INDUSTRIAL ORGANISATION & MANAGEMENT
INDUSTRIAL ECONOMICS & MANAGEMENT
ECONOMICS AND BUSINESS MANAGEMENT
GENERAL MANAGEMENT

1. Objective: This course is designed to introduce the students to the basic concepts of Economics and Management so as to enable them to give optimal performance during professional life.

Details of Course

S. No	Contents
1	**INDUSTRIAL ECONOMICS:** Meaning and importance of industrialisation. Organizations- various types of organizations. Division of Economics, Basic Constituents(Micro & Macro Economics)
2	**CONSUMPTION AND MARKET STRUCTURE:** Law of Demand and Elasticity of Demand, Consumer's surplus, Utility and its measurement, Types of market structure – Perfect, Monopoly, Monopolistic and Oligopoly, Demand forecasting techniques. Meaning and factors influencing location of Industrial Units, Scale of production- large vs Small Industrial Units
3	**MANAGEMENT- INTRODUCTION TO MANAGEMENT:** Management and its nature, purpose and definitions. Process and functions of management- Planning, Organising, Actuating and controlling, Functional areas of management, skills and role of Management
4	**PLANNING:** Nature and purpose of planning, types of plans, steps in planning process. **Objectives**: nature and importance of objectives, Types of objectives, primary, secondary, individual and personal objectives. Guidelines for setting objectives **Decision Making**: Importance and limitations of rational decision making, types of decisions- programmed and non programmed decision making. Process of decision making under certainty, uncertainty and risk.
5	**ORGANISING:** Nature and purpose of organising: steps in organising/ process of organising, formal and informal organizations; span of control & factors determining effective span. **Decentralisation of Authority**: Nature of decentralisation, degree of decentralisation, decentralisation as philosophy and policy **Delegation of authority:** Meaning of authority/delegation, steps in the process of delegation, factors determining the degree of delegation, art of delegation. **Line/staff organization:** Line organization, staff organization, line and staff organization, functional and committee organization, the nature of line and staff relationship.
6	**ACTUATING:** Nature and purpose of Actuating, steps in actuating process.

	Essentials of Human Resource Management: Importance and functions of Human resource management, Importance of Human resource planning, Recruitment, selection, training and development, performance appraisal, compensation packages, promotions, transfers demotion and separation etc. **Leadership:** Meaning and importance, Leadership qualities **Motivation:** The need – want - satisfaction chain.
7	**CONTROLLING:** Nature and purpose of controlling, steps in controlling/ process of controlling, types of controls, recruitments of effective controls.

References

1. **Industrial Organization and Management – Y.K. Bhushan**
2. **Principles of Management - A.K. Chatterjee**
3. **Principles of Management – George Terry**
4. **Industrial Organization and Management – V.D. Sinha and Gadgill**
5. **Management – Stoner, Freeman and Gilbert**
6. **Elementary Economics Theory – KK Dewett and JD Verma**
7. **An Introduction to Economics – ML Sethi**
8. **Advanced Economics - K.P.M**
9. **Indian Economics KK Dewett and JJ verma**

UNIT I
Industrial Economics

1. Meaning and importance of industrialization

Meaning & History of Industrialization

Industrialization is the process by which an economy is transformed from primarily agricultural to one based on the manufacturing of goods. Individual manual labor is often replaced by mechanized mass production, and craftsmen are replaced by assembly lines. Characteristics of industrialization include economic growth, more efficient division of labor, and the use of technological innovation to solve problems as opposed to dependency on conditions outside human control.

Industrialization is most commonly associated with the European Industrial Revolution of the late 18th and early 19th centuries. Industrialization also occurred in the United States between the 1880s and the Great Depression. The onset of the Second World War also led to a great deal of industrialization, which resulted in the growth and development of large urban centers and suburbs. Industrialization is an outgrowth of capitalism, and its effects on society are still undetermined to some extent; however, it has resulted in a lower birthrate and a higher average income.

Industrial Revolution

The Industrial Revolution traces its roots to the late 18th century in Britain. Prior to the proliferation of industrial manufacturing facilities, fabrication and processing were generally carried out by hand in people's homes. The steam engine was a key invention, as it allowed for many different types of machinery. Growth of the metals and textiles industries allowed for the mass production of basic personal and commercial goods. As manufacturing activities grew, transportation, finance, and communications industries expanded to support the new productive capacities.

The Industrial Revolution led to unprecedented expansion in wealth and financial well being for some. It also led to increased labor specialization and allowed cities to support larger populations, motivating a rapid demographic shift. People left rural areas in large numbers, seeking potential fortunes in budding industries. The revolution quickly spread beyond Britain, with manufacturing centers being established in continental Europe and the United States.

World War II created unprecedented demand for certain manufactured goods, leading to a buildup of productive capacity. After the war, reconstruction in Europe occurred alongside a massive population expansion in North America. This provided further catalysts that kept capacity utilization high and stimulated further growth of industrial activity. Innovation, specialization, and wealth creation were causes and effects of industrialization in this period.

The late 20th century was noteworthy for rapid industrialization in other parts of the world, notably East Asia. The Asian Tigers of Hong Kong, South Korea, Taiwan, and Singapore are well known for economic growth that altered those economies. China famously experienced its own industrial revolution after moving toward a more mixed economy and away from heavy central planning.

Modes of Industrialization

Different strategies and methods of industrialization have been followed at different times and places with varying degrees of success. The Industrial Revolution in Europe and the United States initially took place under generally mercantilist and protectionist government policies that fostered the early growth of industry but was later associated with a more laissez-faire or free market approach that opened markets to foreign trade as an outlet for industrial output.

In the post Second World War era, developing nations across Latin America and Africa adopted a strategy of import substituting industrialization, which involved protectionist barriers to trade coupled with direct subsidization or nationalization of domestic industries. Nearly at the same time, parts of Europe and several East Asian economies pursued an alternative strategy of export led growth. This strategy emphasized deliberate pursuit of foreign trade to build exporting industries, and partly depended on maintaining a weak currency to make exports more attractive to foreign buyers. In general, export-led growth has outperformed import substituting industrialization.

Lastly, socialist nations of the 20th century repeatedly embarked on various deliberate, centrally planned programs of industrialization almost entirely independent of either domestic or foreign trade markets. These include the first and second five-year plans in the Soviet Union and the Great Leap Forward in China. While these efforts did re-orient the respective economies toward a more industrial base and an increase in output of industrial commodities, they were also accompanied by harsh government repression, deteriorating living and working conditions for workers, and even widespread starvation.

The Importance of Industrialization In Development

- ***Provides market to other sectors***

  Industries provide a market for both producer and consumer goods from other sectors of the economy. In the case of producer goods, industries buy raw materials from the primary sector, e. g. cotton from agriculture, soda-ash from mining, and timber from forestry. The industrial sector also buys services from the tertiary sector, e. g. banking, insurance, transport and communication. At the same time, industrial workers buy consumer goods from other sectors. By providing a market to these other sectors, industries facilities the development of the country.

- ***Provides inputs to other sectors***

The industrial sector provides the necessary inputs to other sectors of the economy. For instance, it provides agriculture with farm inputs such as tractors, fertilizers, chemicals and drugs. It also provides other sectors with machinery, steel, oil, etc. This makes it possible for these other sectors to operate and contribute to development.

- ***Provides consumer goods to other sectors***

  Workers from other sectors require consumer goods such as clothes, processed food, radios, television sets, vehicles, and furniture, that are provided by the manufacturing industry. This raises the living standards of workers as well as their productivity.

- ***Creates employment opportunities***

  The industrial sector is an important employer for both skilled and unskilled labour. Agriculture and other sectors cannot absorb all the labour force. As industries expand, they account for a much share of employment. By so doing, industries alleviate unemployment.

- ***Conserves and earns foreign exchange***

  Through industrialization, a country is able to conserve foreign exchange by reducing on imports. This is particularly so when industries are established to produce goods that were previously imported. At the same time, where a country manufactures goods for export, it earns foreign exchange. This foreign exchange can be used to import essential capital goods and stimulate capital formation.

- ***Adds value to primary products***

  Producers of primary products can benefit more by processing their products before export. This is because processing adds value to a product. Instead of exporting fruits in their raw form, they can be processed and tinned. By so doing, fruits will fetch a higher price. Similarly, coffee can fetch a higher price by being processed before exportation.

- ***Facilitates technological change***

  Industrialization is conducive to development of ideas and facilitates invention and innovation. It can be seen as an instrument of change since it transcends cultural boundaries. Through industrialization, people from different backgrounds have been able to improve on the utilization of resources. Industries are breeding grounds for entrepreneurs and managers. They also help train the skilled manpower needed in a country. In a way, the manufacturing industry facilitates technological advancement, which is crucial for development.

Students are advised to learn about history of industrialization in India along with opportunities created and the problems associated with it.

2. Organizations- various types of organizations.

Organizations (Meaning)

Organization refers to a collection of people, who are involved in pursuing defined objectives. It can be understood as a social system which comprises all formal human relationships. The organization encompasses division of work among employees and alignment of tasks towards the ultimate goal of the company.

It can also be referred as the second most important managerial function, that coordinates the work of employees, procures resources and combines the two, in pursuance of company's goals.

Process of Organization

Step 1: Determination and classification of firm's activities.
Step 2: Grouping of the activities into workable departments.
Step 3: Assignment of authority and responsibility on the departmental executives for undertaking the delegated tasks.
Step 4: Developing relationship amidst superior and subordinate, within the unit or department.
Step 5: Framing policies for proper coordination between the superior and subordinate and creating specific lines of supervision.

Organization is a goal-oriented process, which aims at achieving them, through proper planning and coordination between activities. It relies on the principle of division of work and set up authority-responsibility relationship among the members of the organization.

On the basis of relationship, an organization can be of two types—formal and informal.

Formal organization refers to the structure of well-defined jobs, each bearing a definite measure of authority, responsibility and accountability.

Informal organization refers to the relationship between people in the organization based on personal attitudes, emotions and prejudices, likes and dislikes.

There are five common types of organizations on the basis of structure—Line, functional, Line and Staff, Committee and matrix organization.

(1) Line organization —In this, there is a chain of authority which flows from upward to down word.

Advantages. Main advantages of this form of organization are: (i) Simple, (ii) Fixed responsibility, (iii)

Flexibility, (iv) Prompt decision, (v) Unified control, (vi) Well-defined authority, (vii) Fixed channel of promotions.

Disadvantages— The system claims the following disadvantages: (i) Unitary administration, (ii) Overloading with work, (iii) Lack of specialisation (iv) Lack of communication (v) Succession problem, (vi) Absence of conceptual thinking, (vii) Favourities, (viii) No co-ordination.

(2) Functional organization—In this form of organization all activities in the organization are grouped according to the basic functions, i.e., production, finance, marketing, headed by a specialist.

Advantages- Main advantages of this form are: (i) Specialisation, (ii) Large-scale production, (iii) Improved efficiency, (iv) Flexibility, (v) Better industrial relations, (vi) Separation of mental and physical functions.

Disadvantages—Following are the disadvantages of this form of organization: (i) Multiplicity of authority, (ii) Indiscipline, (iii) Shifting of responsibility, (iv) Lack of co-ordination, (v) impracticable, (vi) delay in decision making.

(3) Line and Staff Organization—In this form of organization the structure is basically that of line organization but functional experts are appointed to advise the line authority in their respective field.

Advantages: (i) Advantages of the line and the functional organizations, (ii) Specialisation, (iii) Sound decisions.

Disadvantages: (i) Conflicts between the line and the staff executives, (ii) Advice of the staff executives is ignored, (iii) No demarcation of authority, (iv) Lack of responsibility, (v) uneconomical.

(4) Committee Organization—Committee is a group of individuals formed permanently or temporarily for a particular purpose through free interchange of ideas.

Advantages—(I) Pooling of ideas, (2) Co-ordination, (3) Motivation through participation, (4) Representation of interest groups, (5) Easy communication, (6) No concentration of power, (7) A tool of management for development.

Disadvantages—(I) Slow decisions, (2) Divided responsibility, (3) Minority tyranny, (4) other abuses.

(5) Project or Matrix Organization—In it authority flows vertically within functional departments.

Advantages-It emphasises multiple inter-dependence among various functions, horizontal relationships
and operational flexibility.

Disadvantages—It is of a temporary nature.

The different types of organizations on basis of ownership are: - 1. Single Ownership (Private Undertaking). 2. Partnership. 3. Joint Stock Company 4. Cooperative Organization (Or Societies) 5. Public Sector 6. Private Sector.

Single Ownership:

Ownership when applied to an industrial enterprise means title to and possession of the assets of the enterprise, the power to determine the policies of operation, and the right to receive and dispose of the proceeds. It is called a single ownership when an individual exercises and enjoys these rights in his own interest. A business owned by one man is called single ownership. Single ownership does well for those enterprises which require little capital and lend themselves readily to control by one person.

Advantages of Single Ownership:

1. Easy to establish as it does not require to complete any legal formality.
2. Simplicity of organization.
3. The expenses in starting the business are minimal.
4. Owner is free to make all decisions.
5. This type of ownership is simple, easy to operate and extremely flexible.
6. The owner enjoys all the profits, thus,
7. There is a great deal of personal motivation and incentive to succeed.
8. Minimum legal restrictions are associated with this form of ownership.
9. Owner can keep secrecy as regards the raw materials used, method of manufacture, etc.
10. Single ownership associates with it the great ease with which the business can be discontinued.

Disadvantages of Single Ownership:

1. The owner is liable for all obligations and debts of the business.
2. The business may not be successful if the owner has limited money, lacks ability and necessary experience to run the business.
3. Because of relatively unstable nature of the business, it is difficult to raise capital for expanding the business.

4. If the business fails, creditors can take the personal property as well as the business property of the (single) owner to settle their claims. This means single ownership involves unlimited liability for debts and losses.
5. There is limited opportunity for employees as regards monetary rewards (e.g., profit sharing, bonuses, etc.) and promotions.
6. Generally, single ownership firm has limited life, i.e., the firm may cease to exist with the death of the proprietor. This is the cause of unstable nature of the firm (refer 3 above).

Partnership:

A single owner becomes inadequate as the size of the business enterprise grows. He may not be in a position to do away with all the duties and responsibilities of the grown business. At this stage, the individual owner may wish to associate with him more persons who have either capital to invest, or possess special skill and knowledge to make the existing business still more profitable.
Such a combination of individual traders is called Partnership. Partnership may be defined as the relation between persons who have agreed to share the profits of a business carried on by all or any of them acting for all.
Individuals with common purposes join as partners and they put together their property, ability, skill, knowledge, etc., for the purpose of making profits. In brief, partnership is an association of two or more (up to 20) persons to carry on as co-owners of a business for profit.
Partnerships are based upon a partnership agreement which is generally reduced to writing. It should cover all areas of disagreement among the partners. It should define the authority, rights and duties of each partner. It should specify- how profits and losses will be divided among the partners, etc.

Joint Stock Company:

Joint Stock Company overcomes many of the disadvantages associated with Partnership types of industrial ownership, such as:
(i) Difficulties in raising capital,
(ii) Easy disruption,
(iii) Lack of facility for centralised management, and
(iv) Unlimited liability, etc.
A joint stock company is an Association of individuals, called shareholders, who join together for profit and agree to supply capital divided into shares that are transferable for carrying on a specific business. Death, insolvency, disablement or lunacy of the shareholders does not affect the joint stock company. A joint stock company consists of more than twenty persons for carrying any business other than the banking business.
These persons give a name to the company, mention the purpose for which it is formed, and state the nature and the amount of capital (shares) to be issued, etc., and submit the proposal to the Registrar of Companies. As the registrar issues a certificate in this

connection, the company starts operating. The managing body of a joint stock company is Board of Directors elected by the shareholders.

The Board of Directors:

(i) Makes policies;

(ii) Takes decisions; and

(iii) Runs the company efficiently.

The liability of the members (or shareholders) of a joint stock company is limited to that capital only of which they hold the shares. Finance is raised by issuing shares, debentures, bank loans, loans from industrial and finance corporations.

Types of Joint Stock Company:

There are two types of joint stock companies:

(a) Private Limited Company:

(i) The capital is collected from the private partners; some of them may be active while others being sleeping.

(ii) Private limited company restricts the right to transfer shares, avoids public to take up shares or debentures.

(iii) The number of members is between 2 and 50, excluding employee and ex-employee sharehold¬ers.

(iv) The company need not file documents such as consent of directors, list of directors, etc., with the Registrar of Joint Stock Companies.

(v) The company need not obtain from the Registrar, a certificate of commencement of business.

(vi) The company need not circulate the Balance Sheet, Profit and Loss Account, etc., among its members; but it should hold its annual general meeting and place such financial statements in the meeting.

(vii) A private company must get its accounts audited.

(viii) A private company has to send a certificate along with the annual return to the Registrar of Joint Stock Companies stating that it does not have shareholders more than fifty excluding the employee and ex-employee shareholders.

Actually, a private joint stock company resembles much with partnership and has the advantage that big capital can be collected, than could be done so in partnership.

(b) Public Limited Company:

(i) In Public limited company, the capital is collected from the public by issuing shares having small face value (Rs. 50,20,10).

(ii) The number of shareholders should not be less than seven, but there is no limit to their maximum number.

(iii) A public limited company has to file with the Registrar of Joint Stock Companies, documents such as consent of the directors, list of directors, director's contract, etc., along with the memorandum of association and articles of association.

(iv) A public company has to issue a prospectus to the public.

(v) It has to allot shares within 180 days from the date of prospectus.

(vi) It can start only after receiving the certificate to commence business.

(vii) It has to hold a Statutory Meeting and to issue a Statutory Report to all members and also to the Registrar within a certain period.
(viii) There is no restriction on the transfer of shares. (be) Directors of the company are subject to rotation.
(x) The public company must get its account audited every year by registered auditors.
(xi) It has to send financial statements to all members and to the Registrar.
(xii) It has to hold a general meeting every year.
(xiii) The Managing Agent gets a fixed percentage of net profit as remuneration.
Advantages of Joint Stock Companies:
(i) A huge sum of money can be raised.
(ii) It associates limited liability with it.
(iii) Shares are transferable.
(iv) Company's life is not affected by the life (death) of shareholders.
(v) Services of specialists can be obtained.
(vi) Risk of loss is divided among many shareholders.
(vii) The company associates with it stability, efficiency and flexibility of management.
Disadvantages of Joint Stock Companies:
(i) A good deal of legal formalities is required for the formation of a joint stock company.
(ii) Company is managed by big shareholders only.
(iii) High paid officials manage the whole shows; they cannot have as high interests in the company as the proprietors can have.
(iv) People can commit frauds with the company.
(v) Board of directors and managers who remain familiar with the financial position of the company may sell or purchase shares for their personal profits.
(vi) It is difficult to maintain secrecy as in partnership.
(vii) The team spirit with which partnership works, is lacking in a joint stock company.
(viii) Divided responsibility.
Applications of Joint Stock Companies:
(i) Steel mills,
(ii) Fertiliser factories, and
(iii) Engineering concerns, etc.

Cooperative Organisation (Or Societies):
It is a form of private ownership which contains features of large partnership as well as some features of the corporation. The main aim of the cooperative is to eliminate profit and provide goods and services to the members of the cooperative at cost.
Members pay fees or buy shares of the cooperative, and profits are periodically redistributed to them. Since each member has only one vote (unlike in joint stock companies), this avoids the concentration of control in a few hands.
In a cooperative, there are shareholders, a board of directors and the elected officers similar to the corporation. There are periodic meetings of shareholders, also. Special laws deal with the formation and taxation of cooperatives.

Cooperative organisation is a kind of voluntary, democratic ownership formed by some motivated individuals for obtaining necessities of everyday life at rates less than those of the market. The principle behind the cooperative is that of cooperation and self-help.

Forms of Cooperative Enterprises:

(i) Consumer's Cooperatives, in retail trade and services.

(ii) Producer Cooperatives, for group buying and selling such items as dairy products, grain, fruit, etc.

(iii) Cooperative farming for more and good quality yield from the farms.

(iv) Cooperative housing for constructing and providing houses to the members of the association at relatively lesser rates.

(v) Cooperative credit society, to provide loans to the needy individuals.

Advantages of Cooperative Enterprises:

(i) Daily necessities of life can be made available at lower rates.

(ii) It is the democratic form of ownership.

(iii) Overheads are reduced as members of the cooperative may render honorary services.

(iv) It promotes cooperation, mutual assistance and the idea of self-help.

(v) The chances of large stock-holding (hoarding) and black marketing are eliminated.

(vi) No one person can make huge profits.

(vii) Common man is benefited by cooperatives.

(viii) Monetary help can be secured from government.

(ix) Goods required can be purchased directly from the manufacturers and therefore can be sold at less rates.

Disadvantages of Cooperative Enterprises:

(i) Since the members of the cooperative manage the whole show, they may not be competent enough to make it a good success.

(ii) Finance being limited, specialist's services cannot be taken.

(iii) Conflict may arise among the members on the issue of sharing responsibility and enjoying authorities.

(iv) Members who are in position may try to take personal advantages.

(v) Members being in services may not be able to devote necessary attention and adequate time for supervising the works of the cooperative enterprise.

