategy is generally a medium for realization of organizational objectives. Objectives stress the state of being there whereas Strategy stresses upon the process of reaching there. Strategy includes both the fixation of objectives as well the medium to be used to realize those objectives. Thus, strategy is a wider term which believes in the manner of deployment of resources so as to achieve the objectives.

While fixing the organizational objectives, it is essential that the factors which influence the selection of objectives must be analyzed before the selection of objectives. Once the objectives and the factors influencing strategic decisions have been determined, it is easy to take strategic decisions.

- **Evaluating the Organizational Environment** - The next step is to evaluate the general economic and industrial environment in which the organization operates. This includes a review of the organizations competitive position. It is essential to conduct a qualitative and quantitative review of an organizations existing product line. The purpose of such a review is to make sure that the factors important for competitive success in the market can be discovered so that the management can identify their own strengths and weaknesses as well as their competitors' strengths and weaknesses.

After identifying its strengths and weaknesses, an organization must keep a track of competitors' moves and actions so as to discover probable opportunities of threats to its market or supply sources.

- **Setting Quantitative Targets** - In this step, an organization must practically fix the quantitative target values for some of the organizational objectives. The idea behind this is to compare with long term customers, so as to evaluate the contribution that might be made by various product zones or operating departments.
- **Aiming in context with the divisional plans** - In this step, the contributions made by each department or division or product category within the organization is identified and accordingly strategic planning is done for each sub-unit. This requires a careful analysis of macroeconomic trends.
- **Performance Analysis** - Performance analysis includes discovering and analyzing the gap between the planned or desired performance. A critical evaluation of the organizations past performance, present condition and the desired future conditions must be done by the organization. This critical evaluation identifies the degree of gap that persists between the actual reality and the long-term aspirations of the organization. An attempt is made by the organization to estimate its probable future condition if the current trends persist.
- **Choice of Strategy** - This is the ultimate step in Strategy Formulation. The best course of action is actually chosen after considering organizational goals, organizational strengths, potential and limitations as well as the external opportunities.

Types of Strategies

1. Business Strategy

The first of the three types of strategy is Business. It is primarily concerned with how a company will approach the marketplace - where to play and how to win.

Where to play answers questions like, which customer segments will we target, which geographies will we cover, and what products and services will we bring to market.

How to win answers questions like, how will we position ourselves against our competitors, what capabilities will we employ to differentiate us from the competition, and what unique approaches will we apply to create new markets.

Senior managers typically create business strategy. After it is created, business architects play an important role in clarifying the strategy, creating tighter alignment

among different strategies, and communicating the business strategy across and down the organization in a clear and consistent fashion.

Executives are just beginning to bring advanced, highly credible business architecture practices into the strategy discussions early to provide tools, models, and facilitation that enable better strategy development.

2. Operational Strategy

The second of the three types of strategy is Operational. It is primarily concerned with accurately translating the business strategy into a cohesive and actionable implementation plan. Operational Strategy answers the questions:

- Which capabilities need to be created or enhanced?
- What technologies do we need?
- Which processes need improvement?
- Do we have the people we need?

The vast majority of business architects are currently working in the operational strategy domain reaching up into the business strategy domain for direction.

They work from the middle out to bring clarity and cohesiveness to the organization's operating model typically working vertically within a single business unit while resolving issues at the business unit boundaries.

More mature business architecture practices work in multiple verticals or move from one vertical to another creating common business architecture patterns.

3. Transformational Strategy

The third of the three types of strategy is Transformational. It is seen less often as it represents the wholesale transformation of an entire business or organization.

This type of strategy goes beyond typical business strategy in that it requires radical and highly disruptive changes in people, process, and technology.

Few organizations go down this path willingly.

Transformational strategy is generally the domain of Human Resources, organizational development, and consultants.

These efforts are incredibly complex and can experience significant benefit from applying business architecture discipline though it is rare to see business architects playing a significant role here.

Bottom line:

Not all strategy work is the same. Each strategy type creates a unique role for the business architect requiring a different approach and skill set. Business architects who are successfully delivering in one role should be actively developing the skills they need to move into other strategy domains.

The SWOT Analysis:

No discussion on strategy formulation will be complete without a discussion of SWOT Analysis. It involves a systematic analysis of the internal strengths and weaknesses (financial, managerial, marketing, or technological) and of external opportunities and threats (like change in demand, law, or technologies).

It is an internal evaluation to be in fit with external world. Strengths refer to competencies, weaknesses refer to constraints, opportunities refer to favourable condition in the business environment of the firm, and threat means an unfavourable condition in the firm's environment creating a risk.

Opportunities

Gradual Political & Economic Reforms
Political Stability

Threats

Terrorism Regional stability Corruption
Inflation

Non-convertibility of currency Barriers to repatriation of profits

Strengths

Excess production capability (can be used for exports)

New sources of inexpensive raw materials & parts

Weaknesses

High prices of imports

Deficiency of bilingual employees

Poor knowledge of local culture, consumer behaviour, and educational system

SWOT analysis will be useful as under:

- (a) To eliminate weaknesses those expose the firm to external threats.
- (b) To highlight the strengths, which the company would try to exploit.
- (c) To convert threat or weaknesses into an advantage.
- (d) To expose present shortcomings in the company's resources and skills.
- (e) To match the strength to opportunity to exploit it.

Management By Objective (MBO)

The process of setting objectives in the organization to give a sense of direction to the employees is called as Management by Objectives.

It refers to the process of setting goals for the employees so that they know what they are supposed to do at the workplace

Management by Objectives defines roles and responsibilities for the employees and help them chalk out their future course of action in the organization.

Management by objectives guides the employees to deliver their level best and achieve the targets within the stipulated time frame.

Need for Management by Objectives (MBO)

- The Management by Objectives process helps the employees to understand their duties at the workplace.
- KRAs are designed for each employee as per their interest, specialization and educational qualification.
- The employees are clear as to what is expected out of them.

- Management by Objectives process leads to satisfied employees. It avoids job mismatch and unnecessary confusions later on.
- Employees in their own way contribute to the achievement of the goals and objectives of the organization. Every employee has his own role at the workplace. Each one feels indispensable for the organization and eventually develops a feeling of loyalty towards the organization. They tend to stick to the organization for a longer span of time and contribute effectively. They enjoy at the workplace and do not treat work as a burden.
- Management by Objectives ensures effective communication amongst the employees. It leads to a positive ambience at the workplace.
- Management by Objectives leads to well defined hierarchies at the workplace. It ensures transparency at all levels. A supervisor of any organization would never directly interact with the Managing Director in case of queries. He would first meet his reporting boss who would then pass on the message to his senior and so on. Every one is clear about his position in the organization.
- The MBO Process leads to highly motivated and committed employees
- The MBO Process sets a benchmark for every employee. The superiors set targets for each of the team members. Each employee is given a list of specific tasks.

Limitations of Management by objectives Process

- It sometimes ignores the prevailing culture and working conditions of the organization.
- More emphasis is being laid on targets and objectives. It just expects the employees to achieve their targets and meet the objectives of the organization without bothering much about the existing circumstances at the workplace. Employees are just expected to perform and meet the deadlines. The MBO Process sometimes do treat individuals as mere machines.
- The MBO process increases comparisons between individuals at the workplace. Employees tend to depend on nasty politics and other unproductive tasks to outshine their fellow workers. Employees do only what their superiors ask them to do. Their work lacks innovation, creativity and sometimes also becomes monotonous.

Policies

Policies are general statements that guides in decision-making. A policy refers to a continuing decision which applies to repetitive situations. It is standing answer to a recurring question.