Public Sector:

Concept of Public Sector:

A public enterprise is one that is:

(1) Owned by the state,

(2) Managed by the state, or

(3) Owned and managed by the state.

The sector of public enterprises is popularly known as the Public Sector. Public enterprises are controlled and operated by the Government either solely or in association with private enterprises. Public enterprises are controlled and operated by the Government to produce and supply goods and services required by the society.

Ultimate control of public enterprises remains with the state and the stale runs it with a service motto.
Its sphere embraces all units, irrespective of risks involved and profit expected. There is no dearth of capital in public sector and business expansion is not difficult. Public sector prevents concentration and unbalanced growth of industries.
Public sectors are accountable in terms of their results to Parliament and State Legislature. A public enterprise is seldom as efficient as a private enterprise; wastage and inefficiency can seldom be reduced to a minimum.
Evolution of Public Sector:
The Industrial Revolution gave rise to many bitter social evils. It also gave birth to private capitalism. Consumers and workers were exploited and, therefore, there arose the need of State Intervention in industrial field. The intervention led to evolution of public sector/enterprises. The evolution of public sector in India is recent.
Prior to 1947, there was virtually no public sector barring the field of transport and communication, i.e., Railways, Posts and Telegraphs etc., are being managed by the Central Government since pre-independence period. Since independence, a large number of public enterprises have been established both by Central and State Governments.
The Hindustan Shipyard, The Hindustan Steels, the Hindustan Machine Tools, The Bharat Heavy Electricals, Indian Telephone Industries, Indian Airlines, Life Insurance Corporation are a few examples of public sector.
Objectives of Public Sector:
(1) To provide basic infrastructure facilities for the growth of economy.
(2) To promote rapid economic development.
(3) To undertake economic activity strategically important for the growth of the country, which if left to private initiative would distort the national objective.
(4) To have balanced regional development and even dispersal of economic activity throughout the country.
(5) To avoid concentration of economic power in a few hands.
(6) To create employment opportunities on an increasing scale.
(7) To earn foreign exchange in order to export commodities not available in the country e.g., petro¬leum oil, sophisticated weapon systems etc.
(8) To look after well-being and welfare of public.
(9) To minimize exploitation of workers and consumers.
Merits of Public Sector:
(1) Public sector helps in the growth of those industries which require huge amount of capital and which cannot flourish under the private sector.
(2) Public sector helps in the implementation of the economic plans and enables them to reach the target of achievement within a prescribed period by taking initiative in- the establishment of in¬dustries of its own accord.
(3) Due to the absence of project motive in the public sector, the consumers are benefitted by greater, better and cheaper products.

(4) Public enterprise prevents the concentration of wealth in the hands of a few and paves the way for equitable distribution of wealth among different sections of community.
(5) Public enterprise encourages industrial growth of under-developed regions in the country.
(6) Profits earned by public sector may be used for the general welfare of the community.
(7) Public sector offers equitable employment opportunities to all; there is no discrimination, as may be in a private sector.
(8) Capital, raw material, fuel, power and transport are easily made available to them.
Demerits of Public Sector:
(1) Public sector can rarely attain the efficiency of a private enterprise; wastage and inefficiency can seldom be reduced to a minimum.
(2) Due to heavy administrative expenses, state enterprises are mostly run at a loss leading to addi¬tional burden of taxation on the people.
(3) There is too much interference by the Government and Politicians in the internal affairs of the public enterprises. As a result inefficiency increases.
(4) Delay in decisions is a very common phenomena in public enterprises.
(5) Incompetent persons may occupy high levels.
(6) Workers (unlike in private concerns) shirk work.

Private Sector:
Private sector serves personal interests and is a non-government sector. Profit (rather than service) is the main objective. Private sector constitutes mainly consumer's goods industries where profit possibilities are high. Private sector does not undertake risky ventures or those having low-profit margin. Private enterprises are run by businessmen, capital is collected from the private partners.
Merits of Private Sector:
(i) The magnitude of profits incurred is high.
(ii) The efficiency of the private enterprise is high,
(iii) Wastage of material and labour is minimum.
(iv) Decision-making is very prompt.
(v) There is no interference in its internal affairs by politicians or Government.
(vi) Competent persons occupy high levels.
Demerits of Private Sector:
(i) There is exploitation motive, the workers and the consumers may not receive fair deal.
(ii) There is dearth of capital to expand the business.
(iii) Private enterprise leads to concentration of wealth in the hands of a few.
(iv) Private enterprises lead to unbalanced growth of industries.

3. Division of Economics, Basic Constituents (Micro & Macro Economics)

Economics (Meaning)

Economics can be defined in a few different ways. It's the study of scarcity, the study of how people use resources and respond to incentives, or the study of decision-making. It often involves topics like wealth and finance, but it's not all about money. Economics is a broad discipline that helps us understand historical trends, interpret today's headlines, and make predictions about the coming years.

Economics ranges from the very small to the very large. The study of individual decisions is called microeconomics. The study of the economy as a whole is called macroeconomics. A microeconomist might focus on families' medical debt, whereas a macroeconomist might focus on sovereign debt.

Main Divisions of Economics

There are four main divisions of economics. They are consumption, production, exchange and distribution. In modern times, economists add one more division and that is public finance.

Main Divisions of Economics

There are four main divisions of economics. They are consumption, production, exchange and distribution. In modern times, economists add one more division and that is public finance. In public finance, we study about the economics of government. The economic functions of the modern State have increased to a great extent. So public finance has become an important branch of economics.

All the above divisions are interrelated. And they are dependent on each other.

Consumption

Consumption deals with the satisfaction of human wants. There is economic activity in the world because there are wants. When a want is satisfied, the process is known as consumption. Generally, in plain language, when we use the term 'consumption', what we mean is usage. But in economics, it has a special meaning. We can speak of the consumption of the services of a lawyer, just as we speak of the consumption of food.

In the sub-division dealing with consumption, we study about the nature of wants, the classification of wants and some of the laws dealing with consumption such as the law of diminishing marginal utility, Engel's law of family expenditure and the law of demand.

Production

Production refers to the creation of wealth. Strictly speaking, it refers to the creation of utilities. And utility refers to the ability of a good to satisfy a want. There are three kinds of utility. They are form utility, place utility and time utility. Production refers to all activities which are undertaken to produce goods which satisfy human wants. Land, labour, capital and organization are the four factors of production. In the sub-division dealing with production, we study about the laws which govern the factors of production. They include Malthusian Theory of population and the laws of returns. We also study about the localization of industries and industrial organization.

Exchange

In modern times, no one person or country can be self-sufficient. This gives rise to exchange. In exchange, we give one thing and take another. Goods may be exchanged for goods or for money. If goods are exchanged for goods, we call it barter. Modern economy is a money economy. As goods are exchanged for money, we study in economics about the functions of money, the role of banks and we also study how prices are determined. We also discuss various aspects of international trade.

Distribution

Wealth is produced by the combination of land, labour, capital and organization. And it is distributed in the form rent, wages, interest and profits. In economics, we are not much interested in personal distribution. That is, we do not analyse how it is distributed among different persons in the society. But we are interested in functional distribution. As the four factors or agents of production perform different functions in production, we have to reward them.

Public Finance

Public finance deals with the economics of government. It studies mainly about the income and expenditure of government. So, we have to study about different aspects relating to taxation, public expenditure, public debt and so on.

Micro & Macro Economics

Most people understand how physics is classified as a science, however, there might be some confusion when including economics in the same category. In fact, economics is a social science, as it shares the same qualitative and quantitative elements common to all social sciences. Economics focuses on the manufacturing, distribution, and consumption of goods and services, and how people, organisations, governments, and nations choose to allocate resources in order to gain these goods and services. As with the studies of all sciences, establishing different sections makes it easier to understand. Economics can be broken into two sections: microeconomics and macroeconomics.[3] Here we delve into these sections; their differences, how they affect each other, and their impact on business.

What is microeconomics?

Microeconomics can be defined as the study of decision-making behaviour of individuals, companies, and households with regards to the allocation of their resources.

Microeconomics strives to discover what factors contribute to peoples' decisions, and what impact these choices have on the general market as far as price, demand, and supply of goods and services is concerned. It's a 'bottom-up' approach with a focus on the basic elements that make up the economy's three sectors (agriculture, manufacturing, and services/tertiary), such as land, entrepreneurship, and capital. It aims to understand the pattern of wages, employment, and income, as well as consumer behaviour, spending trends, wage-price behaviour, corporate policies, and how regulations impact on companies. Microeconomics tries to determine decisions and resource allocation at an individual level, as well as explain what happens when certain conditions change.

To summarise, microeconomics determines to understand the following:

- How people and households spend their budgets
- What combination of products and services are the best fit for their needs and wants, in the context of their available budget
- How individuals decide whether or not to work, and if they choose to work, whether or not it will be full time or part time
- How people decide to save for the future, how much they choose to save, or whether they decide to go into debt
- How a business decides to produce and sell certain products, how it will produce it, how many of each it will sell, and for how much
- What causes them to decide how many workers it will hire
- How a firm will finance its business
- At what time a business will decide to expand, downsize, or even close

For example, microeconomics could use information from a company's financial reports in order to determine how an organisation could maximise its production and output capacity, in order to lower prices and become more competitive.

What is macroeconomics?

Macroeconomics is the holistic study of the structure, performance, behaviour, and decision-making processes of an economy, at a national level.[9] Essentially, macroeconomics is a 'top-down' approach. It seeks to understand changes in the nation's Gross Domestic Product (GPD), inflation and inflation expectations, spending, receipts and borrowings at a governmental level (fiscal policies), unemployment, and monetary policy. This is done to interpret and know the state of the economy, so that policies can be formulated at a higher level, and macro research can be carried out for academic purposes.

Macroeconomics analyses entire industries and economies, rather than singular companies or individuals. It seeks to answer questions such as, "What should the inflation rate be?" and, "What stimulates economic growth?".

To summarise, macroeconomics strives to answer the following:

- Which factors determine how many goods and services a country can produce
- What determines the number of jobs available in an economy
- What determines a country's standard of living

- What factors cause the economy to speed up or slow down
- What causes organisations to hire or fire more labour on a national scale
- What causes the economy to grow over the long term
- What the state of the nation's economic health is, based on improvement in the standard of living, low unemployment, and low inflation

Macroeconomics vs microeconomics: the key differences

Microeconomics and macroeconomics both explore the same elements, but from different points of view. The main differences between them are:

- Macroeconomics seeks to find a general perspective, at a national level, while microeconomics focuses on the individual's perspective, at a consumer level.
- Even though supply and demand applies to both fields of economics, microeconomics is based on the trends of buyers and sellers, where macroeconomics focuses on the various cycles of an economy, such as short and long term debt cycle, and business cycles.

Macroeconomics vs microeconomics: the overlap

Macroeconomics does not exist in isolation, but rather is entwined with microeconomics, and works in tandem in order to be efficient. Choices based on microeconomic factors, whether from individuals or businesses, can impact macroeconomics in the long run. Similarly, a national policy that involves microeconomics could affect how households and enterprises interact with their economy. For example, if the government raises the tax on a certain product (macroeconomics), an individual shop owner will have to increase the price, which will impact on the consumer and their decision for or against the product at that price (microeconomics)

Students are advised and encouraged to learn about role of economics in the area of engineering (especially to the concerned branch).

UNIT II
CONSUMPTION AND MARKET STRUCTURE:

Law of Demand and Elasticity of Demand

Law of Demand

- The **law of demand** states that a higher price leads to a lower quantity demanded and that a lower price leads to a higher quantity demanded.
- **Demand curves** and **demand schedules** are tools used to summarize the relationship between quantity demanded and price.

Demand for goods and services

Economists use the term **demand** to refer to the amount of some good or service consumers are willing and able to purchase at each price. Demand is based on needs and wants—a consumer may be able to differentiate between a need and a want, but from an economist's perspective they are the same thing. Demand is also based on ability to pay. If you cannot pay, you have no effective demand.

What a buyer pays for a unit of the specific good or service is called **price**. The total number of units purchased at that price is called the **quantity demanded**. An increase in the price of a good or service almost always decreases the quantity demanded of that good or service. Conversely, a decrease in price will increase the quantity demanded.

When the price of a gallon of gasoline goes up, for example, people look for ways to reduce their consumption by combining several errands, commuting by carpool or mass transit, or taking weekend or vacation trips closer to home. Economists call this inverse relationship between price and quantity demanded the *law of demand*. The law of demand assumes that all other variables that affect demand are held constant.

Demand schedule and demand curve

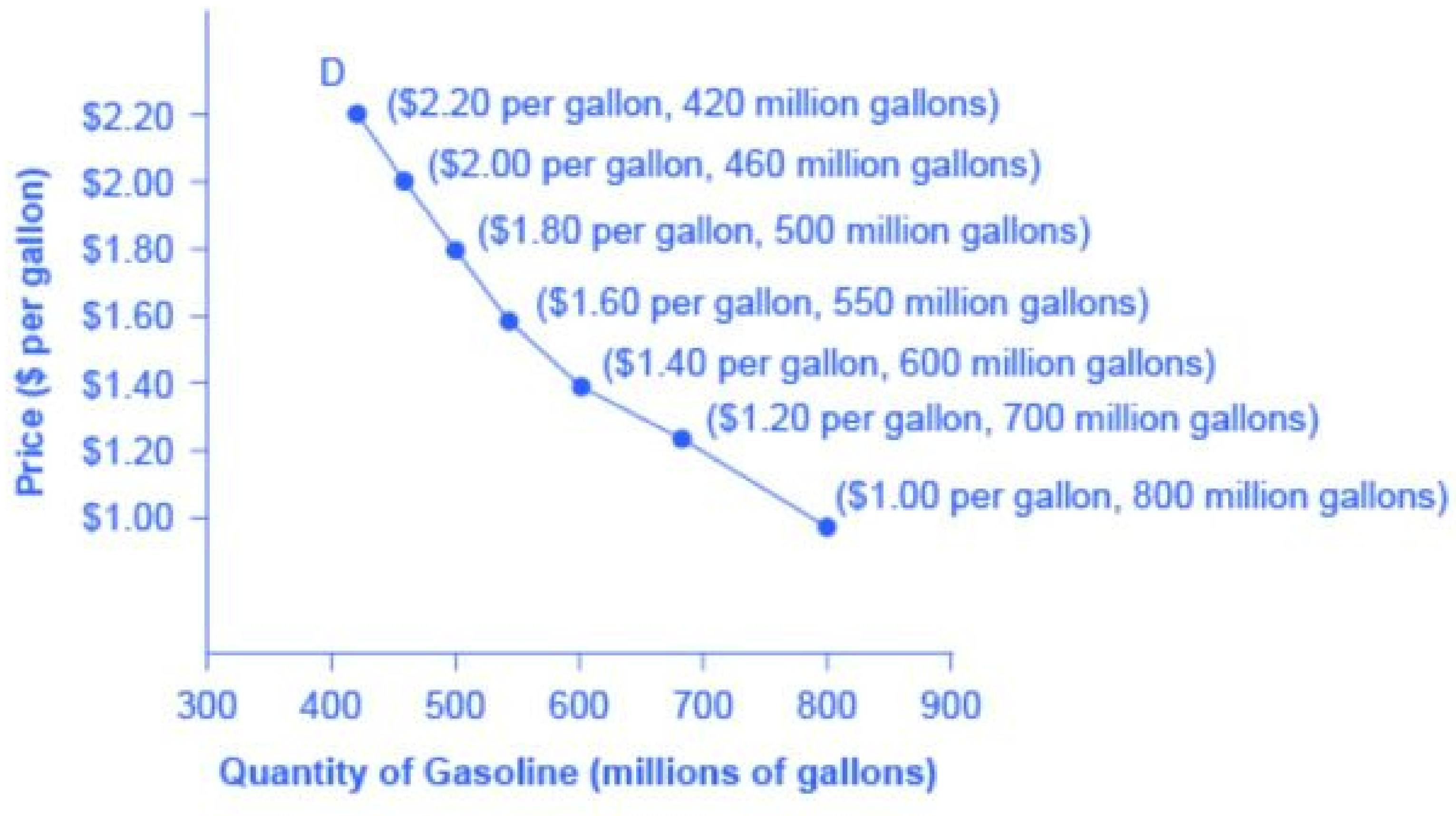
- A *demand schedule* is a table that shows the quantity demanded at each price.
- A *demand curve* is a graph that shows the quantity demanded at each price. Sometimes the demand curve is also called a demand schedule because it is a graphical representation of the demand schedule.

Here's an example of a demand schedule from the market for gasoline.

Price (per gallon)	Quantity demanded (millions of gallons)
$1.00	800
$1.20	700
$1.40	600
$1.60	550
$1.80	500
$2.00	460
$2.20	420

Price, in this case, is measured in dollars per gallon of gasoline. The quantity demanded is measured in millions of gallons over some time period—for example, per day or per year—and over some geographic area—like a state or a country.
Here's the same information shown as a demand curve with quantity on the horizontal axis and the price per gallon on the vertical axis. Note that this is an exception to the normal rule in mathematics that the independent variable (xxx) goes on the horizontal axis and the dependent variable (yyy) goes on the vertical.
Wondering why it is different? Click here!

A Demand Curve for Gasoline



The graph shows a downward-sloping demand curve that represents the law of demand.

The demand schedule shows that as price rises, quantity demanded decreases, and vice versa. These points are then graphed, and the line connecting them is the demand curve. The downward slope of the demand curve again illustrates the law of demand—the inverse relationship between prices and quantity demanded.

Demand curves will be somewhat different for each product. They may appear relatively steep or flat, and they may be straight or curved. Nearly all demand curves share the fundamental similarity that they slope down from left to right, embodying the law of demand: As the price increases, the quantity demanded decreases, and, conversely, as the price decreases, the quantity demanded increases.

The difference between demand and quantity demanded

In economic terminology, demand is not the same as quantity demanded. When economists talk about demand, they mean the relationship between a range of prices and the quantities demanded at those prices, as illustrated by a demand curve or a demand schedule. When economists talk about quantity demanded, they mean only a certain point on the demand curve or one quantity on the demand schedule. In short, demand refers to the curve, and quantity demanded refers to a specific point on the curve.

Elasticity of Demand

Introduction

Generally, elasticity of demand refers to price elasticity of demand, which is often called own price elasticity of demand, though the notion of elasticity of demand also relates to income, cross and substitution elasticities of demand.

Price Elasticity of Demand:

Meaning:

The elasticity of demand is the degree of responsiveness of demand to change in price. In the words of Prof. Lipsey: "Elasticity of demand may be defined as the ratio of the percentage change in demand to the percentage change in price." Mrs. Robinson's definition is more clear: "The elasticity of demand at any price.... is the proportional change of amount purchased in response to a small change in price, divided by the proportional change of price."

Thus, price elasticity of demand is the ratio of percentage change in amount demanded to a percentage change in price. It may be written as E_p = Percentage change in amount demanded/ Percentage change in price If we use Δ (delta) for a change, q for amount demanded and p for price, the algebraic equation is

$$E_p = \frac{\frac{\Delta q}{q}}{\frac{\Delta p}{p}} = \frac{\Delta q}{q} \times \frac{p}{-\Delta p} = -\frac{\Delta q}{\Delta p} \times \frac{p}{q}$$

Ep, the coefficient of price elasticity of demand is always negative because when price changes demand moves in the opposite direction. It is, however, customary to disregard the negative sign. If the percentages for quantity and prices are known the value of the coefficient E_p can be calculated.

Price elasticity of demand may be unity, greater than unity, less than unity, zero or infinite. These five cases are explained with the aid of the following figures. Price elasticity of demand is unity when the change in demand is exactly proportionate to the change in price. For example, a 20% change in price causes 20% change in demand, E = 20%/20% = 1. In the diagrams of Figure 1, Δp represents change in price, Δq change in demand? And DD the demand curve. Price elasticity on the first demand curve in Panel (A) is unity, for Δq/Δp = 1.

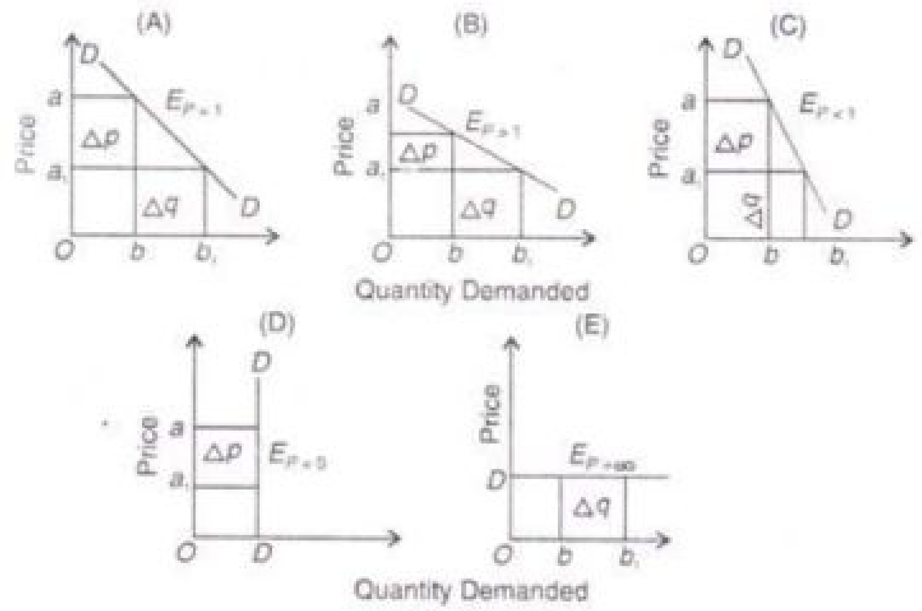


Fig. 1

When the change in demand is more than proportionate to the change in price, price elasticity of demand is greater than unity. If the change in demand is 40% when price changes by 20% then E = 40%/20% = 2, in Panel (B), i.e. Δq /Δp> 1. It is also known as relatively elastic demand.