Types of Policies

Policies may be classified as originated, implied, appealed and externally imposed policies. Let us discuss them briefly.

a. On the Basis of Source:

1. Originated Policies: Originated policies are formulated by top level management, by reference to the objectives of the organization and their achievement. The purpose of

these policies is to guide the actions of their subordinates. Sometimes, these policies are formulated in active consultation with managers at lower levels.

2. Implied Policies: Implied policies are those evolved by themselves when a series of decisions are made by managers over a period of time. These policies exist in an unwritten form. They are not consciously formulated but emerge from recurring managerial decisions.

3. Appealed Policies: Appealed policies are formulated at the higher managerial level in response to appeals made by lower managerial levels. These policies may also exist in the form of precedents and serve as guides for decisions in future.

4. Externally Imposed Policies: Externally imposed policies are those policies which are influenced by the policies of the Government and other public agencies, trade unions, trade associations, etc.

b. On the Basis of different Levels:

1. Basic Policies: Policies which are followed by top management level are called as basic policies. For example, the branches will be opened in different place where the sales exceed Rs. Five, lakhs.

2. General Policies: These policies affect the middle level management and more specific than basic policies.

Example: Payment will be provided for overtime work only if it is allowed by the management.

3. Department Policies: These policies are highly specific and applicable to the lower levels of management.

Example: Tea will be provided free for workers in night shifts.

c. On the Basis of Managerial Functions:

1. Planning Policies: Planning policies involve the future course of action. Mere policies are formulated as to achieve the targets regarding the future. Planning policies may formulate for whole organisation or for divisional departments.

2. Organisation Policies: These policies are highly specific to organisational goals and objectives.

3. Motivation and Control Policies: Here policies are formulated to motivate people and control the activities, which leads to achieve the organisational objectives with the fullest satisfaction of employees.

d. On the Basis of Dissemination:

1. Explicit Policies: Policies which are in writing or included in the manual or records are called explicit policies. In case of written statements adequate media should be used.

2. Implicit Policies: Implicit policies are disseminated merely by word of mouth through the key people in an organisation. Policies which are not in writing or not included in the manuals or records but which are well understood and practised are called implicit policies.

Principle of Policy Formulation

- It must be specific, clear, easy and simple.
- It should be flexible so that it can adapt to changing circumstances. But it should also be stable.
- It must consider internal factors.
- It may be written or verbal.
- It must reflect the objective of the company.
- There should be a line of communication in the implementation cell.
- There should be evaluation at certain intervals.
- There should be coordination among all the policies. It must not be contradictory with each other.
- A policy should relate one objective with other.
- One policy should be complementary with each other. (Adopting traditional vs inventing new.)
- Policies should be based on justifiability and honesty.
- Policies should be clearly explained to staff. Objective must be clear so that they help implement.

UNIT 3

Staffing

The managerial function of staffing involves manning the organization structure through proper and effective selection, appraisal and development of the personnels to fill the roles assigned to the employers/workforce.

According to Theo Haimann, "Staffing pertains to recruitment, selection, development and compensation of subordinates."

Nature of Staffing Function

- Staffing is an important managerial function- Staffing function is the most important managerial act along with planning, organizing, directing and controlling. The operations of these four functions depend upon the manpower which is available through staffing function.
- Staffing is a pervasive activity- As staffing function is carried out by all managers and in all types of concerns where business activities are carried out.
- Staffing is a continuous activity- This is because staffing function continues throughout the life of an organization due to the transfers and promotions that take place.
- The basis of staffing function is efficient management of personnels- Human resources can be efficiently managed by a system or proper procedure, that is, recruitment, selection, placement, training and development, providing remuneration, etc.
- Staffing helps in placing right men at the right job. It can be done effectively through proper recruitment procedures and then finally selecting the most suitable candidate as per the job requirements.
- Staffing is performed by all managers depending upon the nature of business, size of the company, qualifications and skills of managers, etc. In small companies, the top management generally performs this function. In medium and small scale enterprise, it is performed especially by the personnel department of that concern.

Process

- **Manpower requirements-** The very first step in staffing is to plan the manpower inventory required by a concern in order to match them with the job requirements and demands. Therefore, it involves forecasting and determining the future manpower needs of the concern.
- **Recruitment-** Once the requirements are notified, the concern invites and solicits applications according to the invitations made to the desirable candidates.
- **Selection-** This is the screening step of staffing in which the solicited applications are screened out and suitable candidates are appointed as per the requirements.
- **Orientation and Placement-** Once screening takes place, the appointed candidates are made familiar to the work units and work environment through the orientation programmes. placement takes place by putting right man on the right job.

- **Training and Development-** Training is a part of incentives given to the workers in order to develop and grow them within the concern. Training is generally given according to the nature of activities and scope of expansion in it. Along with it, the workers are developed by providing them extra benefits of indepth knowledge of their functional areas. Development also includes giving them key and important jobs as a test or examination in order to analyse their performances.
- **Remuneration-** It is a kind of compensation provided monetarily to the employees for their work performances. This is given according to the nature of job- skilled or unskilled, physical or mental, etc. Remuneration forms an important monetary incentive for the employees.
- **Performance Evaluation-** In order to keep a track or record of the behaviour, attitudes as well as opinions of the workers towards their jobs. For this regular assessment is done to evaluate and supervise different work units in a concern. It is basically concerning to know the development cycle and growth patterns of the employees in a concern.
- **Promotion and transfer-** Promotion is said to be a non- monetary incentive in which the worker is shifted from a higher job demanding bigger responsibilities as well as shifting the workers and transferring them to different work units and branches of the same organization.

Manpower Planning

Manpower Planning which is also called as Human Resource Planning consists of putting right number of people, right kind of people at the right place, right time, doing the right things for which they are suited for the achievement of goals of the organization. Human Resource Planning has got an important place in the arena of industrialization. Human Resource Planning has to be a systems approach and is carried out in a set procedure. The procedure is as follows:

- Analysing the current manpower inventory
- Making future manpower forecasts
- Developing employment programmes
- Design training programmes

Steps in Manpower Planning

1. Analysing the current manpower inventory- Before a manager makes forecast of future manpower, the current manpower status has to be analysed. For this the following things have to be noted-

- Type of organization
- Number of departments
- Number and quantity of such departments
- Employees in these work units

Once these factors are registered by a manager, he goes for the future forecasting.

2. Making future manpower forecasts- Once the factors affecting the future manpower forecasts are known, planning can be done for the future manpower requirements in several work units.

The Manpower forecasting techniques commonly employed by the organizations are as follows:

- **Expert Forecasts:** This includes informal decisions, formal expert surveys and Delphi technique.
- **Trend Analysis:** Manpower needs can be projected through extrapolation (projecting past trends), indexation (using base year as basis), and statistical analysis (central tendency measure).
- **Work Load Analysis:** It is dependent upon the nature of work load in a department, in a branch or in a division.
- **Work Force Analysis:** Whenever production and time period has to be analysed, due allowances have to be made for getting net manpower requirements.
- **Other methods:** Several Mathematical models, with the aid of computers are used to forecast manpower needs, like budget and planning analysis, regression, new venture analysis.

3. Developing employment programmes- Once the current inventory is compared with future forecasts, the employment programmes can be framed and developed accordingly, which will include recruitment, selection procedures and placement plans.

4. Design training programmes- These will be based upon extent of diversification, expansion plans, development programmes, etc. Training programmes depend upon the extent of improvement in technology and advancement to take place. It is also done to improve upon the skills, capabilities, knowledge of the workers.