If, however, the change in demand is less than proportionate to the change in price, price elasticity of demand is less than unity. When a 20% change in price causes 10% change in demand, then E_p= 10%/20% = 1/2 =<1, in Panel (C), i.e. Δq/Δp<1. It is also known as relatively inelastic demand.

Zero elasticity of demand is one when whatever the change in price, there is absolutely no change in demand. Price elasticity of demand is perfectly inelastic in this case. A 20% rise or fall in price leads to no change in the amount demanded, E_p= 0/20% = 0, in Panel (D), i.e.0/Δp = 0. It is perfectly inelastic demand.

Lastly, price elasticity of demand is infinity when as infinitesimal small change in price leads to an infinitely large change in the amount demanded. Visibly, no change in price causes an infinite change in demand, $E_p = \infty/0 = \infty$, in Panel (E), at OD price, the quantity demanded continues to increase from O_b to O_{b1} .....n. It is perfectly elastic demand.

Methods of Measuring Price Elasticity of Demand:

There are four methods of measuring elasticity of demand they are the percentage method, point method, arc method and expenditure method.

(a) The Percentage Method:

The price elasticity of demand is measured by its coefficient

(Ep). This coefficient (Ep) measures the percentage change in the quantity of a commodity demanded resulting from a given percentage change in its price. Thus

$$E_p = \frac{\%\ change\ in\ q}{\%\ change\ in\ p} = \frac{\Delta q / q}{\Delta p / p} = \frac{\Delta q}{\Delta p} \times \frac{p}{q}$$

Where q refers to quantity demanded, p to price and A to change. If E_p> 1, demand is elastic. If E_p <1 demand is inelastic, and if E_p =1, demand is unitary elastic. With this formula, we can compute price elasticities of demand on the basis of a demand schedule.

Table. 1: Demand Schedule

Combination	**Price (Rs.) Per Kg. of X**	**Quantity Kgs. of X**
A	6	0
B	5	10
C	4	20
D	3	30
E	2	40
F	1	50
G	0	60

Let us first take combinations B and D.

(i)Suppose the price of commodity X falls from Rs. 5 per kg. to Rs. 3 per kg. and its quantity demanded increases from 10 kgs. to 30 kgs. Then

$$E_p = \frac{\Delta q}{\Delta p} \times \frac{p}{q} = \frac{(30-10)}{(3-5)} \times \frac{5}{10} = \frac{20}{-2} \times \frac{5}{10} = -5 \text{ or} > 1.$$

This shows elastic demand or elasticity of demand greater than unitary.

Note:

The formula can be understood like this:

$\Delta q = q_2 - q_1$ where q_2 is the new quantity (30 kgs.) and q_2 the original quantity (10 kgs.).

$\Delta P = p_2 - p_1$ where p_2 is the new price (Rs.3) and p, the original price (Rs. 5).

In the formula, p refers to the original price (p_1) and q to original quantity (q_1). The opposite is the case in example (ii) below, where Rs. 3 becomes the original price and 30 kgs. as the original quantity.

(ii) Let us measure elasticity by moving in the reverse direction. Suppose the price of X rises from Rs. 3 per kg. to Rs. 5 per kg. and the quantity demanded decreases from 30 kgs. to 10 kgs. Then

$$E_p = \frac{\Delta q}{\Delta p} \times \frac{p}{q} = \frac{(10-30)}{(5-3)} \times \frac{3}{30} = \frac{-20}{2} \times \frac{3}{30} = -1$$

This shows unitary elasticity of demand. Notice that the value of Ep in example (i) differs from that in example (ii) depending on the direction in which we move. This difference in the elasticities is due to the use of a different base in computing percentage changes in each case. Now consider combinations D and F.

(iii) Suppose the price of commodity X falls from Rs. 3 per kg to Re. 1 per kg. and its quantity demanded increases from 30 kgs. to 50 kgs. Then

$$E_p = \frac{\Delta q}{\Delta p} \times \frac{p}{q} = \frac{(50-30)}{(1-3)} \times \frac{3}{30} = \frac{20}{2} \times \frac{3}{30} = -1$$

This is again unitary elasticity.

(iv) Take the reverse order when the price rises from Re. 1 per kg. to Rs. 3 per kg. And the quantity demanded decreases from 50 kgs. to 30 kgs. Then

$$E_p = \frac{\Delta q}{\Delta p} \times \frac{p}{q} = \frac{(30-50)}{3-1} \times \frac{1}{50} = \frac{-20}{2} \times \frac{1}{50} = -\frac{1}{5} < 1$$

This shows inelastic demand or less than unitary.

The value of E_p again differs in this example than that given in example (iii) for the reason stated above.

(b) The Point Method:

Prof. Marshall devised a geometrical method for measuring elasticity at a point on the demand curve. Let RS be a straight line demand curve in Figure. 2. If the price falls from PB (= OA) to MD (= OC), the quantity demanded increases from OB to OD.

Elasticity at point P on the RS demand curve according to the formula is:

$E_P = \Delta q/\Delta p \times p/q$

Where Δq represents change in quantity demanded Δp changes in price level while p and q are initial price and quantity levels.

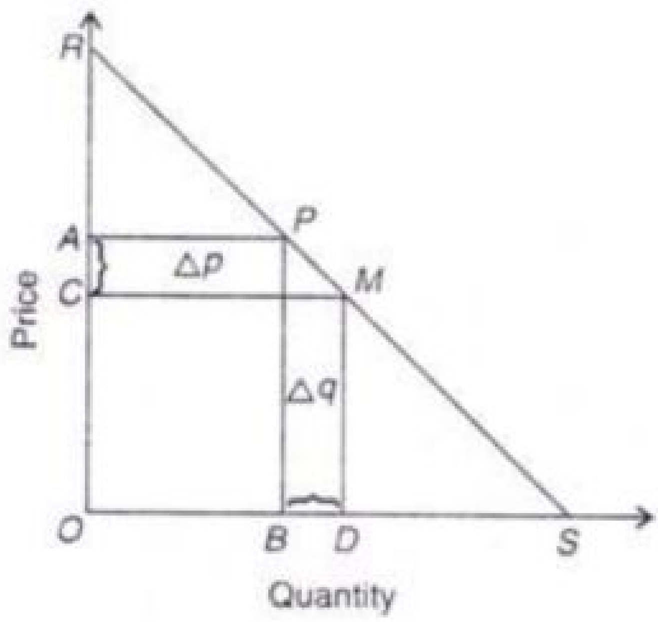


Fig. 2

From Figure 2.

$\Delta q = BD = QM$

$\Delta p = PQ$

$p = PB$

$q = OB$

Substituting these values in the elasticity formula:

$E_P = QM/PQ \times PB/OB$

Moreover, $QM/PQ \times BS/PB$

[$\angle PQM = \angle PBS$ are similar Δ_s]

$\therefore BS/PB \times PB/OB = BS/OB$

Since, Δ PBS and ΔROS are similar,

Ep at point p = BS/OB = OA/AR = PS/PR =Lower Segment/Upper Segment

With the help of the point method, it is easy to point out elasticity at any point along a demand curve. Suppose that the straight line demand curve DC in Figure. 3 is 6 centimeters. Five points L, M, N, P and Q are taken on this demand curve. The elasticity of demand at each point can be known with the help of the above method. Let point N be in the middle of the demand curve. So elasticity of demand at point.

N = CN (Lower Segment) / ND (Upper Segment) = 3/3 = 1 (Unity)

Elasticity of demand at point

M = CM/MD = 5/1 = 5 or > 1.

(Greater than Unity)

Elasticity of demand at point

L = CL/LD = 6/0 = ∞ (infinity).

Elasticity of demand at Point

P = CP/PD = 1/5 = (Less than Unity).

Elasticity of demand at point

Q = CQ/QD = 0/6 = 0(Zero)

We arrive at the conclusion that at the mid-point on the demand curve, the elasticity of demand is unity. Moving up the demand curve from the mid-point, elasticity becomes greater. When the demand curve touches the Y- axis, elasticity is infinity. Ipso facto, any point below the midpoint towards the X-axis will show elastic demand. Elasticity becomes zero when the demand curve touches the X -axis.

(c) The Arc method:

We have studied the measurement of elasticity at a point on a demand curve. But when elasticity is measured between two points on the same demand curve, it is known as arc elasticity. In the words of Prof. Baumol, "Arc elasticity is a measure of the average responsiveness to price change exhibited by a demand curve over some finite stretch of the curve."

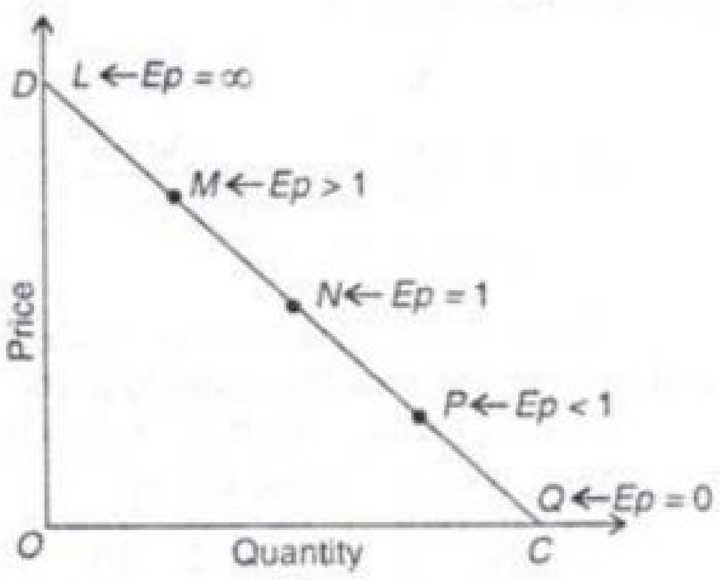


Fig. 3

Any two points on a demand curve make an arc. The area between P and M on the DD curve in Figure. 4 is an arc which measures elasticity over a certain range of price and quantities. On any two points of a demand curve, the elasticity coefficients are likely to be different depending upon the method of computation. Consider the price-quantity combinations P and M as given in Table. 2.

Table 2: Demand Schedule:

Point	Price (Rs)	Quantity (Kg)
P	8	10
M	6	12

If we move from P to M, the elasticity of demand is

$E_P = \Delta Q/\Delta P \times p/q = (12 - 10) / (6-8) \times 8/10 = 2/-2 \times 8/10 = 4/5$

If we move in the reverse direction from M to P, then

(10-20) / (6-8) × 6/12 = -2/2 × 6/12 = -1/2

Thus the point method of measuring elasticity at two points on a demand curve gives different elasticity coefficients because we used a different base in computing the percentage change in each case.

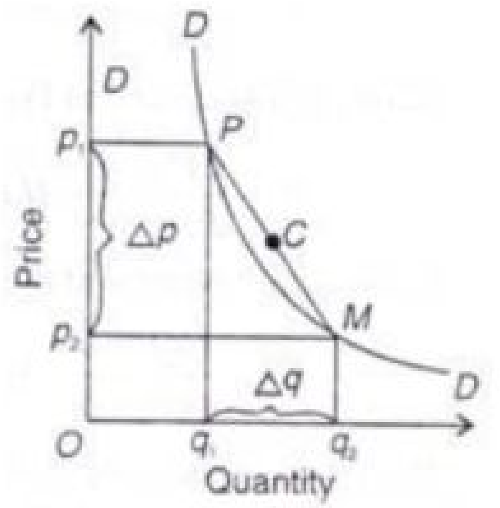


Fig. 4

To avoid this discrepancy, elasticity for the arc (PM in Figure 4) is calculated by taking the average of the two prices $[(p_1 + p_2)^{1/2}]$ and the average of the two quantities $[(q_1 + q_2)^{1/2}]$. The formula for price elasticity of demand at the mid-point (C in Figure 4) of the arc on the demand curve is

$$E_p = \frac{\dfrac{\Delta q}{(q_1+q_2)^{1/2}}}{\dfrac{\Delta p}{(p_1+p_2)^{1/2}}} = \frac{\Delta q}{(q_1+q_2)^{1/2}} \times \frac{(p_1+p_2)^{1/2}}{\Delta p} = \frac{\Delta q}{\Delta p} \times \frac{p_1+p_2}{q_1+q_2}$$

On the basis of this formula, we can measure arc elasticity of demand when there is a movement either from point P to M or from M to P.

From P to M at point P, p_1 =8, q_1 = 10, and at point M, p_2 = 6, q_2 = 12.
Applying these values, we get

E_P = Δq/Δp × p_1 + p_2 / q_1 + q_2 = (12-10) / 8-6 × (8 + 6) × (10+12) = 2/-2 × 14/22 = -7/11
From M to P at point M, P_1= 6, q_1 = 12 and at point, p_2 = 8, q_2 = 10.
Now we have E_P = (10-12) / (8-6) × (6+8)/12+10) = -2/2 × 14/22 = -7/11
Thus whether we move from M to P or P to M on the arc PM of the DD curve, the formula for arc elasticity of demand gives the same numerical value. The closer the two points P and M are, the more accurate is the measure of elasticity on the basis of this formula. If the two points which form the arc on the demand curve are so close that they almost merge into each other, the numerical value of arc elasticity equals the numerical value of point elasticity.

(d) The Total Outlay Method:

Marshall evolved the total outlay, or total revenue or total expenditure method as a measure of elasticity. By comparing the total expenditure of a purchaser both before and after the change in price, it can be known whether his demand for a good is elastic, unity or less elastic.

Total outlay is price multiplied by the quantity of a good purchased:
Total Outlay = Price x Quantity Demanded. This is explained with the help of the demand schedule in Table.3.

Table. 3 : Total Outlay Method

Price Rs. per Kg.	*Quantity in Kgs.*	*TE in Rs*	*Ep*
(1)	(2)	(1×2)=3	(4)
9	2	18	
8	3	24	> 1
7	4	28	
6	5	30	
5	6	30	= 1
4	7.5	30	
3	8	24	
2	9	18	< 1
1	10	10	

(i) Elastic Demand:
Demand is elastic, when with the fall in price the total expenditure increases and with the rise in price the total expenditure decreases. Table.3 shows that when the price falls from Rs. 9 to Rs. 8, the total expenditure increases from Rs. 18 to Rs. 24 and when price rises from Rs. 7 to Rs. 8, the total expenditure falls from Rs. 28 to Rs. 24. Demand is elastic (Ep>1) in this case.

(ii) Unitary Elastic Demand:
When with the fall or rise in price, the total expenditure remains unchanged, the elasticity of demand is unity. This is shown in the table when with the fall in price from Rs. 6 to Rs. 5 or with the rise in price from Rs. 4 to Rs. 5, the total expenditure remains unchanged at Rs. 30, i.e., Ep =1.

(iii) Less Elastic Demand:
Demand is less elastic if with the fall in price, the total expenditure falls and with the rise in price the total expenditure rises. In Table 3 when the price falls from Rs. 3 to Rs. 2, total expenditure falls from Rs. 24 to Rs 18, and when the price rises from Re. 1 to Rs. 2, the total expenditure also rises from Rs. 10 to Rs. 18. This is the case of inelastic or less elastic demand, Ep< 1.

Table 4 summarises these relationships:
Total 4: Total Outlay Method

Price	TE	Ep
Falls	Rises	>1
Rises	Falls	
Falls	Unchanged	=1
Rises	Unchanged	
Falls	Falls	<1
Rises	Rises	

The measurement of elasticity of demand in terms of the total outlay method is explained in Fig. 5 where we divide the relationship between price elasticity of demand and total expenditure into three stages:

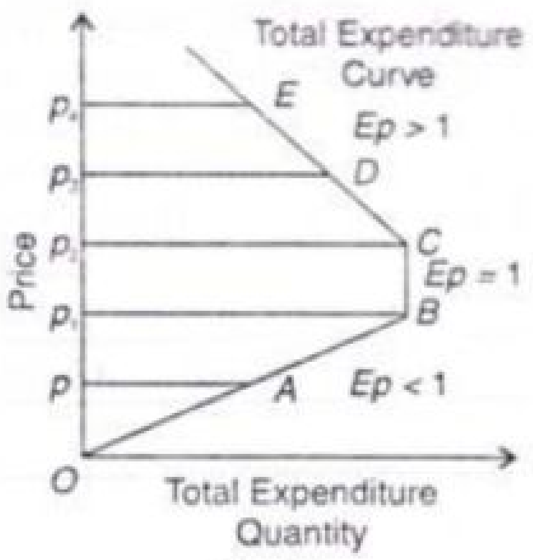


Fig. 5

In the first stage, when the price falls from OP_4 to OP_3 and to OP_2 respectively, the total expenditure rises from P_4E to P_3D and P_2C respectively. On the other hand, when the price increases from OP_2 to OP_3 and OP_4, the total expenditure decreases from P_2C to P_3D and P_4E respectively.
Thus EC segment of total expenditure curve shows elastic demand (Ep> 1).

In the second stage, when the price falls from OP_2 to OP_1 or rises from OP_1 to OP_2 the total expenditure equals, $P_2C = P_1B$, and the elasticity of demand is equal to the unity (Ep =1).
In the third stage, when the price falls from Op_1 to Op_2 the total expenditure also falls from P_1B to PA. Thus with the rise in price from OP to Op_1 the total expenditure also increases from PA to P_1B and the elasticity of demand is less than unity (Ep< 1).
Factors Affecting Price Elasticity of Demand:

Elasticity of demand for any commodity is determined or influenced by a number of factors which are discussed as under:

(1) Nature of the Commodity:

The elasticity of demand for any commodity depends upon the category to which it belongs, i.e., whether it is a necessity, comfort, or luxury. The demand for necessaries of life or conventional necessaries is generally less elastic. For example, the demand for necessaries like food, salt, matches, etc. does not change much with rise or fall in their prices. Similar is the case with commodities which are required at the time of marriage, death ceremonies, etc.

The demand for necessaries of efficiency (such as milk, eggs, butter, etc.), and for comforts is moderately elastic because with the rise or fall in their prices, the demand for them decreases or increases moderately. On the other hand, the demand for luxuries is more elastic because with a small change in their prices there is a large change in their demand. But the demand for prestige goods, like jewels, rare coins, rare stamps, paintings by Tagore or Picasso, etc. is inelastic because they possess unique utility for the buyers who are prepared to buy them at all costs.

(2) Substitutes:
Commodities having substitutes have more elastic demand because with the change in the price of one commodity, the demand for its substitute is immediately affected. For example, if the price of coffee rises, the demand for coffee will decrease and that for tea will increase, and vice versa. But the demand for commodities having no good substitutes is inelastic.

(3) Variety of Uses:
The demand for a commodity having composite demand or variety of uses is more elastic. Such commodities are coal, milk, steel, electricity, etc. For example, coal is used for cooking and heating, for power generation, in factories, in locomotives, etc. If there is a slight fall in the price of coal, its demand will increase from all quarters.

On the other hand, a rise in its price will bring a considerable decrease in demand in less important uses (domestic) and in more important uses efforts will also be made to economise its use, as in railways and factories. Thus the overall effect will be a reduction in demand. A commodity which cannot be put to more than one use, has less elastic demand.

(4) Joint Demand:
There are certain commodities which are jointly demanded, such as car and petrol, pen and ink, bread and jam, etc. The elasticity of demand of the second commodity depends upon the elasticity of demand of the major commodity. If the demand for cars is less elastic, the demand for petrol will also be less elastic. On the other hand, if the demand for, say, bread is elastic the demand for jam will also be elastic.

(5) Deferred Consumption:
Commodities whose consumption can be deferred have an elastic demand. This is the case with durable consumer goods, like cloth, bicycle, fan, etc. If the price of any of these articles rises, people will postpone their consumption. As a result, their demand will decrease, and vice versa.

(6) Habits:
People who are habituated to the consumption of a particular commodity, like coffee, tea or cigarette of a particular brand, the demand for it will be inelastic. We find that the

prices of coffee, tea and cigarettes increase almost every year but there has been little effect on their demand because people are in the habit of consuming them.

(7) Income Groups:
The elasticity of demand also depends on the income group to which a person belongs. Persons who belong to the higher income group, their demand for commodities is less elastic. It is immaterial to a rich man whether the price of a commodity has fallen or risen, and hence his demand for the commodity will be unaffected.

On the other hand, the demand of persons in lower income groups is generally elastic. A rise or fall in the prices of commodities will reduce or increase the demand on their part. But this does not apply in the case of necessities, the demand for which on the part of the poor is less elastic.

(8) Proportion of Income Spent:
If the consumer spends a small proportion of his income on a commodity at a time, the demand for that commodity is less elastic because he does not bother much about small expenditure. Such commodities are shoe polish, pen, pencil, thread, needle, etc. But commodities which entail a large proportion of the income of the consumer, the demand of them is elastic, such as bicycle, watch, etc.

(9) Level of Prices:
The level of prices also influences the elasticity of demand for commodities when the price level is high, the demand for commodities is elastic, and when the price level is low, and the demand is less elastic.

(10) Time Factor:
Time factor plays an important role in influencing the elasticity of demand for commodities. The shorter the time in which the consumer buys a commodity, the lesser will be the elasticity of demand tor that product. On the other hand, the longer the time which the consumer takes in buying a commodity, the higher will be the elasticity of demand for that product.

Prof. Stigler mentions three possible reasons for the long-period elasticity being higher than the short-period elasticity. In the long run, the consumer has a better knowledge of the price changes, takes time to readjust his budget, and might change his consumption pattern due to possible technological changes.

(11) Brand:
The price of demand for a given brand of product may be elastic. If its price increases, people turn towards the other brands easily. This is substitution effect For example, if the price of the Hero bicycle increases, the consumer will buy the Atlas bicycle.

(12) Recurring Demand:

Goods which have recurring demand, their prices are more elastic than the goods which are not demanded time and again.

(13) Distribution of Income:
If a country has equal distribution of income and wealth, the demand for majority of goods is elastic because there are more middle class people whose purchasing power is almost equal.

3. Cross Elasticity of Demand:
The cross elasticity of demand is the relation between percentage change in the quantity demanded of a good to the percentage change in the price of a related good. The cross elasticity of demand between good X and Y

$$Eba = \frac{Percentage\ change\ in\ quantity\ of\ X}{Percentage\ change\ in\ price\ of\ Y}$$

$$= \frac{\frac{\Delta Q_x}{Q_x}}{\frac{\Delta P_y}{P_y}} = \frac{\Delta Q_x}{Q_x} \times \frac{P_y}{\Delta P_y} = \frac{\Delta Q_x}{\Delta P_y} \times \frac{P_y}{Q_x}$$

Where, Q_x = Quantity of good X, P = Price of good Y and A = change. Given the price of X, this formula measures the change in the quantity demanded of X as a result of change in the price of Y. The cross elasticity of demand for good X may be positive, negative or zero which depends on the nature of relation between the goods X and Y. This relation may be as substitutes, complementary or unrelated goods.
a. Substitute Goods:
If X and Y are substitute goods, a fall in the price of good Y will reduce the quantity demanded of good X. Similarly, an increase in the price of good Y will raise the demand for good X. Their cross elasticity is positive because, given the price of X, a change in the price of Y will lead to a change in the quantity demanded of X in the same direction as in the price of Y. The cross elasticity of substitute goods is explained in Table 5.

Table 5: Cross Elasticity of Substitutes:

Commodity	**Before Change**	**After Change**		
	Price in Rs. Per K.G.	**Quantity (K.G)**	**Price in Rs. Per (KG.)**	**Quantity (K.G.)**
X (Tea)	20	400	20	500
Y (Coffee)	30	500	40	300

$E_{xy} = \Delta Q_x / \Delta P_y \times P_y / Q_x = 500 - 400/40-30 \times 30/400$
$= 100/10 \times 30/400 = (+)\ 3/4$ or $(+)\ 0.75$

It is clear from the above that the coefficient of cross elasticity of substitute goods such as tea (X) and coffee (Y) is positive (+0.75) when with the rise in price of coffee, the price of tea being constant, the demand for tea also increases.

This is shown in Fig. 6 where the quantity of good X (tea) is taken on X-axis and the quantity of good Y is plotted on X-axis. When the price of Y increases from OY to $OY_1$the quantity demanded of X rises from OX to OX_1. The slope of the demand curve downwards to the right shows positive elasticity of both the goods.

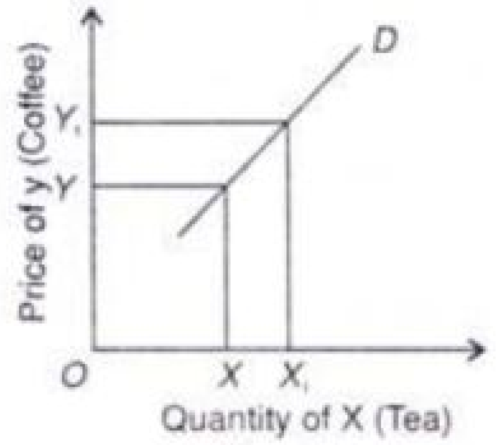


Fig. 6

b. Complementary Goods:

If two goods are complementary (jointly demanded), rise in the price of one leads to a fall in the demand for the other. Rise in the prices of cars will bring a fall in their demand together with the demand for petrol. Similarly, a fall in the prices of cars will raise the demand for petrol. Since price and demand vary in the opposite direction, the cross elasticity of demand is negative.

The cross elasticity of complementary goods is explained in Table 6.

Table 6: Cross Elasticity of Complementary:

Goods	Before the Price Change	After the Price Change		
	Price in Rs. Per K.G.	Quantity (K.G.)	Price in Rs. Per K.G.	Quantity (K.G.)
X (Tea)	150	40	150	30
Y (Sugar)	15	100	20	80

$E_{xy} = \Delta Q_x/\Delta P_y \times P_y/Q_x = 30\text{-}40 \;/\; 20\text{-}15 \times 15/40$
$= -10/5 \times 15/40 = -15/20 = -3/4 = (-)\ 0.75.$

In this case, the cross elasticity coefficient of complementary goods such as tea and sugar or car and petrol is negative.

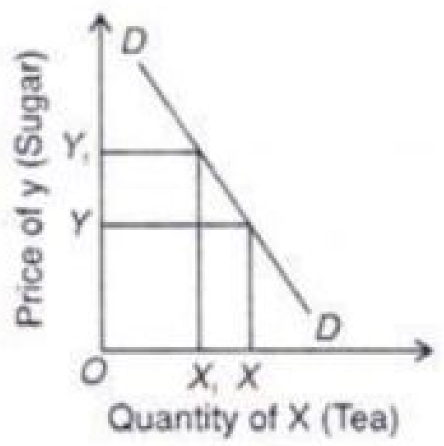


Fig. 7

This is explained in Fig.7 where with the rise in the price of Y (Sugar) from OY to OY_1, the demand for X (tea) falls from OX to OX_1. The slope of the demand curve downwards to the right indicates negative cross elasticity.

c. Unrelated Goods:

If the two goods are unrelated, a fall in the price of good Y has no effect whatsoever on the demand for good X. In such a case, the cross elasticity of demand is zero. For example, a fall in the price of tea has no effect on the quantity demanded of car. The cross elasticity of demand for unrelated goods is shown in Fig. 8. Even an increase in the price of good Y from OY to OY_1, the demand for good X remains the same as OD. Hence, the cross elasticity of demand for unrelated goods is zero.

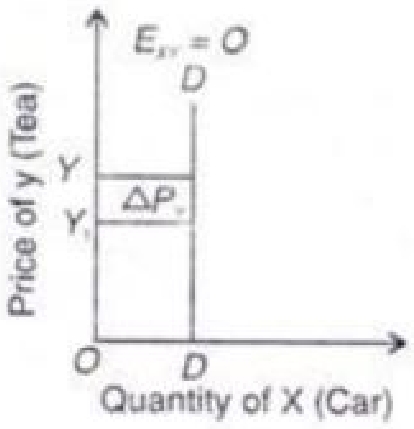


Fig. 8

Some Conclusions:

We may draw certain inferences from this analysis of the cross elasticity of demand.

(a) The cross elasticity between two goods, whether substitutes or complementaries, is only a one-way traffic. The cross elasticity between butter and jam may not be the same as the cross elasticity of jam to butter. A 10% fall in the price of butter may cause a fall in the demand for jam by 5%. But a 10% fall in the price of jam may lower the demand for butter by 2%. It shows that in the first case the coefficient is 0.5 and in the second case 0.2. The superior the substitute whose price changes, the higher is the cross elasticity of demand.

This rule also applies in the case of complementary goods. If the price of car falls by 5%, the demand for petrol may go up by 15%, giving a high coefficient of 3. But a fall in the price of petrol by 5% may lead to a rise in the demand for cars by 1%, giving a low coefficient of 0.2.

(b) Cross elasticities for both substitutes and complementaries vary between zero and infinity. Generally, cross elasticity for substitutes is positive, but in exceptional circumstances it may also be negative.

(c) Commodities which are close substitutes have high cross elasticity and commodities with low cross elasticities are poor substitutes for each other. This distinction helps to define an industry. If some goods have high cross elasticity, it means that they are close substitutes. Firms producing them can be regarded as one industry.

A good having a low cross elasticity in relation to other goods may be regarded a monopoly product and its manufacturing firm becomes an industry by determining the boundary of an industry. Thus cross elasticities are simply guidelines.

Application of Cross Elasticity in Management:

The cross elasticity of demand has much practical importance in the solution of various business problems:

1. In Production:

A firm wants to know the cross elasticity of demand for its goods while considering the effect of change in the price of its competitor's goods on the demand for its own goods. It is important for a firm to have knowledge of it while making its production plan.

2. in Demand Forecasting and Pricing:

Its knowledge helps the firm in estimating the potential impact of the pricing decisions of its competitors and associates on its sales so that it prepares its pricing strategies.

3. in International Trade and Balance of Payments:

The utility of this concept is significant in the area of international trade and balance of payments. The government wants to know how the change in domestic prices affects the demand for imports.

Domestically produced goods being close substitutes if the cross elasticity of demand for imports is high and if the prices of domestic goods increase due to inflation, the demand for imports will increase substantially which will deteriorate the balance of payments position.

4. Income Elasticity of Demand:

The concept of income elasticity of demand (E_y) expresses the responsiveness of a consumer's demand (or expenditure or consumption) for any good to the change in his income. It may be defined as the ratio of percentage change in the quantity demanded commodity to the percentage change in income. Thus

E_y = Percentage change in quantity demanded / Percentage change in income

$= \Delta Q/Q \ / \ \Delta Y/Y = \Delta Q/Q \times Y/\Delta Y = \Delta Q/\Delta Y \times Y/Q$

Where $\Delta$is change, Q quantity demanded and Y is income.

The coefficient E may be positive, negative or zero depending upon the nature of a commodity. If an increase in income leads to an increased demand for a commodity, the income elasticity coefficient (E_y) is positive. A commodity whose income elasticity is positive is a normal good because more of it is purchased as the consumer's income increases.

On the other hand, if an increase in income leads to a fall in the demand for a commodity, its income elasticity coefficient (E_y) is negative. Such a commodity is called inferior good because less of it is purchased as income increases. If the quantity of a commodity purchased remains unchanged regardless of the change in income, the income elasticity of demand is zero ($E_y = 0$).

Normal goods are of three types:

Necessaries, luxuries and comforts. In the case of luxuries, the coefficient of income elasticity is positive but high, $E_y > 1$. Income elasticity of demand is high when the demand for a commodity rises more than proportionate to the increase in income. Assuming prices of all other goods as constant, if the income of the consumer increases by 5% and as a result his purchases of the commodity increase by 10%, then $E_y = 10/5 = 2 (>1)$. Taking income on the vertical axis and the quantity demanded on the horizontal axis, the increase in demand Q_1 income Q_2 in more than the rise in income Y_1, Y_2 as shown in Fig 9. The curve Dy shows a positive and elastic income demand.

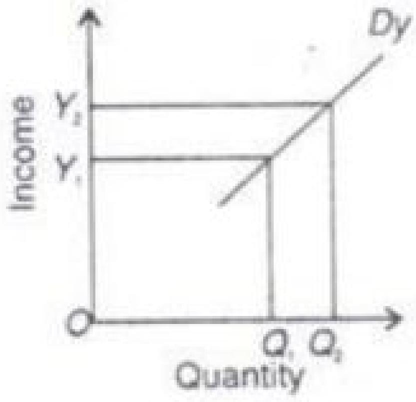


Fig. 9

In the case of necessities, the coefficient of income elasticity is positive but low, $E_y < 1$. Income elasticity of demand is low when the demand for a commodity rises less than proportionate to the rise in the income. If the proportion of income spent on a commodity increases by 2% when the consumer's income goes up by 5%, $E_y = 2/5 (<1)$ Figure 10 shows a positive but inelastic income demand curve Dy because the increase in demand Q_1 Q_2 is less than proportionate to the rise in income Y_1 Y_2.

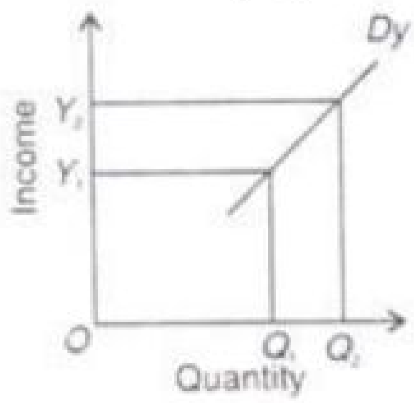


Fig. 10

In the case of comforts, the coefficient of income elasticity is unity ($E_y = 1$) when the demand for a commodity rises in the same proportion as the increase in income. For example, a 5% increase in income leads to 5% rise in demand, $E_y = 5/5 = 1$. The curve Dy in Figure 11 shows unitary income elasticity of demand. The increase in quantity demanded Q_1 Q_2 exactly equals the increase in income Y_1Y_2.

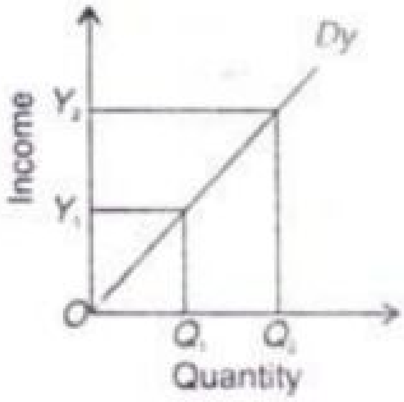


Fig. 11

The coefficient of income elasticity of demand in the case of inferior goods is negative. In the case of inferior goods, the consumer will reduce his purchases of it, when his income increases. If a 5% increase in income leads to 2% reduction in demand, $E_y = -2/5$ (<0). Figure 12 shows the Dy curve for inferior goods which bends upwards from A to B when the quantity demanded decreases by good with the rise in income by Y_1Y_2.

If with increase in income, the quantity demanded remains unchanged, the coefficient of income elasticity, $E_y = 0$. If, say, with 5% increase in income, there is no change in the quantity demanded, then $E_y = 0/5 = 6$. Figure 13 shows a vertical income demand curve Dy with zero elasticity.

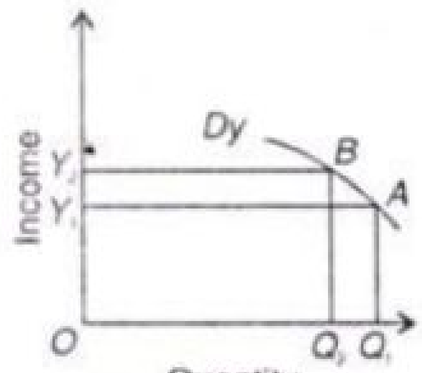


Fig. 12

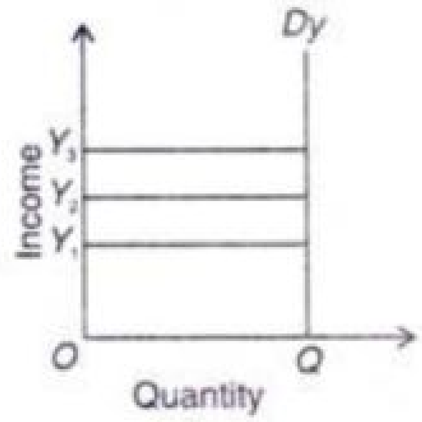


Fig. 13

Measuring Income Elasticity of Demand: The Engel Curve:

Each Dy curve expresses the income-quantity relationship. Such a curve is known as an Engel curve which shows the quantities of a commodity which a consumer would buy at various levels of income. In Figure 9, we have explained income elasticity of demand with the help of linear Engle curves. Income elasticity in terms of non-linear Engel curves can be measured with the point formula. In general, the Engel curves look like the curves E_1 E_2 and E_3, as shown in Figures 14, 15 and 16.

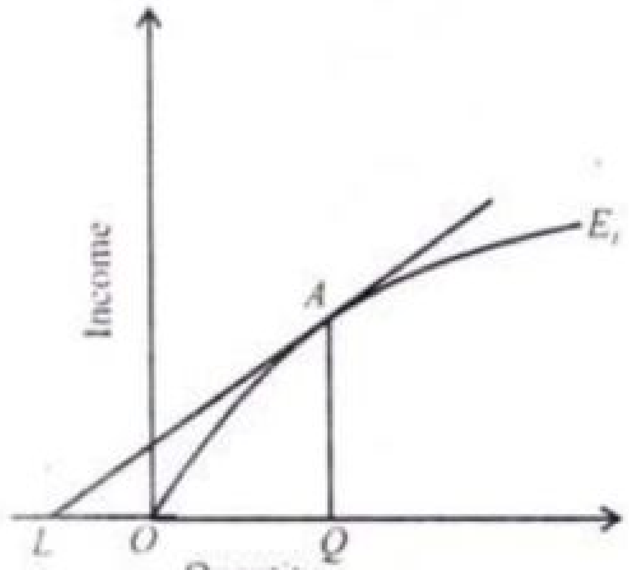


Fig. 14

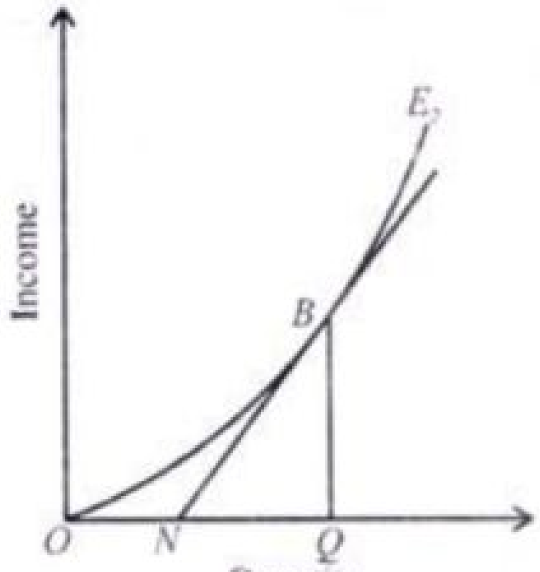


Fig. 15

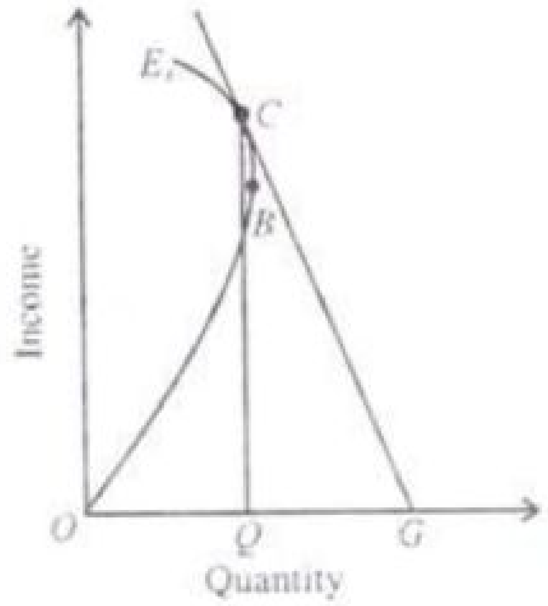


Fig. 16

(1) Consider Figure. 14 where LA is tangent to the Engel curve E_1 at point A. The coefficient of income elasticity of demand at point A is

$E_y = \Delta Q/\Delta Y\ Y/Q = LQ/QA.QA.OQ = LQ/QA > 1$

This shows that the curve E_1 is income elastic over much of its range. When the Engel curve is positively sloped and $E_y > 1$, it is the case of a luxury goods.

(2) Take Figure 15 where NB is tangent to the Engel curve ED_2 at point B. The coefficient of income elasticity at point B is

$E_y = \Delta Q/\Delta Y\ Y/Q = NQ/QB.QB/OQ = NQ/OQ < 1.$

This shows that the income elasticity of E_2 curve over much of its range is larger than zero but smaller than 1. When the Engel curve is positively sloped and $E_y < 1$, the commodity is a necessity and is income inelastic.

(3) In Figure 16, the Engel curve E_2 is backward-sloping after point B. In the backward-sloping range, draw a tangent GC at point C. The coefficient of income elasticity at point C is

$E_y = -GQ/GC\ GC/OQ = -GQ/OQ < 0$

This shows that over the range the Engel curve E_3 is negatively sloped. E_y is negative and the commodity is an inferior good. But before it bends backward, the Engel curve E_3 illustrates the case of a necessary good having income inelasticity over much of its range.

Determinants of Income Elasticity of Demand:

There are certain factors which determine the income elasticity of demand:

1. The Nature of Commodity:

Commodities are generally grouped into necessities, comforts and luxuries. We have seen above that in the case of necessities, $E_y < 1$, in the case of comforts, $E_y = 1$, and in the case of luxuries, $E_y > 1$.