Importance of Manpower Planning

- 1. Key to managerial functions-** The four managerial functions, i.e., planning, organizing, directing and controlling are based upon the manpower. Human resources help in the implementation of all these managerial activities. Therefore, staffing becomes a key to all managerial functions.
- 2. Efficient utilization-** Efficient management of personnels becomes an important function in the industrialization world of today. Setting of large scale enterprises require management of large scale manpower. It can be effectively done through staffing function.
- 3. Motivation-** Staffing function not only includes putting right men on right job, but it also comprises of motivational programmes, i.e., incentive plans to be framed for further participation and employment of employees in a concern. Therefore, all types of incentive plans becomes an integral part of staffing function.

4. **Better human relations-** A concern can stabilize itself if human relations develop and are strong. Human relations become strong through effective control, clear communication, effective supervision and leadership in a concern. Staffing function also looks after training and development of the work force which leads to co-operation and better human relations.
5. **Higher productivity-** Productivity level increases when resources are utilized in best possible manner. Higher productivity is a result of minimum wastage of time, money, efforts and energies. This is possible through the staffing and its related activities (Performance appraisal, training and development, remuneration)

Need of Manpower Planning

Manpower Planning is a two-phased process because manpower planning not only analyses the current human resources but also makes manpower forecasts and thereby draw employment programmes. Manpower Planning is advantageous to firm in following manner:

- Shortages and surpluses can be identified so that quick action can be taken wherever required.
- All the recruitment and selection programmes are based on manpower planning.
- It also helps to reduce the labour cost as excess staff can be identified and thereby overstaffing can be avoided.
- It also helps to identify the available talents in a concern and accordingly training programmes can be chalked out to develop those talents.
- It helps in growth and diversification of business. Through manpower planning, human resources can be readily available and they can be utilized in best manner.
- It helps the organization to realize the importance of manpower management which ultimately helps in the stability of a concern.

Obstacles in Manpower Planning

1. **Under Utilization of Manpower:** The biggest obstacle in case of manpower planning is the fact that the industries in general are not making optimum use of their manpower and once manpower planning begins, it encounters heavy odds in stepping up the utilization.
2. **Degree of Absenteeism:** Absenteeism is quite high and has been increasing since last few years.
3. **Lack of Education and Skilled Labour:** The extent of illiteracy and the slow pace of development of the skilled categories account for low productivity in employees. Low productivity has implications for manpower planning.

Job Analysis

Job analysis is primary tool in personnel management. In this method, a personnel manager tries to gather, synthesize and implement the information available regarding the workforce in the concern. A personnel manager has to undertake job analysis so as to put right man on right job.

There are two outcomes of job analysis :

- Job description

- Job specification

The information collected under job analysis is :

- Nature of jobs required in a concern.
- Nature/ size of organizational structure.
- Type of people required to fit that structure.
- The relationship of the job with other jobs in the concern.
- Kind of qualifications and academic background required for jobs.
- Provision of physical condition to support the activities of the concern. For example- separate cabins for managers, special cabins for the supervisors, healthy condition for workers, adequate store room for store keeper.

Advantages of Job Analysis

- Job analysis helps the personnel manager at the time of recruitment and selection of right man on right job.
- It helps him to understand extent and scope of training required in that field.
- It helps in evaluating the job in which the worth of the job has to be evaluated.
- In those instances where smooth work force is required in concern.
- When he has to avoid overlapping of authority- responsibility relationship so that distortion in chain of command doesn't exist.
- It also helps to chalk out the compensation plans for the employees.
- It also helps the personnel manager to undertake performance appraisal effectively in a concern.

A personnel manger carries analysis in two ways :

- Job description
- Job specification

JOB DESCRIPTION is an organized factual statement of job contents in the form of duties and responsibilities of a specific job. The preparation of job description is very important before a vacancy is advertised. It tells in brief the nature and type of job. This type of document is descriptive in nature and it constitutes all those facts which are related to a job such as :

- Title/ Designation of job and location in the concern.
- The nature of duties and operations to be performed in that job.
- The nature of authority- responsibility relationships.
- Necessary qualifications that are required for job.
- Relationship of that job with other jobs in a concern.
- The provision of physical and working condition or the work environment required in performance of that job.

Advantages of Job Description

- It helps the supervisors in assigning work to the subordinates so that he can guide and monitor their performances.
- It helps in recruitment and selection procedures.

- It assists in manpower planning.
- It is also helpful in performance appraisal.
- It is helpful in job evaluation in order to decide about rate of remuneration for a specific job.
- It also helps in chalking out training and development programmes.

JOB SPECIFICATION is a statement which tells us minimum acceptable human qualities which helps to perform a job. Job specification translates the job description into human qualifications so that a job can be performed in a better manner. Job specification helps in hiring an appropriate person for an appropriate position. The contents are :

- Job title and designation
- Educational qualifications for that title
- Physical and other related attributes
- Physique and mental health
- Special attributes and abilities
- Maturity and dependability
- Relationship of that job with other jobs in a concern.
- Advantages of Job Specification
- It is helpful in preliminary screening in the selection procedure.
- It helps in giving due justification to each job.
- It also helps in designing training and development programmes.
- It helps the supervisors for counseling and monitoring performance of employees.
- It helps in job evaluation.
- It helps the management to take decisions regarding promotion, transfers and giving extra benefits to the employees.

From the above advantages, we can justify the importance of job analysis and its related products. Both job description as well as job specification are important for personnel manager in personnel management function. Therefore, job analysis is considered to be the primary tool of personnel management.

Recruitment

Internal Recruitment - is a recruitment which takes place within the concern or organization. Internal sources of recruitment are readily available to an organization. Internal sources are primarily three - Transfers, promotions and Re-employment of ex-employees.

Internal recruitment may lead to increase in employee's productivity as their motivation level increases. It also saves time, money and efforts. But a drawback of internal recruitment is that it refrains the organization from new blood. Also, not all the manpower requirements can be met through internal recruitment. Hiring from outside has to be done.

Internal sources are primarily 3

- **Transfers**
- **Promotions** (through Internal Job Postings) and
- **Re-employment of ex-employees** - Re-employment of ex-employees is one of the internal sources of recruitment in which employees can be invited and appointed to fill vacancies in the concern. There are situations when ex-employees provide unsolicited applications also.

External Recruitment - External sources of recruitment have to be solicited from outside the organization. External sources are external to a concern. But it involves lot of time and money. The external sources of recruitment include - Employment at factory gate, advertisements, employment exchanges, employment agencies, educational institutes, labour contractors, recommendations etc.

- **Employment at Factory Level** - This a source of external recruitment in which the applications for vacancies are presented on bulletin boards outside the Factory or at the Gate. This kind of recruitment is applicable generally where factory workers are to be appointed. There are people who keep on soliciting jobs from one place to another. These applicants are called as unsolicited applicants. These types of workers apply on their own for their job. For this kind of recruitment workers have a tendency to shift from one factory to another and therefore they are called as “badli” workers.
- **Advertisement** - It is an external source which has got an important place in recruitment procedure. The biggest advantage of advertisement is that it covers a wide area of market and scattered applicants can get information from advertisements. Medium used is Newspapers and Television.
- **Employment Exchanges** - There are certain Employment exchanges which are run by government. Most of the government undertakings and concerns employ people through such exchanges. Now-a-days recruitment in government agencies has become compulsory through employment exchange.
- **Employment Agencies** - There are certain professional organizations which look towards recruitment and employment of people, i.e. these private agencies run by private individuals supply required manpower to needy concerns.
- **Educational Institutions** - There are certain professional Institutions which serves as an external source for recruiting fresh graduates from these institutes. This kind of recruitment done through such educational institutions, is called as Campus Recruitment. They have special recruitment cells which helps in providing jobs to fresh candidates.
- **Recommendations** - There are certain people who have experience in a particular area. They enjoy goodwill and a stand in the company. There are certain vacancies which are filled by recommendations of such people. The biggest drawback of this source is that the company has to rely totally on such people which can later on prove to be inefficient.
- **Labour Contractors** - These are the specialist people who supply manpower to the Factory or Manufacturing plants. Through these contractors, workers are appointed on contract basis, i.e. for a particular time period. Under conditions

when these contractors leave the organization, such people who are appointed have to also leave the concern.

Employee Selection

Employee Selection is the process of putting right men on right job. It is a procedure of matching organizational requirements with the skills and qualifications of people. Effective selection can be done only when there is effective matching. By selecting best candidate for the required job, the organization will get quality performance of employees. Moreover, organization will face less of absenteeism and employee turnover problems. By selecting right candidate for the required job, organization will also save time and money. Proper screening of candidates takes place during selection procedure. All the potential candidates who apply for the given job are tested. But selection must be differentiated from recruitment, though these are two phases of employment process. Recruitment is considered to be a positive process as it motivates more of candidates to apply for the job. It creates a pool of applicants. It is just sourcing of data. While selection is a negative process as the inappropriate candidates are rejected here. Recruitment precedes selection in staffing process. Selection involves choosing the best candidate with best abilities, skills and knowledge for the required job.

The Employee selection Process takes place in following order-

- 1. Preliminary Interviews-** It is used to eliminate those candidates who do not meet the minimum eligibility criteria laid down by the organization. The skills, academic and family background, competencies and interests of the candidate are examined during preliminary interview. Preliminary interviews are less formalized and planned than the final interviews. The candidates are given a brief up about the company and the job profile; and it is also examined how much the candidate knows about the company. Preliminary interviews are also called screening interviews.
- 2. Application blanks-** The candidates who clear the preliminary interview are required to fill application blank. It contains data record of the candidates such as details about age, qualifications, reason for leaving previous job, experience, etc.
- 3. Written Tests-** Various written tests conducted during selection procedure are aptitude test, intelligence test, reasoning test, personality test, etc. These tests are used to objectively assess the potential candidate. They should not be biased.
- 4. Employment Interviews-** It is a one to one interaction between the interviewer and the potential candidate. It is used to find whether the candidate is best suited for the required job or not. But such interviews consume time and money both. Moreover the competencies of the candidate cannot be judged. Such interviews may be biased at times. Such interviews should be conducted properly. No distractions should be there in room. There should be an honest communication between candidate and interviewer.
- 5. Medical examination-** Medical tests are conducted to ensure physical fitness of the potential employee. It will decrease chances of employee absenteeism.
- 6. Appointment Letter-** A reference check is made about the candidate selected and then finally he is appointed by giving a formal appointment letter.

Difference between Recruitment and Selection

Basis	Recruitment	Selection
Meaning	It is an activity of establishing contact between employers and applicants.	It is a process of picking up more competent and suitable employees.
Objective	It encourages large number of Candidates for a job.	It attempts at rejecting unsuitable candidates.
Process	It is a simple process.	It is a complicated process.
Hurdles	The candidates have not to cross over many hurdles.	Many hurdles have to be crossed.
Approach	It is a positive approach.	It is a negative approach.
Sequence	It proceeds selection.	It follows recruitment.
Economy	It is an economical method.	It is an expensive method.
Time Consuming	Less time is required.	More time is required.

Training of Employees

Training of employees takes place after orientation takes place. Training is the process of enhancing the skills, capabilities and knowledge of employees for doing a particular job. Training process moulds the thinking of employees and leads to quality performance of employees. It is continuous and never ending in nature.

Importance of Training

Training is crucial for organizational development and success. It is fruitful to both employers and employees of an organization. An employee will become more efficient and productive if he is trained well.

Training is given on four basic grounds:

1. New candidates who join an organization are given training. This training familiarize them with the organizational mission, vision, rules and regulations and the working conditions.
2. The existing employees are trained to refresh and enhance their knowledge.

3. If any updations and amendments take place in technology, training is given to cope up with those changes. For instance, purchasing a new equipment, changes in technique of production, computer implantment. The employees are trained about use of new equipments and work methods.
4. When promotion and career growth becomes important. Training is given so that employees are prepared to share the responsibilities of the higher level job.

The benefits of training can be summed up as:

- **Improves morale of employees-** Training helps the employee to get job security and job satisfaction. The more satisfied the employee is and the greater is his morale, the more he will contribute to organizational success and the lesser will be employee absenteeism and turnover.
- **Less supervision-** A well trained employee will be well acquainted with the job and will need less of supervision. Thus, there will be less wastage of time and efforts.
- **Fewer accidents-** Errors are likely to occur if the employees lack knowledge and skills required for doing a particular job. The more trained an employee is, the less are the chances of committing accidents in job and the more proficient the employee becomes.
- **Chances of promotion-** Employees acquire skills and efficiency during training. They become more eligible for promotion. They become an asset for the organization.
- **Increased productivity-** Training improves efficiency and productivity of employees. Well trained employees show both quantity and quality performance. There is less wastage of time, money and resources if employees are properly trained.

Ways/Methods of Training

Training is generally imparted in two ways:

- **On the job training-** On the job training methods are those which are given to the employees within the everyday working of a concern. It is a simple and cost-effective training method. The inproficient as well as semi- proficient employees can be well trained by using such training method. The employees are trained in actual working scenario. The motto of such training is “learning by doing.” Instances of such on-job training methods are job-rotation, coaching, temporary promotions, etc.
- **Off the job training-** Off the job training methods are those in which training is provided away from the actual working condition. It is generally used in case of new employees. Instances of off the job training methods are workshops, seminars, conferences, etc. Such method is costly and is effective if and only if large number of employees have to be trained within a short time period. Off the job training is also called as vestibule training,i.e., the employees are trained in a separate area(may be a hall, entrance, reception area,etc. known as a vestibule) where the actual working conditions are duplicated.

Performance Appraisal

Performance Appraisal is the systematic evaluation of the performance of employees and to understand the abilities of a person for further growth and development.

Performance appraisal is generally done in systematic ways which are as follows:

- The supervisors measure the pay of employees and compare it with targets and plans.
- The supervisor analyses the factors behind work performances of employees.
- The employers are in position to guide the employees for a better performance.

Objectives of Performance Appraisal

Performance Appraisal can be done with following objectives in mind:

- To maintain records in order to determine compensation packages, wage structure, salaries raises, etc.
- To identify the strengths and weaknesses of employees to place right men on right job.
- To maintain and assess the potential present in a person for further growth and development.
- To provide a feedback to employees regarding their performance and related status.
- To provide a feedback to employees regarding their performance and related status.
- It serves as a basis for influencing working habits of the employees.
- To review and retain the promotional and other training programmes.

Advantages of Performance Appraisal

It is said that performance appraisal is an investment for the company which can be justified by following advantages:

- **Promotion:** Performance Appraisal helps the supervisors to chalk out the promotion programmes for efficient employees. In this regards, inefficient workers can be dismissed or demoted in case.
- **Compensation:** Performance Appraisal helps in chalking out compensation packages for employees. Merit rating is possible through performance appraisal. Performance Appraisal tries to give worth to a performance. Compensation packages which includes bonus, high salary rates, extra benefits, allowances and pre-requisites are dependent on performance appraisal. The criteria should be merit rather than seniority.
- **Employees Development:** The systematic procedure of performance appraisal helps the supervisors to frame training policies and programmes. It helps to analyse strengths and weaknesses of employees so that new jobs can be designed for efficient employees. It also helps in framing future development programmes.
- **Selection Validation:** Performance Appraisal helps the supervisors to understand the validity and importance of the selection procedure. The supervisors come to know the validity and thereby the strengths and weaknesses of selection procedure. Future changes in selection methods can be made in this regard.