2. Income Level:

This grouping of commodities depends upon the income level of a country. A car may be a necessity in a high-income country and a luxury in a poor low-income country.

3. Time Period:

Income elasticity of demand depends on the time period. Over the long-run, the consumption patterns of the people may change with changes in income with the result that a luxury today may become a necessity after the lapse of a few years.

4. Demonstration Effect:

The demonstration effect also plays an important role in changing the tastes, preferences and choices of the people and hence the income elasticity of demand for different types of goods.

5. Frequency:

The frequency of increase in income also determines income elasticity of demand for goods. If the frequency is greater, income elasticity will be high because there will be a general tendency to buy comforts and luxuries.

Use of Income Elasticity in Business Decisions:

The income elasticity of a product has great significance in long-term planning and in the solution of strategic problems, particularly during trade cycles:

a. Planning of the Firm's Growth:

The knowledge of income elasticity of demand is very important for both the firms and the government. Firms whose demand function is income elastic, the scope of their growth is generally wide in an expanding economy but they are very insecure during recession. So such firms must consider their all economic activities and their potential growth rate in future.

On the contrary, firms whose products are less income elastic, they will neither obtain more profit with the expansion of the economy nor will they incur specific loss during recession in the economy. Such firms consider it necessary to bring variety in different products or in a different industry.

For example, agricultural products are less income elastic while industrial products are income elastic. Moreover, since the coefficient of income elasticity of inferior goods is negative, the sale of such products will decline with economic growth.

b. In Formulation of Farm Policy:
Farmers' products are less income elastic because they cannot generally bring variety in their products like income elastic products. Hence, in the coming years the danger of such agricultural problems is likely to remain particularly in developing countries. Therefore, the Government of India has considered it necessary to continue and increase various agricultural subsidies.

c. In Forecasting Demands:
The concept of income elasticity can be used in forecasting future demand provided the firm knows the growth rate of income and income elasticity of demand for the good. It is often believed that the demand for goods and services increases with the rise in GNP that depends on the marginal propensity to consume.

But it may be proved true in the context of aggregate national demand while it is not necessary to be true for a particular good. For this, the income of the related income class should be used. It is also useful for avoiding the problem of overproduction or under-production.

d. In Formulating Marketing Strategies:
The income elasticity of demand of potential buyer class for products affects the number, nature and location of sales centers, nature and level of advertising and the policies related to other sales promotion activities. For instance, the sales centers of ice creams will be located in the prosperous town areas where the people have sufficient income and their incomes are likely to increase sufficiently in future. Here, the expected rise in demand in the context of increased income has been discussed. But this rise will be compensated in more or less quantity by the expected fall in demand with the increase in price.

5. Advertising or Promotional Elasticity of Demand:
In the modem competitive or partial competitive market economy, advertising has a great significance. Under advertising, various visible or verbal activities are done by the firm for the purpose of creating or increasing demand for its goods or services.

Informative advertising is very helpful for the consumer in making rational purchase decisions.

But the extension of demand through advertising can be measured by advertising or promotional elasticity of demand (E_A) which measures the expected changes in demand as a result of change in other promotional expenses. The demand for some goods is affected more by advertising such as the demand for cosmetics. Following is the formula for advertising elasticity,

$E_x = \Delta Q / \Delta Q \times a/Q$

Where, Q = quantity sold of good X; A = units of advertising expenses on good X; ΔQ = change in quantity sold of good X; andΔ A = change in advertising expenses on good X.

The elasticity of demand for a good should be positive because there is the possibility of extension of demand and market for the good with advertising expenditure. The higher the value of this elasticity, the greater will be the inducement of the firm to advertise that product. It is on the basis of advertising elasticity that a firm decides how much to spend on advertising a product.

Factors Influencing Advertising Elasticity of Demand:

The main factors influencing advertising elasticity are as follows:

1. Stage of Product's Development:

The advertising elasticity of demand for a product may vary with different levels of sales of the same product. It is different for new and established products.

2. Degree of Competition:

The advertising effect in a competitive market is also determined by the relative effect of advertising by competing firms.

3. Effects of Advertising in Terms of Time:

The advertising elasticity of demand depends upon the time interval between advertising expenditure and its effect on sales. This depends on general economic environment, selected media and type of the product. This time interval is large for durable goods than for non-durable goods.

4. Effect of Advertising by Rival Firms:

The advertising elasticity also depends as to how other rival firms advertise in comparison to the advertisement of the firm. This, in turn, depends on the levels of advertisement and advertisements done in the past and present by rival firms.

6. Importance of Elasticity of Demand in Management

The elasticity of demand is of great importance in managerial decision making. It is more significant in the following areas:

1. In the Determination of Output Level:

For making production profitable, it is essential that the quantity of goods and services should be produced corresponding to the demand for that product.

Since the changes in demand are due to the change in price, the knowledge of elasticity of demand is necessary for determining the output level.

2. In the Determination of Price:

The elasticity of demand for a product is the basis of its price determination. The ratio in which the demand for a product will fall with the rise in its price and vice versa can be known with the knowledge of elasticity of demand. If the demand for a product is inelastic, the producer can charge high price for it, whereas for an elastic demand product he will charge low price. Thus, the knowledge of elasticity of demand is essential for management in order to earn maximum profit.

3. In Price Discrimination by Monopolist:

Under monopoly discrimination the problem of pricing the same commodity in two different markets also depends on the elasticity of demand in each market. In the market with elastic demand for his commodity, the discriminating monopolist fixes a low price and in the market with less elastic demand, he charges a high price.

4. In Price Determination of Factors of Production:

The concept of elasticity for demand is of great importance for determining prices of various factors of production. Factors of production are paid according to their elasticity of demand. In other words, if the demand of a factor is inelastic, its price will be high and if it is elastic, its price will be low.

5. In Demand Forecasting:

The elasticity of demand is the basis of demand forecasting. The knowledge of income elasticity is essential for demand forecasting of producible goods in future. Long-term production planning and management depend more on the income elasticity because management can know the effect of changing income levels on the demand for his product.

6. In Dumping:

A firm enters foreign markets for dumping his product on the basis of elasticity of demand to face foreign competition.

7. In the Determination of Prices of Joint Products:

The concept of the elasticity of demand is of much use in the pricing of joint products, like wool and mutton, wheat and straw, cotton and cotton seeds, etc. In such cases, separate cost of production of each product is not known.

Therefore, the price of each is fixed on the basis of its elasticity of demand. That is why products like wool, wheat and cotton having an inelastic demand are priced very high as compared to their by-products like mutton, straw and cotton seeds which have an elastic demand.

8. In the Determination of Government Policies:
The knowledge of elasticity of demand is also helpful for the government in determining its policies. Before imposing statutory price control on a product, the government must consider the elasticity of demand for that product. The government decision to declare public utilities those industries whose products have inelastic demand and are in danger of being controlled by monopolist interests depends upon the elasticity of demand for their products.

9. Helpful in Adopting the Policy of Protection:
The government considers the elasticity of demand of the products of those industries which apply for the grant of a subsidy or protection. Subsidy or protection is given to only those industries whose products have an elastic demand. As a consequence, they are unable to face foreign competition unless their prices are lowered through subsidy or by raising the prices of imported goods by imposing heavy duties on them.

10. In the Determination of Gains from International Trade:
The gains from international trade depend, among others, on the elasticity of demand. A country will gain from international trade if it exports goods with less elasticity of demand and import those goods for which its demand is elastic.

In the first case, it will be in a position to charge a high price for its products and in the latter case it will be paying less for the goods obtained from the other country. Thus, it gains both ways and shall be able to increase the volume of its exports and imports.

Application of Elasticity in Managerial Decisions:
Now we shall consider the application of concepts of elasticity. Economists measure how responsive or sensitive consumers are to change in the price or income or a change in the price of some other product. Managerial economists measure the degree of elasticity by the elasticity co-efficient.

Managerial decisions aim at the best alternative. Managerial decisions are of two types: programmed decisions and non-programmed decisions. But the decision making process may be required in four areas of work: location decision, growth decision, financial decision and operating decision. The price- quantity relationship comes under operating decision.

Managerial Decision and Income Elasticity:
Income elasticity measures the ratio of percentage change in quantity demanded to percentage change in income. Positive income elasticity suggests a more than proportionate increase in expenditure with an increase in income. If income elasticity is negative it implies that the commodity is inferior.

Among the several income concepts, the most commonly used term is the personal disposable income per head. The other income concepts important for durable goods are that of transitory income i.e., fluctuation in the short run income and discretionary income i.e., that part of the income which is left over after deductions.

Economic development will be closely associated with increase in die sales of quality goods. An efficient businessman is really interested in knowing whether the sale of his goods will lead to economic development. The relationship between demand and income changes is not always positive.

It depends on the permanent change in income. If the income elasticity is greater than one, the sales of his goods will increase more quickly than general economic development. If the income elasticity is greater than zero but less than one, sales of the goods will increase but at a lower rate than economic development.

Managerial Decision and Industry Elasticity:
From the managerial point of view, it is thought useful to explain industry elasticity. We know from the law of demand that when the price of a commodity falls, the quantity demanded increases and vice versa. The relation of price to sales is known in economics as the demand. The relation of price to demand or sales has been a major interest of economist for a long time.

If we like to have a good knowledge of their relations, it gives better results to management. The industry elasticity means that there is a change in complete industry sales with a change in the general level of prices for the industry. The industry demand has elasticity due to competition from other industries.

Managerial Decision and Expectation Elasticity:
Expectation elasticity indicates the responsiveness of sales to buyers guesses about the future values of demand determinants. In most companies, knowledge of condition in the immediate future is essential for evolving a suitable production policy. Formulating suitable production policy is necessary to avoid the problem of over production or the problem of short supply.

Once the demand potential is assessed it will be easier for the company to engage in long term planning. Like the future price of a commodity or of its substitute, future income of buyers, prospects of easy availability or otherwise in the future or future outlays, price and income expectations are the most important among them.

Managerial Decision and Market Share Elasticity:
As regards a particular firm, the market share elasticity is most important. This is influenced by rival's changes in prices and promotional efforts both qualitative and quantitative. A thorough knowledge of market share elasticity will help the managerial economist to the profitable results of the concern. The market share elasticity indicates

that there has been a change in company's wide sales to the price differential between the company's price and the industry-wide price level.

Managerial Decision and Promotional Elasticity:

Many of the firms spend huge amounts every year on advertising their products to boost up sales. There is a direct relationship between the extent of advertisement and volume of sales. The promotional elasticity of demand is also called the advertising elasticity of demand. It measures the responsiveness of demand to change in advertising. The reason for finding out the advertisement elasticity of demand by the company manager is to determine the effects of advertisement on sales.

Consumer's surplus

The price which a consumer pays for a commodity is always less than what he is willing to pay for it, so that the satisfaction which he gets from its purchase is more than the price paid for it and thus he derives a surplus satisfaction which Marshall calls Consumer's Surplus (CS). In the words of Marshall, "The excess of the price which he would be willing to pay rather than go without the thing, over that which he actually does pay, is the economic measure of the surplus satisfaction.

It may be called "consumer's surplus." Instances of commodities from which we derive consumer's surplus in our daily life are salt, newspapers, postcard, matches, etc. Consumer's surplus, according to Marshall, is a part of the benefit which a person derives from his environment or conjuncture.

To illustrate, let us suppose that a consumer is willing to buy 1 orange if its price were Re 1, 2 oranges if the price were 75 paise, 3 oranges at 50 paise and 4 oranges if it were 25 paise. Suppose the market price is 25 paise per orange. At this price, the consumer will buy 4 oranges and enjoy a surplus of Rs. 1.50 (.75 + .50 +.25). This is shown in Table 1.

Table 1: Marshall's Measure of Consumer's Surplus

Units of Orange	Marginal Utility (Price willing to pay)	Actual Price Paise	C.S. Paise
1	1.00	.25	.75
2	.75	.25	.50
3	.50	.25	.25
4	.25	.25	

Total Utility = Rs 2.50; Total Price =Re 1; CS = Rs 1.50

The consumer's surplus can also be defined as the difference between what a consumer is willing to pay for a commodity and what he actually does pay for it. Our hypothetical consumer is prepared to pay Rs. 2.50 (= 1.00+ .75 +.50 + .25) for four oranges but actually pays Re 1, and therefore derives a surplus of Rs. 1.50 (Rs 2.50-1.00).

It can also be expressed as:

CS = Total Utility-Marginal Utility or (Price) x No. of Units of the commodity. On the basis of this formula, consumer's surplus of Rs 1.50 = 2.50 [Total Utility] -1.00 (= .25 x 4). It is based on the assumption that the price of the commodity equals its marginal utility.

Consumer's surplus is represented diagrammatically in Figure 1 where DD_l is the demand curve for the commodity. It OP is the price, OQ units of the commodity are purchased and the price paid is OP x OQ = area OQRP. But the total amount of money he is prepared to pay (total utility) for OQ units is OQRD. Therefore, CS = OQRD – OQRP = DRP. In other words, consumer's surplus is the area between the demand curve (DD_1) and the price line (PR) and is equal to the triangle that is formed under the demand curve.

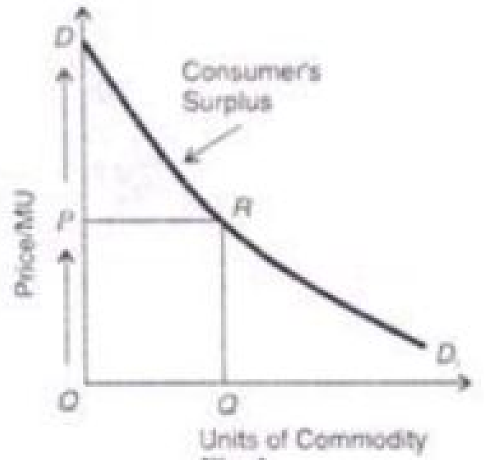


Fig. 1

Consumer's Surplus In Terms of Indifference Curve Analysis: Hicks' Formulation:

The Marshallian measure of consumer's surplus is beset with numerous difficulties due to the unrealistic assumptions of the utility analysis.

But the two basic assumptions which underlie the doctrine of consumer's surplus are:

(i) Utility is quantitatively measurable and

(ii) Marginal utility of money remains constant.

Utility is something subjective which cannot be expressed in cardinal numbers and therefore, it is not possible either to add or subtract it. The indifference curve technique avoids this difficulty by measuring utility in ordinal numbers. Consumer's satisfaction is based on his scale of preferences shown on an indifference map, all points on an indifference curve represent equal satisfaction. The assumption of constancy of marginal utility of money is also not acceptable for it ignores the income effect of the change in the price of a good. We study below Hicks' formulation.

Hicks measure the Marshallian consumer's surplus with constant MU of money in terms of the indifference curve analysis. Take Figure. 2 where money is measured along the vertical axis and good X along the horizontal axis. Suppose the budget line of the consumer is MN.

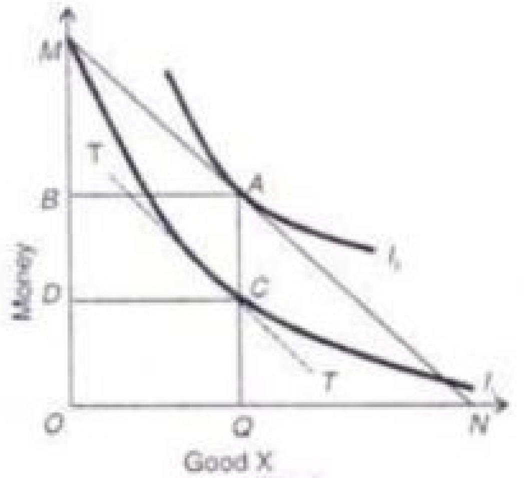


Fig. 2

Its slope equals the price of good X, assuming that the price of one unit of money is equal to 1. Given the price of good X, the consumer is in equilibrium at point A where the indifference curve I_1 is tangent to the budget line MN. At this point A, he has the combination of OQ quantity of good X and OB of money. He thus spends BM of his income in buying OQ quantity of X.

In order to find out the amount of money which the consumer would be willing to spend for OQ quantity of good X rather than go without it, we draw an indifference curve I, from point M which is vertically parallel to the indifference curve I_2, at point C, as shown by the dotted line drawn parallel to the line MN.

Thus the two curves have the same slope at OQ quantity of X. The indifference curve I_1 show's that the consumer is prepared to spend DM amount of money for OQ quantity of X. But in actuality, he spends BM on buying the same quantity of X. Hence DM-BM = DB = CA is the consumer's surplus.

It may be noted that Marshall assumed constant MU of money in his concept and to explain the Marshallian measure, Hicks assumed vertically parallel indifference curves. Thus, when the slopes of indifference curves I_1 and I_2 at points C and A are equal, the assumption of constant MU of money is fulfilled.

Students are encouraged to learn about practical uses of Consumer`s Surplus in economics.

Utility and its measurement

Although the concept of 'taste' and 'satisfaction' are familiar for all of us, it is much more difficult to express these concepts in concrete terms. For example, suppose you have just eaten an ice-cream and a chocolate.

Can you tell how much are you satisfied from each of these items? Probably you can tell which item you liked more. But, it is very difficult to express "how much" you liked one over the other. It is evident, that we need a more quantitative measure of satisfaction. Due to this reason, economists developed the concept of utility.

Meaning of Utility:

Utility refers to want satisfying power of a commodity. It is the satisfaction, actual or expected, derived from the consumption of a commodity. Utility differs from person- to-person, place-to-place and time-to-time. In the words of Prof. Hobson, "Utility is the ability of a good to satisfy a want".

In short, when a commodity is capable of satisfying human wants, we can conclude that the commodity has utility.

How to Measure Utility?
After understanding the meaning of utility, the next big question is: How to measure utility? According to classical economists, utility can be measured, in the same way, as weight or height is measured. For this, economists assumed that utility can be measured in cardinal (numerical) terms. By using cardinal measure of utility, it is possible to numerically estimate utility, which a person derives from consumption of goods and services. But, there was no standard unit for measuring utility. So, the economists derived an imaginary measure, known as 'Util'.

Utils are imaginary and psychological units which are used to measure satisfaction (utility) obtained from consumption of a certain quantity of a commodity.

Example – Measurement of satisfaction in utils:
Suppose you have just eaten an ice-cream and a chocolate. You agree to assign 20 utils as utility derived from the ice-cream. Now the question is: how many utils be assigned to the chocolate? If you liked the chocolate less, then you may assign utils less than 20. However, if you liked it more, you would give it a number greater than 20. Suppose, you assign 10 utils to the chocolate, then it can be concluded that you liked the ice-cream twice as much as you liked the chocolate.

One more way to measure utility:
Utils cannot be taken as a standard unit for measurement as it will vary from individual to individual. Hence, several economists including Marshall, suggested the measurement of utility in monetary terms. It means, utility can be measured in terms of money or price, which the consumer is willing to pay.

In the above example, suppose 1 util is assumed to be equal to Rs. 1. Now, an ice-cream will yield utility worth Rs. 20 (as 1 util = Rs. 1) and chocolate will give utility of Rs. 10. This utility of Rs. 20 from the ice-cream or f I0 from the chocolate is termed as value of utility in terms of mone

The advantage of using monetary values instead of utils is that it allows easy comparison between utility and price paid, since both are in the same units.

It must be noted that it is impossible to measure satisfaction of a person as it is inherent to the individual and differs greatly from person-to-person. Still, the concept of utility is very useful in explaining and understanding the behaviour of consumer.

The measurement of utility has always been a controversial issue. Neo-classical economists, such as Alfred Marshall, Leon Walrus, and Carl Meneger believed that utility is cardinal or quantitative like other mathematical variables, such as height, weight, velocity, air pressure, and temperature.

Therefore, these economists developed cardinal utility concept to measure the utility derived from a good. They developed a unit of measuring utility, which is known as utils. For example, according to the cardinal utility concept, an individual gains 20 utils from ice-cream and 10 utils from coffee.

However, modern economists, such as J.R. Hicks, gave the concept of ordinal utility of measuring utility. According to this concept, utility cannot be measured numerically, it can only be ranked as 1, 2, 3, and so on. For instance, an individual prefers ice-cream than coffee, which implies that utility of ice-cream is given rank 1 and coffee as rank 2.

1. Cardinal Utility Concept:
The neo-classical economists propounded the theory of consumption (consumer behavior theory) on the assumption that utility is cardinal. For measuring utility, a term 'util' is coined which means units of utility.
Following are the assumptions of the cardinal utility concept that were followed by economists while measuring utility:

a. One util equals one unit of money
b. Utility of money remains constant

However, over a passage of time, it has been felt by economists that the exact or absolute measurement of utility is not possible. There are a number of difficulties involved in the measurement of utility. This is because of the fact that the utility derived by a consumer from a good depends on various factors, such as changes in consumer's moods, tastes, and preferences.

These factors are not possible to determine and measure. Therefore, no such technique has been devised by economists to measure utility. Utility; thus, is not measureable in cardinal terms. However, the cardinal utility concept has a prime importance in consumer behavior analysis.