- **Communication:** For an organization, effective communication between employees and employers is very important. Through performance appraisal, communication can be sought for in the following ways:
 - Through performance appraisal, the employers can understand and accept skills of subordinates.
 - The subordinates can also understand and create a trust and confidence in superiors.
 - It also helps in maintaining cordial and congenial labour management relationship.
 - It develops the spirit of work and boosts the morale of employees.
 All the above factors ensure effective communication.
- **Motivation:** Performance appraisal serves as a motivation tool. Through evaluating performance of employees, a person's efficiency can be determined if the targets are achieved. This very well motivates a person for better job and helps him to improve his performance in the future.

Tools

Following are the tools used by the organizations for Performance Appraisals of their employees.

- Ranking
- Paired Comparison
- Forced Distribution
- Confidential Report
- Essay Evaluation
- Critical Incident
- Checklists
- Graphic Rating Scale
- BARS
- Forced Choice Method
- MBO
- Field Review Technique
- Performance Test

We will be discussing the important performance appraisal tools and techniques in detail.

Ranking Method

The ranking system requires the rater to rank his subordinates on overall performance. This consists in simply putting a man in a rank order. Under this method, the ranking of an employee in a work group is done against that of another employee. The relative position of each employee is tested in terms of his numerical rank. It may also be done by ranking a person on his job performance against another member of the competitive group.

Advantages of Ranking Method

- Employees are ranked according to their performance levels.

- It is easier to rank the best and the worst employee.
- Limitations of Ranking Method
- The “whole man” is compared with another “whole man” in this method. In practice, it is very difficult to compare individuals possessing various individual traits.
- This method speaks only of the position where an employee stands in his group. It does not test anything about how much better or how much worse an employee is when compared to another employee.
- When a large number of employees are working, ranking of individuals become a difficult issue.
- There is no systematic procedure for ranking individuals in the organization. The ranking system does not eliminate the possibility of snap judgements.

Forced Distribution method

This is a ranking technique where raters are required to allocate a certain percentage of rates to certain categories (eg: superior, above average, average) or percentiles (eg: top 10 percent, bottom 20 percent etc). Both the number of categories and percentage of employees to be allotted to each category are a function of performance appraisal design and format. The workers of outstanding merit may be placed at top 10 percent of the scale, the rest may be placed as 20 % good, 40 % outstanding, 20 % fair and 10 % fair.

Advantages of Forced Distribution

- This method tends to eliminate raters bias
- By forcing the distribution according to pre-determined percentages, the problem of making use of different raters with different scales is avoided.
- Limitations of Forced Distribution
- The limitation of using this method in salary administration, however, is that it may lead low morale, low productivity and high absenteeism.
- Employees who feel that they are productive, but find themselves in lower grade(than expected) feel frustrated and exhibit over a period of time reluctance to work.

Critical Incident techniques

Under this method, the manager prepares lists of statements of very effective and ineffective behaviour of an employee. These critical incidents or events represent the outstanding or poor behaviour of employees or the job. The manager maintains logs of each employee, whereby he periodically records critical incidents of the workers behaviour. At the end of the rating period, these recorded critical incidents are used in the evaluation of the worker's performance. Example of a good critical incident of a Customer Relations Officer is : March 12 - The Officer patiently attended to a customers complaint. He was very polite and prompt in attending the customers problem.

Advantages of Critical Incident techniques

- This method provides an objective basis for conducting a thorough discussion of an employee's performance.
- This method avoids recency bias (most recent incidents are too much emphasized)
- Limitations of Critical Incident techniques
- Negative incidents may be more noticeable than positive incidents.
- The supervisors have a tendency to unload a series of complaints about the incidents during an annual performance review sessions.
- It results in very close supervision which may not be liked by an employee.
- The recording of incidents may be a chore for the manager concerned, who may be too busy or may forget to do it.

Checklists and Weighted Checklists

In this system, a large number of statements that describe a specific job are given. Each statement has a weight or scale value attached to it. While rating an employee the supervisor checks all those statements that most closely describe the behaviour of the individual under assessment. The rating sheet is then scored by averaging the weights of all the statements checked by the rater. A checklist is constructed for each job by having persons who are quite familiar with the jobs. These statements are then categorized by the judges and weights are assigned to the statements in accordance with the value attached by the judges.

Advantages of Checklists and Weighted Checklists

- Most frequently used method in evaluation of the employee's performance.
- Limitations of Checklists and Weighted Checklists
- This method is very expensive and time consuming
- Rater may be biased in distinguishing the positive and negative questions.
- It becomes difficult for the manager to assemble, analyze and weigh a number of statements about the employee's characteristics, contributions and behaviours.

UNIT 4

Controlling

Controlling consists of verifying whether everything occurs in conformance with the plans adopted, instructions issued and principles established. Controlling ensures that there is effective and efficient utilization of organizational resources so as to achieve the planned goals. Controlling measures the deviation of actual performance from the standard performance, discovers the causes of such deviations and helps in taking corrective actions.

According to Brech, "Controlling is a systematic exercise which is called as a process of checking actual performance against the standards or plans with a view to ensure adequate progress and also recording such experience as is gained as a contribution to possible future needs."

According to Donnell, "Just as a navigator continually takes reading to ensure whether he is relative to a planned action, so should a business manager continually take reading to assure himself that his enterprise is on right course."

Controlling has got two basic purposes

- It facilitates co-ordination
- It helps in planning

Features of Controlling Function

Following are the characteristics of controlling function of management-

- Controlling is an end function- A function which comes once the performances are made in conformance with plans.
- Controlling is a pervasive function- which means it is performed by managers at all levels and in all type of concerns.
- Controlling is forward looking- because effective control is not possible without past being controlled. Controlling always look to future so that follow-up can be made whenever required.
- Controlling is a dynamic process- since controlling requires taking reviewal methods, changes have to be made wherever possible.
- Controlling is related with planning- Planning and Controlling are two inseparable functions of management. Without planning, controlling is a meaningless exercise and without controlling, planning is useless. Planning presupposes controlling and controlling succeeds planning.

Process of Controlling

Controlling as a management function involves following steps:

- **Establishment of standards-** Standards are the plans or the targets which have to be achieved in the course of business function. They can also be called as the criteria for judging the performance. Standards generally are classified into two-
 1. Measurable or tangible - Those standards which can be measured and expressed are called as measurable standards. They can be in form of cost, output, expenditure, time, profit, etc.

2. Non-measurable or intangible- There are standards which cannot be measured monetarily. For example- performance of a manager, deviation of workers, their attitudes towards a concern. These are called as intangible standards.

Controlling becomes easy through establishment of these standards because controlling is exercised on the basis of these standards.

- **Measurement of performance-** The second major step in controlling is to measure the performance. Finding out deviations becomes easy through measuring the actual performance. Performance levels are sometimes easy to measure and sometimes difficult. Measurement of tangible standards is easy as it can be expressed in units, cost, money terms, etc. Quantitative measurement becomes difficult when performance of manager has to be measured. Performance of a manager cannot be measured in quantities. It can be measured only by-
 1. Attitude of the workers,
 2. Their morale to work,
 3. The development in the attitudes regarding the physical environment, and
 4. Their communication with the superiors.