2. Ordinal Utility Concept:
Cardinal utility approach is based on the fact that the exact or absolute measurement of utility is not possible. However, modern economists rejected the cardinal utility approach and introduced the concept of ordinal utility for the analysis of consumer behavior.
According to them, it may not be possible to measure exact utility, but it can be expressed in terms of less or more useful good. For instance, a consumer consumes coconut oil and mustard oil. In such a case, the consumer cannot say that coconut oil gives 10 utils and mustard oil gives 20 utils.

Instead he/she can say that mustard oil gives more utility to him/her than coconut oil. In such a case, mustard oil would be given rank 1 and coconut oil would be given rank 2 by the consumer. This assumption lays the foundation for the ordinal theory of consumer behavior.

According to neo-classical economists, cardinal measurement of utility is possible in practical situations. Moreover, they believed that the concept of cardinal utility is useful in analyzing consumer behavior. However, modern economists believed that utility is related to psychological aspect of consumers; therefore, it cannot be measured in quantitative terms.

In addition, they advocated that the ordinal utility concept plays a significant role in consumer behavior analysis. Modern economists also believed that the concept of ordinal utility meets the theoretical requirements of consumer behavior analysis even when there is no cardinal measure of utility is available.

Total Utility (TU):

Total utility refers to the total satisfaction obtained from the consumption of all possible units of a commodity. It measures the total satisfaction obtained from consumption of all the units of that good. For example, if the 1st ice-cream gives you a satisfaction of 20 utils and 2nd one gives 16 utils, then TU from 2 ice-creams is 20 + 16 = 36 utils. If the 3rd ice-cream generates satisfaction of 10 utils, then TU from 3 ice-creams will be 20+ 16 + 10 = 46 utils.

TU can be calculated as:

$TU_n = U_1 + U_2 + U_3 + \ldots\ldots\ldots\ldots\ldots\ldots + U_n$

Where:

TU_n = Total utility from n units of a given commodity

$U_1, U_2, U_3, \ldots\ldots\ldots\ldots U_n$ = Utility from the 1st, 2nd, 3rd nth unit

n = Number of units consumed

Marginal Utility (MU):

Marginal utility is the additional utility derived from the consumption of one more unit of the given commodity. It is the utility derived from the last unit of a commodity purchased. As per given example, when 3rd ice-cream is consumed, TU increases from 36 utils to 46 utils. The additional 10 utils from the 3rd ice-cream is the MU.

In the words of Chapman, "Marginal utility is addition made to total utility by consuming one more unit of a commodity".

MU can be calculated as: $MU_n = TU_n - TU_{n-1}$

Where: MU_n = Marginal utility from nth unit; TU_n = Total utility from n units;

TU_{n-1} = Total utility from n – 1 units; n = Number of units of consumption

MU of 3rd ice-cream will be: $MU_3 = TU_3 - TU_2 = 46 - 36 = 10$ utils One More way to Calculate MU

MU is the change in TU when one more unit is consumed. However, when change in units consumed is more than one, then MU can also be calculated as:

ATU

MU = Change in Total Utility/ Change in number of units = $\Delta TU/\Delta Q$

Total Utility is Summation of Marginal Utilities:
Total utility can also be calculated as the sum of marginal utilities from all units, i.e.

$TU_n = MU_1 + MU_2 + MU_3 + \ldots\ldots\ldots\ldots\ldots\ldots + MU_n$ or simply,
$TU = \sum MU$

The concepts of TU and MU can be better understood from the following schedule and diagram:

Table 2.1: TU and MU

Ice-creams Consumed	Marginal Utility (MU)	Total Utility (TU)
1	20	20
2	16	36
3	10	46
4	4	50
5	0	50
6	-6	44

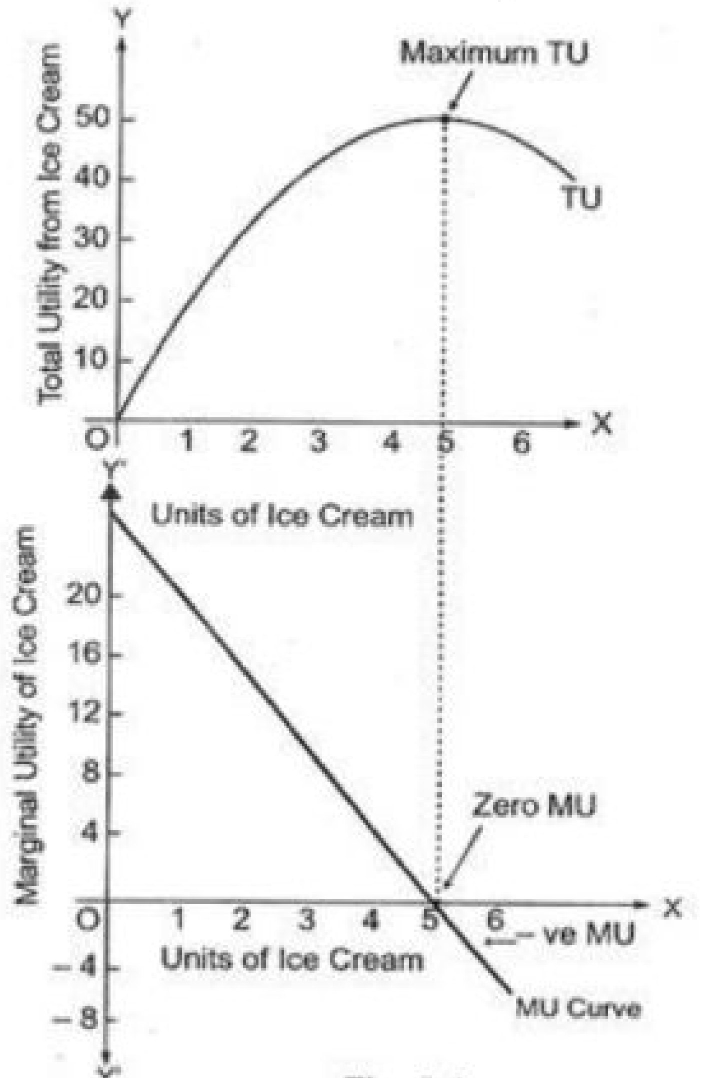


Fig. 2.1

In Fig. 2.1, units of ice-cream, are shown along the X-axis and TU and MU are measured along the Y-axis. MU is positive and TU is increasing till the 4^{th} ice-cream. After consuming the 5^{th} ice-cream, MU is zero and TU is maximum.
This point is known as the point of satiety or the stage of maximum satisfaction. After consuming the 6^{th} ice-cream, MU is negative (known as disutility) and total utility starts diminishing. Disutility is the opposite of utility. It refers to loss of satisfaction due to consumption of too much of a thing.

Types of market structure – Perfect, Monopoly, Monopolistic and Oligopoly

Market structure refers to the nature and degree of competition in the market for goods and services. The structures of market both for goods market and service (factor) market are determined by the nature of competition prevailing in a particular market.

Meaning of Market:
Ordinarily, the term "market" refers to a particular place where goods are purchased and sold. But, in economics, market is used in a wide perspective. In economics, the term "market" does not mean a particular place but the whole area where the buyers and sellers of a product are spread.

This is because in the present age the sale and purchase of goods are with the help of agents and samples. Hence, the sellers and buyers of a particular commodity are spread over a large area. The transactions for commodities may be also through letters, telegrams, telephones, internet, etc. Thus, market in economics does not refer to a particular market place but the entire region in which goods are bought and sold. In these transactions, the price of a commodity is the same in the whole market.

According to Prof. R. Chapman, "The term market refers not necessarily to a place but always to a commodity and the buyers and sellers who are in direct competition with one another." In the words of A.A. Cournot, "Economists understand by the term 'market', not any particular place in which things are bought and sold but the whole of any region in which buyers and sellers are in such free intercourse with one another that the price of the same goods tends to equality, easily and quickly." Prof. Cournot's definition is wider and appropriate in which all the features of a market are found.

The essential features of a market are:
(1) An Area:
In economics, a market does not mean a particular place but the whole region where sellers and buyers of a product ate spread. Modem modes of communication and transport have made the market area for a product very wide.

(2) One Commodity:

In economics, a market is not related to a place but to a particular product.

Hence, there are separate markets for various commodities. For example, there are separate markets for clothes, grains, jewellery, etc.

(3) Buyers and Sellers:
The presence of buyers and sellers is necessary for the sale and purchase of a product in the market. In the modem age, the presence of buyers and sellers is not necessary in the market because they can do transactions of goods through letters, telephones, business representatives, internet, etc.

(4) Free Competition:
There should be free competition among buyers and sellers in the market. This competition is in relation to the price determination of a product among buyers and sellers.

(5) One Price:
The price of a product is the same in the market because of free competition among buyers and sellers.

On the basis of above elements of a market, its general definition may be as follows:
The market for a product refers to the whole region where buyers and sellers of that product are spread and there is such free competition that one price for the product prevails in the entire region.

Market Structure:
Market structure refers to the nature and degree of competition in the market for goods and services. The structures of market both for goods market and service (factor) market are determined by the nature of competition prevailing in a particular market.

Determinants:
There are a number of determinants of market structure for a particular good.

They are:
(1) The number and nature of sellers.
(2) The number and nature of buyers.
(3) The nature of the product.
(4) The conditions of entry into and exit from the market.
(5) Economies of scale.

They are discussed as under:
1. Number and Nature of Sellers:

The market structures are influenced by the number and nature of sellers in the market. They range from large number of sellers in perfect competition to a single seller in pure monopoly, to two sellers in duopoly, to a few sellers in oligopoly, and to many sellers of differentiated products.

2. Number and Nature of Buyers:

The market structures are also influenced by the number and nature of buyers in the market. If there is a single buyer in the market, this is buyer's monopoly and is called monopsony market. Such markets exist for local labour employed by one large employer. There may be two buyers who act jointly in the market. This is called duopsony market. They may also be a few organised buyers of a product.

This is known as oligopsony. Duopsony and oligopsony markets are usually found for cash crops such as rice, sugarcane, etc. when local factories purchase the entire crops for processing.

3. Nature of Product:

It is the nature of product that determines the market structure. If there is product differentiation, products are close substitutes and the market is characterised by monopolistic competition. On the other hand, in case of no product differentiation, the market is characterised by perfect competition. And if a product is completely different from other products, it has no close substitutes and there is pure monopoly in the market.

4. Entry and Exit Conditions:

The conditions for entry and exit of firms in a market depend upon profitability or loss in a particular market. Profits in a market will attract the entry of new firms and losses lead to the exit of weak firms from the market. In a perfect competition market, there is freedom of entry or exit of firms.

But in monopoly and oligopoly markets, there are barriers to entry of new firms. Usually, governments have a monopoly in public utility services like postal, air and road transport, water and power supply services, etc. By granting exclusive franchises, entries of new supplies are barred. In oligopoly markets, there are barriers to entry of firms because of collusion, tacit agreements, cartels, etc. On the other hand, there are no restrictions in entry and exit of firms in monopolistic competition due to product differentiation.

5. Economies of Scale:

Firms that achieve large economies of scale in production grow large in comparison to others in an industry. They tend to weed out the other firms with the result that a few firms are left to compete with each other. This leads to the emergency of oligopoly. If only one firm attains economies of scale to such a large extent that it is able to meet the entire market demand, there is monopoly.

Forms of Market Structure:

On the basis of competition, a market can be classified in the following ways:

1. Perfect Competition
2. Monopoly
3. Duopoly
4. Oligopoly
5. Monopolistic Competition

1. Perfect Competition Market:

A perfectly competitive market is one in which the number of buyers and sellers is very large, all engaged in buying and selling a homogeneous product without any artificial restrictions and possessing perfect knowledge of market at a time. In the words of A. Koutsoyiannis, "Perfect competition is a market structure characterised by a complete absence of rivalry among the individual firms." According to R.G. Lipsey, "Perfect competition is a market structure in which all firms in an industry are price- takers and in which there is freedom of entry into, and exit from, industry."

Characteristics of Perfect Competition:

The following are the conditions for the existence of perfect competition:

(1) Large Number of Buyers and Sellers:

The first condition is that the number of buyers and sellers must be so large that none of them individually is in a position to influence the price and output of the industry as a whole. The demand of individual buyer relative to the total demand is so small that he cannot influence the price of the product by his individual action.

Similarly, the supply of an individual seller is so small a fraction of the total output that he cannot influence the price of the product by his action alone. In other words, the individual seller is unable to influence the price of the product by increasing or decreasing its supply.

Rather, he adjusts his supply to the price of the product. He is "output adjuster". Thus no buyer or seller can alter the price by his individual action. He has to accept the price for the product as fixed for the whole industry. He is a "price taker".

(2) Freedom of Entry or Exit of Firms:

The next condition is that the firms should be free to enter or leave the industry. It implies that whenever the industry is earning excess profits, attracted by these profits some new firms enter the industry. In case of loss being sustained by the industry, some firms leave it.

(3) Homogeneous Product:
Each firm produces and sells a homogeneous product so that no buyer has any preference for the product of any individual seller over others. This is only possible if units of the same product produced by different sellers are perfect substitutes. In other words, the cross elasticity of the products of sellers is infinite.

No seller has an independent price policy. Commodities like salt, wheat, cotton and coal are homogeneous in nature. He cannot raise the price of his product. If he does so, his customers would leave him and buy the product from other sellers at the ruling lower price.

The above two conditions between themselves make the average revenue curve of the individual seller or firm perfectly elastic, horizontal to the X-axis. It means that a firm can sell more or less at the ruling market price but cannot influence the price as the product is homogeneous and the number of sellers very large.

(4) Absence of Artificial Restrictions:
The next condition is that there is complete openness in buying and selling of goods. Sellers are free to sell their goods to any buyers and the buyers are free to buy from any sellers. In other words, there is no discrimination on the part of buyers or sellers.

Moreover, prices are liable to change freely in response to demand-supply conditions. There are no efforts on the part of the producers, the government and other agencies to control the supply, demand or price of the products. The movement of prices is unfettered.

(5) Profit Maximisation Goal:
Every firm has only one goal of maximising its profits.

(6) Perfect Mobility of Goods and Factors:
Another requirement of perfect competition is the perfect mobility of goods and factors between industries. Goods are free to move to those places where they can fetch the highest price. Factors can also move from a low-paid to a high-paid industry.

(7) Perfect Knowledge of Market Conditions:
This condition implies a close contact between buyers and sellers. Buyers and sellers possess complete knowledge about the prices at which goods are being bought and sold, and of the prices at which others are prepared to buy and sell. They have also perfect knowledge of the place where the transactions are being carried on. Such perfect knowledge of market conditions forces the sellers to sell their product at the prevailing market price and the buyers to buy at that price.

(8) Absence of Transport Costs:

Another condition is that there are no transport costs in carrying of product from one place to another. This condition is essential for the existence of perfect competition which requires that a commodity must have the same price everywhere at any time. If transport costs are added to the price of the product, even a homogeneous commodity will have different prices depending upon transport costs from the place of supply.

(9) Absence of Selling Costs:

Under perfect competition, the costs of advertising, sales-promotion, etc. do not arise because all firms produce a homogeneous product.

Perfect Competition vs Pure Competition:

Perfect competition is often distinguished from pure competition, but they differ only in degree. The first five conditions relate to pure competition while the remaining four conditions are also required for the existence of perfect competition. According to Chamberlin, pure competition means, competition unalloyed with monopoly elements," whereas perfect competition involves perfection in many other respects than in the absence of monopoly." The practical importance of perfect competition is not much in the present times for few markets are perfectly competitive except those for staple food products and raw materials. That is why, Chamberlin says that perfect competition is a rare phenomenon."

Though the real world does not fulfil the conditions of perfect competition, yet perfect competition is studied for the simple reason that it helps us in understanding the working of an economy, where competitive behaviour leads to the best allocation of resources and the most efficient organisation of production. A hypothetical model of a perfectly competitive industry provides the basis for appraising the actual working of economic institutions and organisations in any economy.

2. Monopoly Market:

Monopoly is a market situation in which there is only one seller of a product with barriers to entry of others. The product has no close substitutes. The cross elasticity of demand with every other product is very low. This means that no other firms produce a similar product. According to D. Salvatore, "Monopoly is the form of market organisation in which there is a single firm selling a commodity for which there are no close substitutes." Thus the monopoly firm is itself an industry and the monopolist faces the industry demand curve.

The demand curve for his product is, therefore, relatively stable and slopes downward to the right, given the tastes, and incomes of his customers. It means that more of the product can be sold at a lower price than at a higher price. He is a price-maker who can set the price to his maximum advantage.

However, it does not mean that he can set both price and output. He can do either of the two things. His price is determined by his demand curve, once he selects his output level. Or, once he sets the price for his product, his output is determined by what consumers will take at that price. In any situation, the ultimate aim of the monopolist is to have maximum profits.

Characteristics of Monopoly:

The main features of monopoly are as follows:

1. Under monopoly, there is one producer or seller of a particular product and there is no difference between a firm and an industry. Under monopoly a firm itself is an industry.

2. A monopoly may be individual proprietorship or partnership or joint stock company or a cooperative society or a government company.

3. A monopolist has full control on the supply of a product. Hence, the elasticity of demand for a monopolist's product is zero.

4. There is no close substitute of a monopolist's product in the market. Hence, under monopoly, the cross elasticity of demand for a monopoly product with some other good is very low.

5. There are restrictions on the entry of other firms in the area of monopoly product.

6. A monopolist can influence the price of a product. He is a price-maker, not a price-taker.

7. Pure monopoly is not found in the real world.

8. Monopolist cannot determine both the price and quantity of a product simultaneously.

9. Monopolist's demand curve slopes downwards to the right. That is why, a monopolist can increase his sales only by decreasing the price of his product and thereby maximise his profit. The marginal revenue curve of a monopolist is below the average revenue curve and it falls faster than the average revenue curve. This is because a monopolist has to cut down the price of his product to sell an additional unit.

3. Duopoly:

Duopoly is a special case of the theory of oligopoly in which there are only two sellers. Both the sellers are completely independent and no agreement exists between them. Even though they are independent, a change in the price and output of one will affect the other, and may set a chain of reactions. A seller may, however, assume that his rival is unaffected by what he does, in that case he takes only his own direct influence on the price.

If, on the other hand, each seller takes into account the effect of his policy on that of his rival and the reaction of the rival on himself again, then he considers both the direct and the indirect influences upon the price. Moreover, a rival seller's policy may remain unaltered either to the amount offered for sale or to the price at which he offers his product. Thus the duopoly problem can be considered as either ignoring mutual dependence or recognising it.

4. Oligopoly:

Oligopoly is a market situation in which there are a few firms selling homogeneous or differentiated products. It is difficult to pinpoint the number of firms in 'competition among the few.' With only a few firms in the market, the action of one firm is likely to affect the others. An oligopoly industry produces either a homogeneous product or heterogeneous products.

The former is called pure or perfect oligopoly and the latter is called imperfect or differentiated oligopoly. Pure oligopoly is found primarily among producers of such industrial products as aluminium, cement, copper, steel, zinc, etc. Imperfect oligopoly is found among producers of such consumer goods as automobiles, cigarettes, soaps and detergents, TVs, rubber tyres, refrigerators, typewriters, etc.

Characteristics of Oligopoly:

In addition to fewness of sellers, most oligopolistic industries have several common characteristics which are explained below:

(1) Interdependence:

There is recognised interdependence among the sellers in the oligopolistic market. Each oligopolist firm knows that changes in its price, advertising, product characteristics, etc. may lead to counter-moves by rivals. When the sellers are a few, each produces a considerable fraction of the total output of the industry and can have a noticeable effect on market conditions.

He can reduce or increase the price for the whole oligopolist market by selling more quantity or less and affect the profits of the other sellers. It implies that each seller is aware of the price-moves of the other sellers and their impact on his profit and of the influence of his price-move on the actions of rivals.

Thus there is complete interdependence among the sellers with regard to their price-output policies. Each seller has direct and ascertainable influences upon every other seller in the industry. Thus, every move by one seller leads to counter-moves by the others.

(2) Advertisement:

The main reason for this mutual interdependence in decision making is that one producer's fortunes are dependent on the policies and fortunes of the other producers in the industry. It is for this reason that oligopolist firms spend much on advertisement and customer services.

As pointed out by Prof. Baumol, "Under oligopoly advertising can become a life-and-death matter." For example, if all oligopolists continue to spend a lot on advertising their products and one seller does not match up with them he will find his customers gradually going in for his rival's product. If, on the other hand, one oligopolist advertises his product, others have to follow him to keep up their sales.

(3) Competition:
This leads to another feature of the oligopolistic market, the presence of competition. Since under oligopoly, there are a few sellers, a move by one seller immediately affects the rivals. So each seller is always on the alert and keeps a close watch over the moves of its rivals in order to have a counter-move. This is true competition.

(4) Barriers to Entry of Firms:
As there is keen competition in an oligopolistic industry, there are no barriers to entry into or exit from it. However, in the long run, there are some types of barriers to entry which tend to restraint new firms from entering the industry.

They may be:
(a) Economies of scale enjoyed by a few large firms; (b) control over essential and specialised inputs; (c) high capital requirements due to plant costs, advertising costs, etc. (d) exclusive patents and licenses; and (e) the existence of unused capacity which makes the industry unattractive. When entry is restricted or blocked by such natural and artificial barriers, the oligopolistic industry can earn long-run super normal profits.