It is also sometimes done through various reports like weekly, monthly, quarterly, yearly reports.

- **Comparison of actual and standard performance-** Comparison of actual performance with the planned targets is very important. Deviation can be defined as the gap between actual performance and the planned targets. The manager has to find out two things here- extent of deviation and cause of deviation. Extent of deviation means that the manager has to find out whether the deviation is positive or negative or whether the actual performance is in conformity with the planned performance. The managers have to exercise control by exception. He has to find out those deviations which are critical and important for business. Minor deviations have to be ignored. Major deviations like replacement of machinery, appointment of workers, quality of raw material, rate of profits, etc. should be looked upon consciously. Therefore it is said, "If a manager controls everything, he ends up controlling nothing." For example, if stationery charges increase by a minor 5 to 10%, it can be called as a minor deviation. On the other hand, if monthly production decreases continuously, it is called as major deviation.

Once the deviation is identified, a manager has to think about various cause which has led to deviation. The causes can be-

1. Erroneous planning,
 2. Co-ordination loosens,
 3. Implementation of plans is defective, and
 4. Supervision and communication is ineffective, etc.
- **Taking remedial actions-** Once the causes and extent of deviations are known, the manager has to detect those errors and take remedial measures for it. There are two alternatives here-

1. Taking corrective measures for deviations which have occurred;
2. After taking the corrective measures, if the actual performance is not in conformity with plans, the manager can revise the targets. It is here the controlling process comes to an end. Follow up is an important step because it is only through taking corrective measures, a manager can exercise controlling.

Relation between Planning and Controlling

Planning and controlling are two separate functions of management, yet they are closely related. The scope of activities if both are overlapping to each other. Without the basis of planning, controlling activities become baseless and without controlling, planning becomes a meaningless exercise. In absence of controlling, no purpose can be served by. Therefore, planning and controlling reinforce each other. According to Billy Goetz, "Relationship between the two can be summarized in the following points

1. Planning precedes controlling and controlling succeeds planning.
2. Planning and controlling are inseparable functions of management.
3. Activities are put on rails by planning and they are kept at right place through controlling.
4. The process of planning and controlling works on Systems Approach which is as follows :
Planning → Results → Corrective Action
5. Planning and controlling are integral parts of an organization as both are important for smooth running of an enterprise.
6. Planning and controlling reinforce each other. Each drives the other function of management.

In the present dynamic environment which affects the organization, the strong relationship between the two is very critical and important. In the present day environment, it is quite likely that planning fails due to some unforeseen events. There controlling comes to the rescue. Once controlling is done effectively, it gives us stimulus to make better plans. Therefore, planning and controlling are inseparable functions of a business enterprise.

Types of Controlling

- **Feedback Control:** This process involves collecting information about a finished task, assessing that information and improvising the same type of tasks in the future.
- **Concurrent control:** It is also called real-time control. It checks any problem and examines it to take action before any loss is incurred. Example: control chart.
- **Predictive/ feedforward control:** This type of control helps to foresee problem ahead of occurrence. Therefore action can be taken before such a circumstance arises.

Budgetary Controlling Techniques

- Budgeting is the formulation of plans for a given future period in numerical terms.

- Organizations may establish budgets for units, departments, divisions, or the whole organization.
- The usual time period for a budget is one year and is generally expressed in financial terms. Budgets are the foundation of most control systems.
- They provide yardsticks for measuring performance and facilitate comparisons across divisions, between levels in the organization, and from one time period to another.

Purpose of Budget

Budgets usually serve four control purposes:

- They help the manager's co-ordinate resources;
- They help define the standards needed in all control systems;
- They provide clear and unambiguous guidelines about the organization's resources and expectations, and
- They facilitate performance evaluations of managers and units.

Types of budgetary controlling techniques

1. Financial Budgets.
2. Operating Budget.
3. Non-Monetary Budgets.

1. Financial Budget: Such budgets detail where the organization expects to get its cash for the coming time period and how it plans to spend it. Usual sources of cash include sales revenue, the sales of assets, the issuance of stock, and loans.

On the other hand, the common uses of cash are to purchase new assets, pay expenses, repay debts, or pay dividends to shareholders.

2. Operating Budget: This type of budget is an expression of the organization's planned operations for a particular period.

3. Non-Monetary Budget: Budgets of this type are expressed in non-financial sales or revenues and expenses, i.e. profit. If the anticipated profit figure is too small steps may be needed to increase the sales budget or cut the expense budget.

Advantages and disadvantages of budgeting

As a matter of fact, budgets offer a number of advantages. They have potential drawbacks as well. Both are summarized below:

Strengths	Weaknesses
1. Budgets facilitate effective control.	1. Budgets may be used too rigidly.
2. Budgets facilitate coordination and communication.	2. Budgets may be time-consuming.
3. Budgets facilitate record keeping.	3. Budgets may limit innovation and change.

4. Budgets are a natural complement to planning.	4. However; Budgets hampers development, change, the flexibility of plan.
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Making Budgetary Control Effective

Budgetary control can be made effective if an organization can ensure the following:

- 1. Setting appropriate standard** - This is a key to successful budgeting. Many budgets fail for lack of such standards, and some upper-level managers hesitate to allow subordinates to submit budget plans for fear that they may have no logical basis for reviewing budget requests.
- 2. Ensuring top-management support** - Budget making and administration must receive the whole-hearted support of top 'management. If top management supports budget making, requires departments and divisions to make and defend their budgets, and participate in this review, then budgets encourage alert management throughout the organization.
- 3. Participation by users in budget preparation** - Besides the support of top management, the concerned managers at lower levels should also participate in its preparation. Real participation in budget preparation is necessary to ensure success. It may also prove worthwhile to give department managers a reasonable degree of latitude in changing their budgets and in shifting funds, as long as they meet their total budgets.
- 4. Providing information to managers about performance under budget** - If budgetary control is to work well, managers need ready information about actual and forecast performance under budgets by their departments. Such information must be so designed as to show them how well they are doing.

Return on Investment (Controlling Technique)

Return on investment is very useful technique for determining whether the capital invested in the business has been effectively used or not for generating reasonable amount of return.

Return on Investment= (Net Income / Total Investment) X 100 Net Income before or after tax can be used for calculating ROI. Total investment includes investment in fixed Assets as well as working capital.

It acts as an effective control device in measuring and comparing the performance of different departments. It also helps departmental managers to find out the problems which adversely affect ROI.

Management Information System

MIS is the use of information technology, people, and business processes to record, store and process data to produce information that decision makers can use to make day to day decisions.

MIS is the acronym for Management Information Systems. In a nutshell, MIS is a collection of systems, hardware, procedures and people that all work together to process, store, and produce information that is useful to the organization.

The need for MIS

The following are some of the justifications for having an MIS system

- Decision makers need information to make effective decisions. Management Information Systems (MIS) make this possible.
- MIS systems facilitate communication within and outside the organization – employees within the organization are able to easily access the required information for the day to day operations. Facilitates such as Short Message Service (SMS) & Email make it possible to communicate with customers and suppliers from within the MIS system that an organization is using.
- Record keeping – management information systems record all business transactions of an organization and provide a reference point for the transactions.

Components of MIS

The major components of a typical management information system are;

- People – people who use the information system
- Data – the data that the information system records
- Business Procedures – procedures put in place on how to record, store and analyze data
- Hardware – these include servers, workstations, networking equipment, printers, etc.
- Software – these are programs used to handle the data. These include programs such as spreadsheet programs, database software, etc.