(5) Lack of Uniformity:
Another feature of oligopoly market is the lack of uniformity in the size of firms. Finns differ considerably in size. Some may be small, others very large. Such a situation is asymmetrical. This is very common in the American economy. A symmetrical situation with firms of a uniform size is rare.

(6) Demand Curve:
It is not easy to trace the demand curve for the product of an oligopolist. Since under oligopoly the exact behaviour pattern of a producer cannot be ascertained with certainty, his demand curve cannot be drawn accurately, and with definiteness. How does an individual seller s demand curve look like in oligopoly is most uncertain because a seller's price or output moves lead to unpredictable reactions on price-output policies of his rivals, which may have further repercussions on his price and output.

The chain of action reaction as a result of an initial change in price or output, is all a guess-work. Thus a complex system of crossed conjectures emerges as a result of the interdependence among the rival oligopolists which is the main cause of the indeterminateness of the demand curve.

If the oligopolist seller does not have a definite demand curve for his product, then how does he affect his sales. Presumably, his sales depend upon his current price and those of his rivals. However, a number of conjectural demand curves can be imagined.

For example, in differentiated oligopoly where each seller fixes a separate price for his product, a reduction in price by one seller may lead to an equivalent, more, less or no price reduction by rival sellers. In each case, a demand curve can be drawn by the seller within the range of competitive and monopoly demand curves.

Leaving aside retaliatory price movements, the individual seller's demand curve under oligopoly for both price cuts and increases is neither more elastic than under perfect or monopolistic competition nor less elastic than under monopoly. It may still be indefinite and indeterminate.

This situation is shown in Figure 1 where KD_1 is the elastic demand curve and MD is the less elastic demand curve. The oligopolies' demand curve is the dotted kinked KPD. The reason is quite simple. If a seller reduces the price of his product, his rivals also lower the prices of their products so that he is not able to increase his sales.

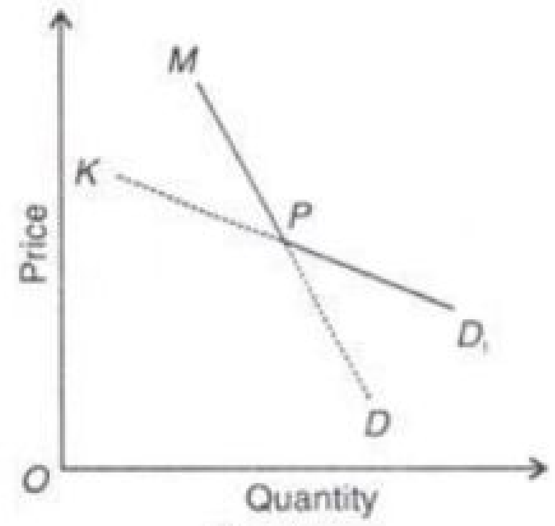


Fig. 1.

So the demand curve for the individual seller's product will be less elastic just below the present price P (where $KD_1$and MD curves are shown to intersect). On the other hand, when he raises the price of his product, the other sellers will not follow him in order to earn larger profits at the old price. So this individual seller will experience a sharp fall in the demand for his product.
Thus his demand curve above the price P in the segment KP will be highly elastic. Thus the imagined demand curve of an oligopolist has a comer or kink at the current price P. Such a demand curve is much more elastic for price increases than for price decreases.

(7) No Unique Pattern of Pricing Behaviour:

The rivalry arising from interdependence among the oligopolists leads to two conflicting motives. Each wants to remain independent and to get the maximum possible profit. Towards this end, they act and react on the price-output movements of one another in a continuous element of uncertainty.

On the other hand, again motivated by profit maximisation each seller wishes to cooperate with his rivals to reduce or eliminate the element of uncertainty. All rivals enter into a tacit or formal agreement with regard to price-output changes. It leads to a sort of monopoly within oligopoly.

They may even recognise one seller as a leader at whose initiative all the other sellers raise or lower the price. In this case, the individual seller's demand curve is a part of the industry demand curve, having the elasticity of the latter. Given these conflicting attitudes, it is not possible to predict any unique pattern of pricing behaviour in oligopoly markets.

5. Monopolistic Competition:

Monopolistic competition refers to a market situation where there are many firms selling a differentiated product. "There is competition which is keen, though not perfect, among many firms making very similar products." No firm can have any perceptible influence on the price-output policies of the other sellers nor can it be influenced much by their actions. Thus monopolistic competition refers to competition among a large number of sellers producing close but not perfect substitutes for each other.

It's Features:

The following are the main features of monopolistic competition:

(1) Large Number of Sellers:

In monopolistic competition the number of sellers is large. They are "many and small enough" but none controls a major portion of the total output. No seller by changing its price-output policy can have any perceptible effect on the sales of others and in turn be influenced by them. Thus there is no recognised interdependence of the price-output policies of the sellers and each seller pursues an independent course of action.

(2) Product Differentiation:

One of the most important features of the monopolistic competition is differentiation. Product differentiation implies that products are different in some ways from each other. They are heterogeneous rather than homogeneous so that each firm has an absolute monopoly in the production and sale of a differentiated product. There is, however, slight difference between one product and other in the same category.

Products are close substitutes with a high cross-elasticity and not perfect substitutes. Product "differentiation may be based upon certain characteristics of the products itself, such as exclusive patented features; trade-marks; trade names; peculiarities of package or container, if any; or singularity in quality, design, colour, or style. It may also exist with respect to the conditions surrounding its sales."

(3) Freedom of Entry and Exit of Firms:
Another feature of monopolistic competition is the freedom of entry and exit of firms. As firms are of small size and are capable of producing close substitutes, they can leave or enter the industry or group in the long run.

(4) Nature of Demand Curve:
Under monopolistic competition no single firm controls more than a small portion of the total output of a product. No doubt there is an element of differentiation nevertheless the products are close substitutes. As a result, a reduction in its price will increase the sales of the firm but it will have little effect on the price-output conditions of other firms, each will lose only a few of its customers.

Likewise, an increase in its price will reduce its demand substantially but each of its rivals will attract only a few of its customers. Therefore, the demand curve (average revenue curve) of a firm under monopolistic competition slopes downward to the right. It is elastic but not perfectly elastic within a relevant range of prices of which he can sell any amount.

(5) Independent Behaviour:
In monopolistic competition, every firm has independent policy. Since the number of sellers is large, none controls a major portion of the total output. No seller by changing its price-output policy can have any perceptible effect on the sales of others and in turn be influenced by them.

(6) Product Groups:
There is no any 'industry' under monopolistic competition but a 'group' of firms producing similar products. Each firm produces a distinct product and is itself an industry. Chamberlin lumps together firms producing very closely related products and calls them product groups, such as cars, cigarettes, etc.

(7) Selling Costs:
Under monopolistic competition where the product is differentiated, selling costs are essential to push up the sales. Besides, advertisement, it includes expenses on salesman, allowances to sellers for window displays, free service, free sampling, premium coupons and gifts, etc.

(8) Non-price Competition:
Under monopolistic competition, a firm increases sales and profits of his product without a cut in the price. The monopolistic competitor can change his product either by varying its quality, packing, etc. or by changing promotional programmes.

The features of market structures are shown in Table 1.

Table 1 : Features of Market Structures

Features	(Market Forms)			
	Perfect Competition	Monopoly	Monopolistic Competition	Oligopoly
1. No. of Firms	Large	One	Varied but not too many	A few
2. Nature of Product	Homoge-neous	One type	Product Differentiation	Homogeneous or Differentiated
3. Entry of Firms	Free	No entry	Free	Restricted
4. Degree of Mono-poly Power	Zero	Full	Limited	Limited due to product differentiation
5. Price Policy of Firm	Price-taker	Price-maker	Price-maker	Price-maker
6. Market Knowledge	Complete	Incomplete	Incomplete	Incomplete
7. Elasticity of Demand	Perfectly elastic	Less elastic	Less elastic	Less elastic
8. AR and MR	Equal	Different	Different	Different
9. Selling Cost	No	Small	Large	Small

Demand forecasting techniques

Meaning:

Forecasts are becoming the lifetime of business in a world, where the tidal waves of change are sweeping the most established of structures, inherited by human society. Commerce just happens to the one of the first casualties. Survival in this age of economic predators, requires the tact, talent and technique of predicting the future.

Forecast is becoming the sign of survival and the language of business. All requirements of the business sector need the technique of accurate and practical reading into the future. Forecasts are, therefore, very essential requirement for the survival of business. Management requires forecasting information when making a wide range of decisions.

The sales forecast is particularly important as it is the foundation upon which all company plans are built in terms of markets and revenue. Management would be a simple matter if business was not in a continual state of change, the pace of which has quickened in recent years.

It is becoming increasingly important and necessary for business to predict their future prospects in terms of sales, cost and profits. The value of future sales is crucial as it affects costs profits, so the prediction of future sales is the logical starting point of all business planning.

A forecast is a prediction or estimation of future situation. It is an objective assessment of future course of action. Since future is uncertain, no forecast can be percent correct. Forecasts can be both physical as well as financial in nature. The more realistic the forecasts, the more effective decisions can be taken for tomorrow.

In the words of Cundiff and Still, "Demand forecasting is an estimate of sales during a specified future period which is tied to a proposed marketing plan and which assumes a particular set of uncontrollable and competitive forces". Therefore, demand forecasting is a projection of firm's expected level of sales based on a chosen marketing plan and environment.

Forecasting Techniques:

Demand forecasting is a difficult exercise. Making estimates for future under the changing conditions is a Herculean task. Consumers' behaviour is the most unpredictable one because it is motivated and influenced by a multiplicity of forces. There is no easy method or a simple formula which enables the manager to predict the future.

Economists and statisticians have developed several methods of demand forecasting. Each of these methods has its relative advantages and disadvantages. Selection of the right method is essential to make demand forecasting accurate. In demand forecasting, a judicious combination of statistical skill and rational judgement is needed.

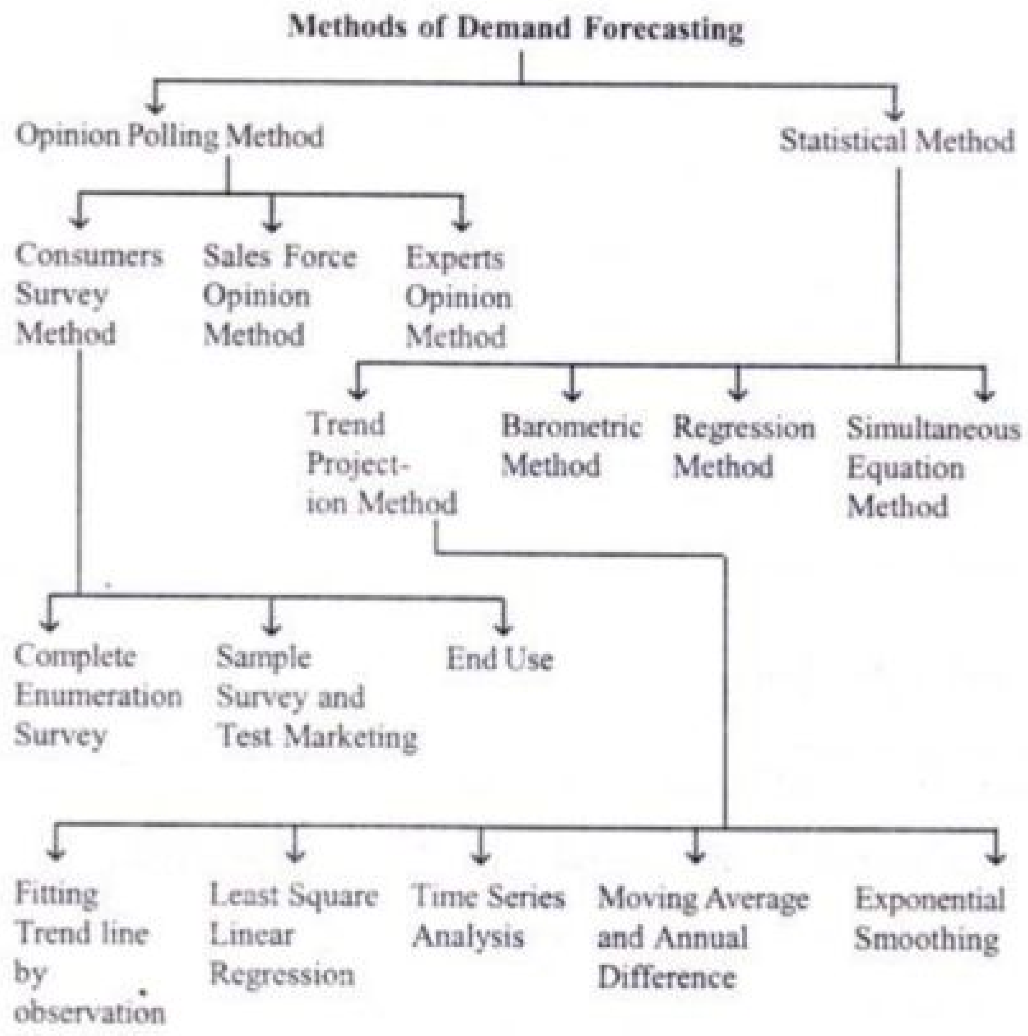
Mathematical and statistical techniques are essential in classifying relationships and providing techniques of analysis, but they are in no way an alternative for sound judgement. Sound judgement is a prime requisite for good forecast.

The judgment should be based upon facts and the personal bias of the forecaster should not prevail upon the facts. Therefore, amid way should be followed between mathematical techniques and sound judgment or pure guess work.

The more commonly used methods of demand forecasting are discussed below:

The various methods of demand forecasting can be summarised in the form of a chart as shown in Table.

Table 1.



1. Opinion Polling Method:

In this method, the opinion of the buyers, sales force and experts could be gathered to determine the emerging trend in the market.

The opinion polling methods of demand forecasting are of three kinds:

(a) Consumer's Survey Method or Survey of Buyer's Intentions:

In this method, the consumers are directly approached to disclose their future purchase plans. I his is done by interviewing all consumers or a selected group of consumers out of the relevant population. This is the direct method of estimating demand in the short run. Here the burden of forecasting is shifted to the buyer. The firm may go in for complete enumeration or for sample surveys. If the commodity under consideration is an intermediate product then the industries using it as an end product are surveyed.

(i) Complete Enumeration Survey:

Under the Complete Enumeration Survey, the firm has to go for a door to door survey for the forecast period by contacting all the households in the area. This method has an advantage of first hand, unbiased information, yet it has its share of disadvantages also. The major limitation of this method is that it requires lot of resources, manpower and time.

In this method, consumers may be reluctant to reveal their purchase plans due to personal privacy or commercial secrecy. Moreover, at times the consumers may not express their opinion properly or may deliberately misguide the investigators.

(ii) Sample Survey and Test Marketing:

Under this method some representative households are selected on random basis as samples and their opinion is taken as the generalised opinion. This method is based on the basic assumption that the sample truly represents the population. If the sample is the true representative, there is likely to be no significant difference in the results obtained by the survey. Apart from that, this method is less tedious and less costly.

A variant of sample survey technique is test marketing. Product testing essentially involves placing the product with a number of users for a set period. Their reactions to the product are noted after a period of time and an estimate of likely demand is made from the result. These are suitable for new products or for radically modified old products for which no prior data exists. It is a more scientific method of estimating likely demand because it stimulates a national launch in a closely defined geographical area.

(iii) End Use Method or Input-Output Method:
This method is quite useful for industries which are mainly producer's goods. In this method, the sale of the product under consideration is projected as the basis of demand survey of the industries using this product as an intermediate product, that is, the demand for the final product is the end user demand of the intermediate product used in the production of this final product.

The end user demand estimation of an intermediate product may involve many final good industries using this product at home and abroad. It helps us to understand inter-industry' relations. In input-output accounting two matrices used are the transaction matrix and the input co-efficient matrix. The major efforts required by this type are not in its operation but in the collection and presentation of data.

(b) Sales Force Opinion Method:
This is also known as collective opinion method. In this method, instead of consumers, the opinion of the salesmen is sought. It is sometimes referred as the "grass roots approach" as it is a bottom-up method that requires each sales person in the company to make an individual forecast for his or her particular sales territory.

These individual forecasts are discussed and agreed with the sales manager. The composite of all forecasts then constitutes the sales forecast for the organisation. The advantages of this method are that it is easy and cheap. It does not involve any elaborate statistical treatment. The main merit of this method lies in the collective wisdom of salesmen. This method is more useful in forecasting sales of new products.

(c) Experts Opinion Method:
This method is also known as "Delphi Technique" of investigation. The Delphi method requires a panel of experts, who are interrogated through a sequence of questionnaires in which the responses to one questionnaire are used to produce the next

questionnaire. Thus any information available to some experts and not to others is passed on, enabling all the experts to have access to all the information for forecasting.

The method is used for long term forecasting to estimate potential sales for new products. This method presumes two conditions: Firstly, the panellists must be rich in their expertise, possess wide range of knowledge and experience. Secondly, its conductors are objective in their job. This method has some exclusive advantages of saving time and other resources.

2. Statistical Method:
Statistical methods have proved to be immensely useful in demand forecasting. In order to maintain objectivity, that is, by consideration of all implications and viewing the problem from an external point of view, the statistical methods are used.

The important statistical methods are:
(i) Trend Projection Method:
A firm existing for a long time will have its own data regarding sales for past years. Such data when arranged chronologically yield what is referred to as 'time series'. Time series shows the past sales with effective demand for a particular product under normal conditions. Such data can be given in a tabular or graphic form for further analysis. This is the most popular method among business firms, partly because it is simple and inexpensive and partly because time series data often exhibit a persistent growth trend.

Time series has got four types of components namely, Secular Trend (T), Secular Variation (S), Cyclical Element (C), and an Irregular or Random Variation (I). These elements are expressed by the equation O = TSCI. Secular trend refers to the long run changes that occur as a result of general tendency.

Seasonal variations refer to changes in the short run weather pattern or social habits. Cyclical variations refer to the changes that occur in industry during depression and boom. Random variation refers to the factors which are generally able such as wars, strikes, flood, famine and so on.

When a forecast is made the seasonal, cyclical and random variations are removed from the observed data. Thus only the secular trend is left. This trend is then projected. Trend projection fits a trend line to a mathematical equation.

The trend can be estimated by using any one of the following methods:
(a) The Graphical Method,

(b) The Least Square Method.

a) Graphical Method:

This is the most simple technique to determine the trend. All values of output or sale for different years are plotted on a graph and a smooth free hand curve is drawn passing through as many points as possible. The direction of this free hand curve—upward or downward— shows the trend. A simple illustration of this method is given in Table 2.

Table 2: Sales of Firm

Year	Sales (Rs. Crore)
1995	40
1996	50
1997	44
1998	60
1999	54
2000	62

In Fig. 1, AB is the trend line which has been drawn as free hand curve passing through the various points representing actual sale values.

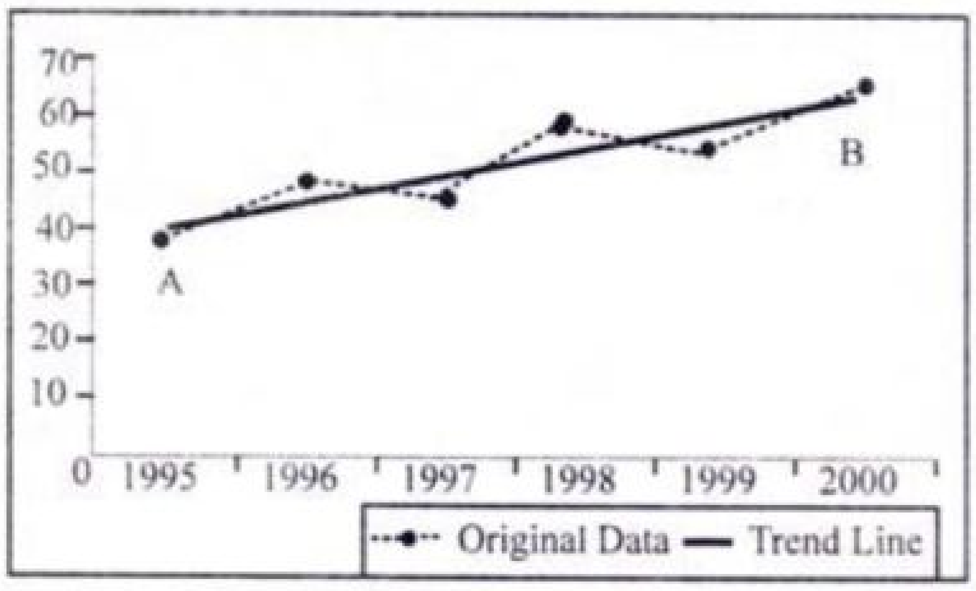


Fig. 1

(b) Least Square Method:

Under the least square method, a trend line can be fitted to the time series data with the help of statistical techniques such as least square regression. When the trend in sales over time is given by straight line, the equation of this line is of the form: y = a + bx. Where 'a' is the intercept and 'b' shows the impact of the independent variable. We have two variables—the independent variable x and the dependent variable y. The line of best fit establishes a kind of mathematical relationship between the two variables .v and y. This is expressed by the regression y on x.