Examples of the broad scope and varied contexts of MISs are:

- Decision support systems
- Enterprise resource planning (ERP)
- Supply chain management
- Customer relationship management (CRM)
- Project management
- Executive information systems (EIS)

TQM (Total Quality Management)

Total Quality Management is an extensive and structured organization management approach that focuses on continuous quality improvement of products and services by using continuous feedback. Joseph Juran was one of the founders of total quality management just like William E. Deming.

Total quality management originated in the industrial sector of Japan (1954). Since that time the concept has been developed and can be used for almost all types of organizations such as schools, motorway maintenance, hotel management and churches. Nowadays, Total Quality Management is also used within the e-business sector and it perceives quality management entirely from the point of view of the customer. The objective of total quality management is doing things right the first time over and over again. This saves the organization the time that is needed to correct poor work and failed product and service implementations (such as warranty repairs).

Total Quality Management can be set up separately for an organization as well as for a set of standards that must be followed- for instance the International Organization for Standardization (ISO) in the ISO 9000 series. Total Quality Management uses strategy, data and communication channels to integrate the required quality principles into the organization's activities and culture.

Total Quality Management principles

1. Focus on customer

When using total quality management it is of crucial importance to remember that only customers determine the level of quality. Whatever efforts are made with respect to training employees or improving processes, only customers determine, for example through evaluation or satisfaction measurement, whether your efforts have contributed to the continuous improvement of product quality and services.

2. Employee involvement

Employees are an organization's internal customers. Employee involvement in the development of products or services of an organization largely determines the quality of these products or services. Ensure that you have created a culture in which employees feel they are involved with the organization and its products and services.

3. Process centred

Process thinking and process handling are a fundamental part of total quality management. Processes are the guiding principle and people support these processes based on basis objectives that are linked to the mission, vision and strategy.

4. Integrated system

Following principle Process centred, it is important to have an integrated organization system that can be modelled for example ISO 9000 or a company quality system for the understanding and handling of the quality of the products or services of an organization.

5. Strategic and systematic approach

A strategic plan must embrace the integration and quality development and the development or services of an organization.

6. Decision-making based on facts

Decision-making within the organization must only be based on facts and not on opinions (emotions and personal interests). Data should support this decision-making process.

7. Communication

A communication strategy must be formulated in such a way that it is in line with the mission, vision and objectives of the organization. This strategy comprises the stakeholders, the level within the organization, the communications channels, the measurability of effectiveness, timeliness, etc.

8. Continuous improvement

By using the right measuring tools and innovative and creative thinking, continuous improvement proposals will be initiated and implemented so that the organization can develop into a higher level of quality.

A supporting Total Quality Management tool that could be used is the Deming cycle (Plan-Do-Check-Act) or the DMAIC process.

Practical approach Total Quality Management

When you implement total quality management, you implement a concept. It is not a system that can be implemented but a line of reasoning that must be incorporated into the organization and its culture.

Practice has proved that there are a number of basic assumptions that contribute to a successful roll-out of total quality management within an organization.

These basic assumptions are:

- Train senior management on total quality management principles and ask for their commitment with respect to its roll-out.
- Assess the current culture, customer satisfaction and the quality system.;
- Senior management determines the desired core values and principles and communicates this within the organization.
- Develop a basic total quality management plan using the basic starting principles mentioned above.
- Identify and prioritize customer needs and the market and determine the organization's products and services to meet those needs.
- Determine the critical processes that can make a substantial contribution to the products and services.
- Create teams that can work on process improvement for example quality circles.
- Managers support these teams using planning, resources, and by providing time training.
- Management integrates the desired changes for improvement in daily processes. After the implementation of improved processes, standardization takes place.;
- Evaluate progress continuously and adjust the planning or other issues if necessary.
- Stimulate employee involvement. Awareness and feedback lead to an overall improvement of the entire process. Support this for example by means of a reward model, i.e. Management by Objectives, and recognition.

Benefits of TQM

Total quality management benefits and advantages:

- Strengthened competitive position
- Adaptability to changing or emerging market conditions and to environmental and other government regulations
- Higher productivity
- Enhanced market image
- Elimination of defects and waste
- Reduced costs and better cost management
- Higher profitability

- Improved customer focus and satisfaction
- Increased customer loyalty and retention
- Increased job security
- Improved employee morale
- Enhanced shareholder and stakeholder value
- Improved and innovative processes

PERT (Programme Evaluation and Review Technique)

PERT was first used in 1957 as a method of planning and controlling the Polaris Missiles Programme by Booz, Allen and Hamilton together with U.S. Naval department. The aim was to finish the project two years in advance. PERT describes basic network technique which includes planning, monitoring and control of projects. PERT finds applications in planning and control of complex set of tasks, functions and relationships.

It is a very important technique in the field of project Management. PERT is commonly employed for conducting the initial review of a project. PERT is a very useful device for planning the time and resources. It represents an important step in the development of managerial science. It points out potentially troublesome areas (which may disrupt programme objectives) against which a timely action can be taken to prevent their occurrences. PERT helps in decision making.

PERT, actually, developed as a research and development planning tool where activity timings could not be estimated with enough certainty. To some extent a similar situation occurs in design work also. PERT can be employed at those places where a project cannot be easily defined in terms of time or resources required.

Of course, events can be readily defined which means it is known that, first, part A will be manufactured, only then subassembly 5 can be built and so on. PERT technique proves very much advantageous when used for non-repetitive type of projects, R & D prototype production, defence projects, etc.

Because of the uncertainty of activity timings, PERT acquired the shape of a probabilistic model. It uses linear programming and probability concepts for planning and controlling activities. Probability concept helps in estimating activity timings; and the maximization of (attainment of) the predefined objective is achieved through the Linear programming feature of PERT. The statistical probability feature of PERT foretells the probability of reaching the specified target dates. PERT is mainly concerned with events and is thus an event-oriented system.

The basic tool used in PERT technique is the network or flow plan. Network consists of a series of related events and activities. An important point is that, as a person plans the activities in his mind, so the flow plan (or diagram) evolves and, it even points out the gaps in the drawing. The network thus drawn shows, how various activities of a project depend on each other and that certain activities have to be completed before the others can start.

Methodology of PERT:

The PERT involves following steps:

1. The project is broken down into different activities systematically.

2. Activities are arranged in logical sequence.
3. The network diagram is drawn.
4. Events and activities are numbered in the network diagram.
5. Using optimistic, pessimistic and normal time, the expected time is calculated.
6. Standard deviation and variance for each activity is calculated.
7. Earliest starting time (EST) and latest finishing time (LFT) are calculated.
8. Expected time, EST and LFT are marked on the network diagram.
9. Slack is calculated.
10. Critical paths are identified and marked on the network diagram.
11. Length of critical path or the total project duration is found out.

Advantages of PERT:

1. PERT forces the management to plan carefully and study how the various parts fit into the whole project.
2. PERT enables the business managers to predict time and cost of the project in advance.
3. PERT is a forward-looking control device for management. PERT calls attention on the timely completion of the project and avoids delay.
4. PERT enables the determination of the probabilities concerning the time by which activity and project would be completed.
5. PERT suggests areas for increasing efficiency and reducing cost.
6. It provides up-to-date information of the project programme so that the necessary steps may be taken to minimize the delays and interruptions.
7. PERT assists in coordinating the different parts of the total projects.

Limitations of PERT:

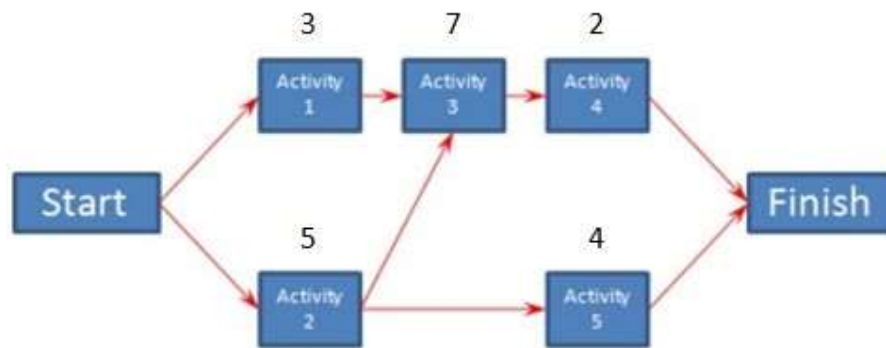
1. In PERT, it is assumed that all the activities involved in the project are known in advance. In projects like research and development (R and D), it is not possible to list out all the activities in advance.
2. The assumption that a project can be sub-divided into a set of predictable and independent, activities may not hold true always.
3. PERT emphasizes only on time and not the costs.
4. PERT is based on time estimates and there may be error in estimating time.
5. For active control of a project, PERT requires frequent updating and revising of calculations. It is an expansive and time consuming exercise, which requires highly trained personnel.

CPM (Critical Path Analysis)

The Critical Path Method has four key elements...

- Critical Path Analysis
 - Float Determination
 - Early Start & Early Finish Calculation
 - Late Start & Late Finish Calculation
-
- **Critical Path Analysis**

The critical path is the sequence of activities with the longest duration. A delay in any of these activities will result in a delay for the whole project. Below are some critical path examples to help you understand the key elements...



Using the Critical Path Method (CPM)

The duration of each activity is listed above each node in the diagram. For each path, add the duration of each node to determine its total duration. The critical path is the one with the longest duration.

There are three paths through this project...

Critical Path Analysis Example Use Critical Path Analysis to find your Critical Path

• Float Determination

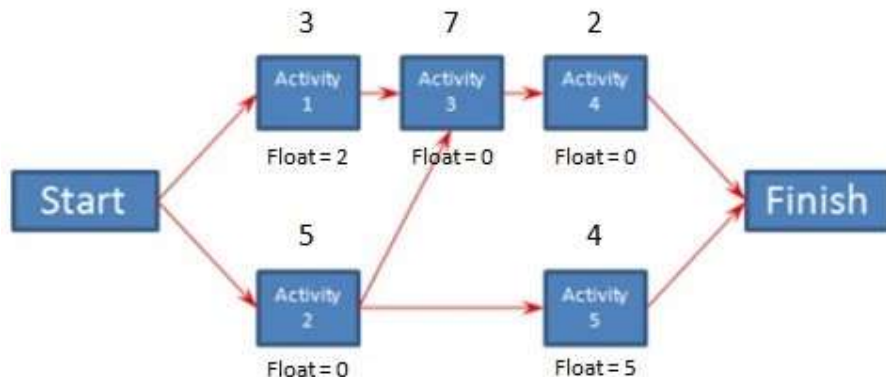
Once you've identified the critical path for the project, you can determine the float for each activity. Float is the amount of time an activity can slip before it causes your project to be delayed. Float is sometimes referred to as slack.

Figuring out the float using the Critical Path Method is fairly easy. You will start with the activities on the critical path. Each of those activities has a float of zero. If any of those activities slips, the project will be delayed.

Then you take the next longest path. Subtract its duration from the duration of the critical path. That's the float for each of the activities on that path.

You will continue doing the same for each subsequent longest path until each activity's float has been determined. If an activity is on two paths, its float will be based on the longer path that it belongs to.

Determining Float



Using the critical path diagram from the previous section, Activities 2, 3, and 4 are on the critical path so they have a float of zero.

The next longest path is Activities 1, 3, and 4. Since Activities 3 and 4 are also on the critical path, their float will remain as zero. For any remaining activities, in this case Activity 1, the float will be the duration of the critical path minus the duration of this path. $14 - 12 = 2$. So Activity 1 has a float of 2.

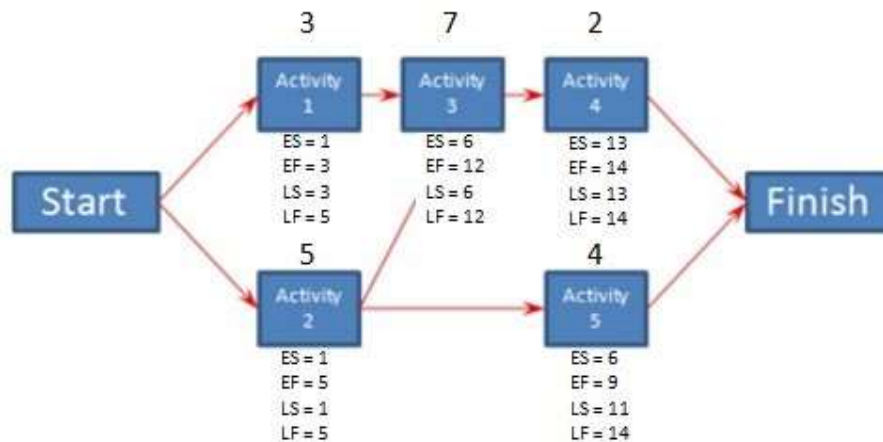
The next longest path is Activities 2 and 5. Activity 2 is on the critical path so it will have a float of zero. Activity 5 has a float of $14 - 9$, which is 5. So as long as Activity 5 doesn't slip more than 5 days, it won't cause a delay to the project.

- **Early Start & Early Finish Calculation**

The Critical Path Method includes a technique called the Forward Pass which is used to determine the earliest date an activity can start and the earliest date it can finish. These dates are valid as long as all prior activities in that path started on their earliest start date and didn't slip.

Starting with the critical path, the Early Start (ES) of the first activity is one. The Early Finish (EF) of an activity is its ES plus its duration minus one. Using our earlier example, Activity 2 is the first activity on the critical path: $ES = 1$, $EF = 1 + 5 - 1 = 5$. You then move to the next activity in the path, in this case Activity 3. Its ES is the previous activity's EF + 1. Activity 3 $ES = 5 + 1 = 6$. Its EF is calculated the same as before: $EF = 6 + 7 - 1 = 12$.

If an activity has more than one predecessor, to calculate its ES you will use the activity with the latest EF.



Critical Path Schedules

- **Late Start & Late Finish Calculation**

The Backward Pass is a Critical Path Method technique you can use to determine the latest date an activity can start and the latest date it can finish before it delays the project.

You'll start once again with the critical path, but this time you'll begin from the last activity in the path. The Late Finish (LF) for the last activity in every path is the same as the last activity's EF in the critical path. The Late Start (LS) is the $LF - \text{duration} + 1$.

In our example, Activity 4 is the last activity on the critical path. Its LF is the same as its EF, which is 14. To calculate the LS, subtract its duration from its LF and add one. $LS = 14 - 2 + 1 = 13$.

You then move on to the next activity in the path. Its LF is determined by subtracting one from the previous activity's LS. In our example, the next Activity in the critical path is Activity 3. Its LF is equal to Activity 4 LS - 1. Activity 3 LF = $13 - 1 = 12$. Its LS is calculated the same as before by subtracting its duration from the LF and adding one. Activity 3 LS = $12 - 7 + 1 = 6$.

You will continue in this manner moving along each path filling in LF and LS for activities that don't have it already filled in.