In order to solve the equation v = a + bx, we have to make use of the following normal equations:

$\Sigma y = na + b \Sigma_x$

$\sum xy = a \sum x + b \sum x2$

(ii) Barometric Technique:

A barometer is an instrument of measuring change. This method is based on the notion that "the future can be predicted from certain happenings in the present." In other words, barometric techniques are based on the idea that certain events of the present can be used to predict the directions of change in the future. This is accomplished by the use of economic and statistical indicators which serve as barometers of economic change.

Generally forecasters correlate a firm's sales with three series: Leading Series, Coincident or Concurrent Series and Lagging Series:

(a) The Leading Series:

The leading series comprise those factors which move up or down before the recession or recovery starts. They tend to reflect future market changes. For example, baby powder sales can be forecasted by examining the birth rate pattern five years earlier, because there is a correlation between the baby powder sales and children of five years of age and since baby powder sales today are correlated with birth rate five years earlier, it is called lagged correlation. Thus we can say that births lead to baby soaps sales.

(b) Coincident or Concurrent Series:

The coincident or concurrent series are those which move up or down simultaneously with the level of the economy. They are used in confirming or refuting the validity of the leading indicator used a few months afterwards. Common examples of coinciding indicators are G.N.P itself, industrial production, trading and the retail sector.

(c) The Lagging Series:

The lagging series are those which take place after some time lag with respect to the business cycle. Examples of lagging series are, labour cost per unit of the manufacturing output, loans outstanding, leading rate of short term loans, etc.

(iii) Regression Analysis:

It attempts to assess the relationship between at least two variables (one or more independent and one dependent), the purpose being to predict the value of the dependent variable from the specific value of the independent variable. The basis of this prediction generally is historical data. This method starts from the assumption that a basic relationship exists between two variables. An interactive statistical analysis computer package is used to formulate the mathematical relationship which exists.

For example, one may build up the sales model as:

Quantum of Sales = a. price + b. advertising + c. price of the rival products + d. personal disposable income +u

Where a, b, c, d are the constants which show the effect of corresponding variables as sales. The constant u represents the effect of all the variables which have been left out in the equation but having effect on sales. In the above equation, quantum of sales is the dependent variable and the variables on the right hand side of the equation are independent variables. If the expected values of the independent variables are substituted in the equation, the quantum of sales will then be forecasted.

The regression equation can also be written in a multiplicative form as given below:

Quantum of Sales = $(\text{Price})^a$ + $(\text{Advertising})^b$ + $(\text{Price of the rival products})^c$ + (Personal disposable income Y + u

In the above case, the exponent of each variable indicates the elasticities of the corresponding variable. Stating the independent variables in terms of notation, the equation form is $QS = P^{\circ 8}. A^{o42} . R^{\circ .83}. Y_2{}^{\circ .68}. 40$

Then we can say that 1 per cent increase in price leads to 0.8 per cent change in quantum of sales and so on.

If we take logarithmic form of the multiple equation, we can write the equation in an additive form as follows:

$\log QS = a \log P + b \log A + c \log R + d \log Y_d + \log u$

In the above equation, the coefficients a, b, c, and d represent the elasticities of variables P, A, R and Y_d respectively.

The co-efficient in the logarithmic regression equation are very useful in policy decision making by the management.

(iv) Econometric Models:

Econometric models are an extension of the regression technique whereby a system of independent regression equation is solved. The requirement for satisfactory use of the econometric model in forecasting is under three heads: variables, equations and data.

The appropriate procedure in forecasting by econometric methods is model building. Econometrics attempts to express economic theories in mathematical terms in such a way that they can be verified by statistical methods and to measure the impact of one economic variable upon another so as to be able to predict future events.

Utility of Forecasting:

Forecasting reduces the risk associated with business fluctuations which generally produce harmful effects in business, create unemployment, induce speculation, discourage capital formation and reduce the profit margin. Forecasting is indispensable and it plays a very important part in the determination of various policies. In modem times forecasting has been put on scientific footing so that the risks associated with it.

Factors influencing location of Industrial Units

Factors Influencing the Location of Industries: Geographical and Non-Geographical Factors!

Many important geographical factors involved in the location of individual industries are of relative significance, e.g., availability of raw materials, power resources, water, labour, markets and the transport facilities.

But besides such purely geographical factors influencing industrial location, there are factors of historical, human, political and economic nature which are now tending to surpass the force of geographical advantages. Consequently, the factors influencing the location of industry can be divided into two broad categories i.e.

(I) Geographical factors, and

(II) Non-geographical factors.

I. Geographical Factors:

Following are the important geographical factors influencing the location of industries.

1. Raw Materials:

The significance of raw materials in manufacturing industry is so fundamental that it needs no emphasising. Indeed, the location of industrial enterprises is sometimes determined simply by location of the raw materials. Modem industry is so complex that a wide range of raw materials is necessary for its growth.

Further we should bear in mind that finished product of one industry may well be the raw material of another. For example, pig iron, produced by smelting industry, serves as the raw material for steel making industry. Industries which use heavy and bulky raw materials in their primary stage in large quantities are usually located near the supply of the raw materials.

It is true in the case of raw materials which lose weight in the process of manufacture or which cannot bear high transport cost or cannot be transported over long distances because of their perishable nature. This has been recognised since 1909 when Alfred Weber published his theory of location of industry.

The jute mills in West Bengal, sugar mills in Uttar Pradesh, cotton textile mills in Maharashtra and Gujarat are concentrated close to the sources of raw materials for this very reason. Industries like iron and steel, which use very large quantities of coal and iron ore, losing lot of weight in the process of manufacture, are generally located near the sources of coal and iron ore.

Some of the industries, like watch and electronics industries use very wide range of light raw materials and the attractive influence of each separate material diminishes. The result is that such industries are often located with no reference to raw materials and are sometimes referred to as 'footloose industries' because a wide range of locations is possible within an area of sufficient population density.

2. Power:

Regular supply of power is a pre-requisite for the localisation of industries. Coal, mineral oil and hydro-electricity are the three important conventional sources of power. Most of the industries tend to concentrate at the source of power.

The iron and steel industry which mainly depends on large quantities of coking coal as source of power are frequently tied to coal fields. Others like the electro-metallurgical and electro-chemical industries, which are great users of cheap hydro-electric power, are generally found in the areas of hydro-power production, for instance, aluminium industry.

As petroleum can be easily piped and electricity can be transmitted over long distances by wires, it is possible to disperse the industry over a larger area. Industries moved to southern states only when hydro-power could be developed in these coal-deficient areas.
Thus, more than all other factors affecting the location of large and heavy industries, quite often they are established at a point which has the best economic advantage in obtaining power and raw materials.
Tata Iron and Steel Plant at Jamshedpur, the new aluminium producing units at Korba (Chhattisgarh) and Renukoot (Uttar Pradesh), the copper smelting plant at Khetri (Rajasthan) and the fertilizer factory at Nangal (Punjab) are near the sources of power and raw material deposits, although other factors have also played their role.

3. Labour:
No one can deny that the prior existence of a labour force is attractive to industry unless there are strong reasons to the contrary. Labour supply is important in two respects (a) workers in large numbers are often required; (b) people with skill or technical expertise are needed. Estall and Buchanan showed in 1961 that labour costs can vary between 62 per cent in clothing and related industries to 29 per cent in the chemical industry; in the fabricated metal products industries they work out at 43 per cent.

In our country, modern industry still requires a large number of workers in spite of increasing mechanisation. There is no problem in securing unskilled labour by locating such industries in large urban centres. Although, the location of any industrial unit is determined after a careful balancing of all relevant factors, yet the light consumer goods and agro-based industries generally require a plentiful of labour supply.

4. Transport:
Transport by land or water is necessary for the assembly of raw materials and for the marketing of the finished products. The development of railways in India, connecting the port towns with hinterland determined the location of many industries around Kolkata, Mumbai and Chennai. As industrial development also furthers the improvement of transport facilities, it is difficult to estimate how much a particular industry owes to original transport facilities available in a particular area.

5. Market:
The entire process of manufacturing is useless until the finished goods reach the market. Nearness to market is essential for quick disposal of manufactured goods. It helps in reducing the transport cost and enables the consumer to get things at cheaper rates.
It is becoming more and more true that industries are seeking locations as near as possible to their markets; it has been remarked that market attractions are now so great that a market location is being increasingly regarded as the normal one, and that a location elsewhere needs very strong justification.
Ready market is most essential for perishable and heavy commodities. Sometimes, there is a considerable material increase in weight, bulk or fragility during the process of manufacture and in such cases industry tends to be market oriented.

6. Water:

Water is another important requirement for industries. Many industries are established near rivers, canals and lakes, because of this reason. Iron and steel industry, textile industries and chemical industries require large quantities of water, for their proper functioning.
Significance of water in industry is evident from Table. Also, it requires 36,400 litres of water to produce one kwh of thermal electricity. Further, it is worth noting that water used in industries gets polluted and is therefore not available for any other purpose.

Table Requirement of Water in Industry:

Name of the industry	**Amount of water required in litres/tonne**
Steel	300,000
Sulphite paper	290,000
Oil refining	25,600
Rayon	1,000,000
Paper from wood	173,000

7. Site:
Site requirements for industrial development are of considerable significance. Sites, generally, should be flat and well served by adequate transport facilities. Large areas are required to build factories. Now, there is a tendency to set up industries in rural areas because the cost of land has shot up in urban centres.
8. Climate:
Climate plays an important role in the establishment of industries at a place. Harsh climate is not much suitable for the establishment of industries. There can be no industrial development in extremely hot, humid, dry or cold climate.
The extreme type of climate of north-west India hinders the development of industries. In contrast to this, the moderate climate of west coastal area is quite congenial to the development of industries. Because of this reason, about 24 per cent of India's modem industries and 30 per cent of India's industrial labour is concentrated in Maharashtra-Gujarat region alone.
Cotton textile industry requires humid climate because thread breaks in dry climate. Consequently, majority of cotton textile mills are concentrated in Maharashtra and Gujarat. Artificial humidifiers are used in dry areas these days, but it increases the cost of production.

II. Non-Geographical Factors:
Now-a-days alternative raw materials are also being used because of modern scientific and technological developments. Availability of electric power supply over wider areas and the increasing mobility of labour have reduced the influence of geographical factors on the location of industries.
The non-geographical factors are those including economic, political, historical and social factors. These factors influence our modern industries to a great extent. Following are some of the important non- geographical factors influencing the location of industries.

1. Capital:
Modem industries are capital-intensive and require huge investments. Capitalists are available in urban centres. Big cities like Mumbai, Kolkata, Delhi, and Chennai are big industrial centres, because the big capitalists live in these cities.

2. Government Policies:
Government activity in planning the future distribution of industries, for reducing regional disparities, elimination of pollution of air and water and for avoiding their heavy clustering in big cities, has become no less an important locational factor.
There is an increasing trend to set up all types of industries in an area, where they derive common advantage of water and power and supply to each other the products they turn out. The latest example in our country is the establishment of a large number of industrial estates all over India even in the small-scale industrial sector.
It is of relevance to examine the influence of India's Five Year plans on industrial location in the country. The emergence of suitable industries in south India around new nuclei of public sector plants and their dispersal to backward potential areas has taken place due to Government policies.
The state policy of industrial location has a greater hand in the establishment of a number of fertiliser factories, iron and steel plants, engineering works and machine tool factories including railway, shipping, aircraft and defence installations and oil refineries in various parts in the new planning era in free India.
We may conclude by noting that the traditional explanation of a location of industry at a geographically favourable point is no longer true. Location of oil refinery at Mathura, coach factory at Kapurthala and fertiliser plant at Jagdishpur are some of the results of government policies.

3. Industrial Inertia:
Industries tend to develop at the place of their original establishment, though the original cause may have disappeared. This phenomenon is referred to as inertia, sometimes as geographical inertia and sometimes industrial inertia. The lock industry at Aligarh is such an example.

4. Efficient Organisation:
Efficient and enterprising organisation and management is essential for running modem industry successfully. Bad management sometimes squanders away the capital and puts the industry in financial trouble leading to industrial ruin.
Bad management does not handle the labour force efficiently and tactfully, resulting in labour unrest. It is detrimental to the interest of the industry. Strikes and lock-outs lead to the closure of industries. Hence, there is an imperative need of effective management and organisation to run the industries.

5. Banking Facilities:
Establishment of industries involves daily exchange of crores of rupees which is possible through banking facilities only. So the areas with better banking facilities are better suited to the establishment of industries.

6. ***Insurance:***
There is a constant fear of damage to machine and man in industries for which insurance facilities are badly needed.

Scale of production- large vs Small Industrial Units

If a firm carries on production with large or more plants, it is known as large scale production. On the contrary, if the production is small and the size of plants smaller, it is called small scale production. The scale of production may have certain advantages and disadvantages. The economies of scale may be divided into two parts— Internal economies and external economies.

Internal economies:

These are economies available to a firm or a factory and which are not dependent upon the actions or activities of other firms. They depend upon the scale of operation of a firm. There are two main causes for internal economies: Indivisibilities and Specialization.

There are some factors of production which cannot be divided into parts. Machines, management, research are examples of indivisibilities. Some factors like labour and machines can get specialized when production is done on a large scale.

Internal economies may be divided into five parts:

(i) Technical economies:

In large scale production, huge and modern machines are used. The machines have less operational costs and more production. Thus, production is increased with a little increase in costs. Labor can get specialized and result is increased efficiency and production.

(ii) Managerial economies:

Managerial specialization is also possible when the scale of production is large. In increased production, the managerial costs are distributed over a wide range. Services of most efficient managers can be hired if they are suitably paid. Large scale production makes it possible.

(iii) Marketing economies:

These are concerned with the buying of raw materials and selling of finished products. Heavy purchases of raw materials may cause a concession in cost of their supply and make it possible to have better quality. There may be economy in transportation costs. Similarly, large firms enjoy some facilities in selling their goods. They can have their own arrangement of transportation, advertisement and sales promotion.

(iv) Financial economies:

Large firms have a market reputation due to their assets and properties and volume of production. Their goodwill helps them exercise influence on financial institutions in obtaining funds in desired volumes at a reasonable rate of interest. They do generally face financial difficulties.

(v) Risk-bearing economies:

Risks in large firms are dispersed over different activities and volume of production. Diversification of production may lessen risks.

External economies:

These are economies available to all the firms in an industry when the scale of production goes up in that industry or a group of industries. These economies are available of localization of an industry at a particular place. These economies include economies due to centralization and invention and research.

Internal economies, therefore, depend upon the size of the firm whereas external economies depend upon the size of the industry. For the economies, they are all internal economies.

Limits to Scale of Production:

The size of a firm cannot be increased to an unlimited extent.

There are limits to growth on account of the following factors:

1. With large size, difficulties in management of the firm may arise. A large firm gets unmanageable.
2. There are some activities which are difficult to be undertaken on a large scale. It depends on the nature of the activity.
3. Sometimes technical facilities are not available in desired amounts limiting the growth of the enterprise.
4. Factors of production may not be available in desired amounts.
5. Capital may not be available in sufficient quantities and at reasonable rates.
6. Demand for the commodity produced by a firm can also limit its size.

UNIT III
INTRODUCTION TO MANAGEMENT

Management and its Nature

Management: Definitions, Concept, Objectives and Scope!

The term 'management' has been used in different senses. Sometimes it refers to the process of planning, organizing, staffing, directing, coordinating and controlling, at other times it is used to describe it as a function of managing people. It is also referred to as a body of knowledge, a practice and discipline. There are some who describe management as a technique of leadership and decision-making while some others have analyzed management as an economic resource, a factor of production or a system of authority.

Definitions:

Various definitions of management are discussed as follows:

(A) Art of Getting Things Done:

Mary Parker Follett:

"Management is the art of getting things done through others." Follett describes management as an art of directing the activities of other persons for reaching enterprise goals. It also suggests that a manager carries only a directing function.

Harold Koontz:

"Management is the art of getting things done through and with people in formally organized groups." Koontz has emphasized that management is getting the work done with the co-operation of people working in the organization.

J.D. Mooney and A.C. Railey:

"Management is the art of directing and inspiring people." Management not only directs but motivates people in the organization for getting their best for obtaining objectives.

As per the above mentioned definitions, management is the art of getting things done through people who may be managers or non-managers. At the level of chief executive, the work is got done through functional managers, at middle level the things are implemented through supervisors and at lower level of management through workers. Human and technical skills play an important role for getting things done. These definitions represent the traditional view point of management while workers are treated as a factor of production only. They are paid wages for doing their work.

This view point suffers from the following deficiencies:
(i) This concept does not specify what type of functions is required to be performed for getting things done from others.

(ii) Management is treated as an art. These days management has also acquired the status of science.

(iii) The workers are treated as means of getting results. The needs and aspirations of workers are not taken into account.

Management is much more than just getting the things done through others. Management may be a technique for getting things done through others by satisfying their needs and helping them grow. Harold Koontz emphasized the attainment of business goals with the co-operation of people working in the organization.

(B) Management as a Process:
Some authors view management as a process because it involves a number of functions. Management refers to all Involves different a manager does. Various functions which are performed by managers to make the efficient use of the available material and human resources so as to achieve the desired objectives are summed up as management. Thus, the functions of planning, organizing, staffing, directing, co-coordinating and controlling fall under the process of management.

Henry Fayol:
"To manage is to forecast and plan, to organize, to command, to co-ordinate, and to control." Fayol described management as a process of five functions such as planning, organizing, commanding, coordinating and controlling. Modern authors, however, do not view co-ordination as a separate function of management.

George R. Terry:
"Management is a distinct process consisting of activities of planning, organizing, actuating and controlling, performed to determine and accomplish stated objectives with the use of human beings and other resources." Though Terry has described four functions to be a part of management process but managerial functions are classified into five categories.

James L. Lundy:
"Management is principally the task of planning, coordinating, motivating and controlling the efforts of others towards a specific objective." Lundy has also specified some functions which management has to perform for achieving organizational goals.

Louis Allen:
"Management is what a manager does." This is a broad definition linking all the activities of the manager to the concept of management. Whatever work is undertaken

by a manager forms a part of management. Above definitions associate management with the functions undertaken for running a business. There may be a difference as to what functions are required to be taken up by the management but functions such as planning, organizing, staffing, directing and controlling form the process of management.

These functions are continuously taken up. On the completion of last function, the first function starts again. The functions of management are interdependent and interlinked. In order to achieve the objectives, a manager has to perform various functions simultaneously.

(C) Management as a Discipline:

Sometimes the term 'management' is used to connote neither the activity nor the personnel who performs it, but as a body of knowledge, a practice and a discipline. In this sense, management refers to the principles and practices of management as a subject of study. Management is taught as a specialized branch of knowledge in educational institutions. It has drawn heavily from Psychology, Sociology, and Anthropology etc. A person acquiring degree or diploma in management can try for a managerial job.

Management is treated both as an art as well as science. An art is often regarded as the systematic application of skill or knowledge in effecting accomplishment of results. In management one has to use personal skill and knowledge in solving many complicated problems to achieve enterprise objectives. Management is regarded as a science because it has developed certain principles, generalizations and techniques which have more or less universal application. So management is a study of a specific discipline. When one says that a particular person is in management stream then it is assumed that he is studying a particular field of learning.

(D) Art and Science of Decision-Making and Leadership:

Decision-making and guiding others is considered an important element of management. A manager has to take various decisions every day for properly running an enterprise.

Donald J. Clough:

"Management is the art and science of decision-making and leadership." The author views management as an art and science of decision-making. The quality of decisions determines the performance of a manager. He has also to provide leadership to subordinates for motivating them to undertake their work.

Rose Moore:

"Management means decision-making." Decision-making cannot be the only function of management even though it is very important.

Stanley Vance:
"Management is simply the process of decision-making and control over the action of human beings for the express purpose of attaining predetermined goals." Stanley Vance has emphasized decision-making and control over the actions of employees for reaching the enterprise goals.

Association of Mechanical Engineers, U.S.A.: "Management is the art and science of preparing, organizing and directing human efforts applied to control the forces and utilize the materials of nature for the benefit of man." The association has given a wide definition where it has emphasized that management controls and directs human efforts for utilizing natural resources for the benefit of man. The above mentioned definitions describe management as a science and art of decision making and controlling the activities of employees for obtaining enterprise objectives.

(E) An Art of Increasing Productivity:
Some authors are of the view that the science of management is used to increase productivity of the enterprise.

John F. Mee:
"Management may be defined as the art of securing maximum prosperity with a minimum of effort so as to secure maximum prosperity and happiness for both employees and employer and give public the best possible service."

F.W. Taylor:
"Management is the art of knowing what you want to do in the best and cheapest way."

Management is the art of securing maximum productivity at the minimum of cost so that it helps employers, employees and public in general. Public is also a stake holder in business, it should also benefit from good performance of business.

(F) Integration of Efforts:
Management makes use of human and physical resources for the benefit of the enterprise.

Keith and Gubellini:
"Management is the force that factors integrates men and physical plant into an effective operating unit." Management integrates physical and human resources for operating the manufacturing process in a better way.

Barry M. Richman:
"Management entails the coordination of human and material resources towards the achievement of organizational objectives as well as the organization of the productive functions essential for achieving stated or accepted economic goals." Management alms to co-ordinate and integrate various resources in the organization for achieving

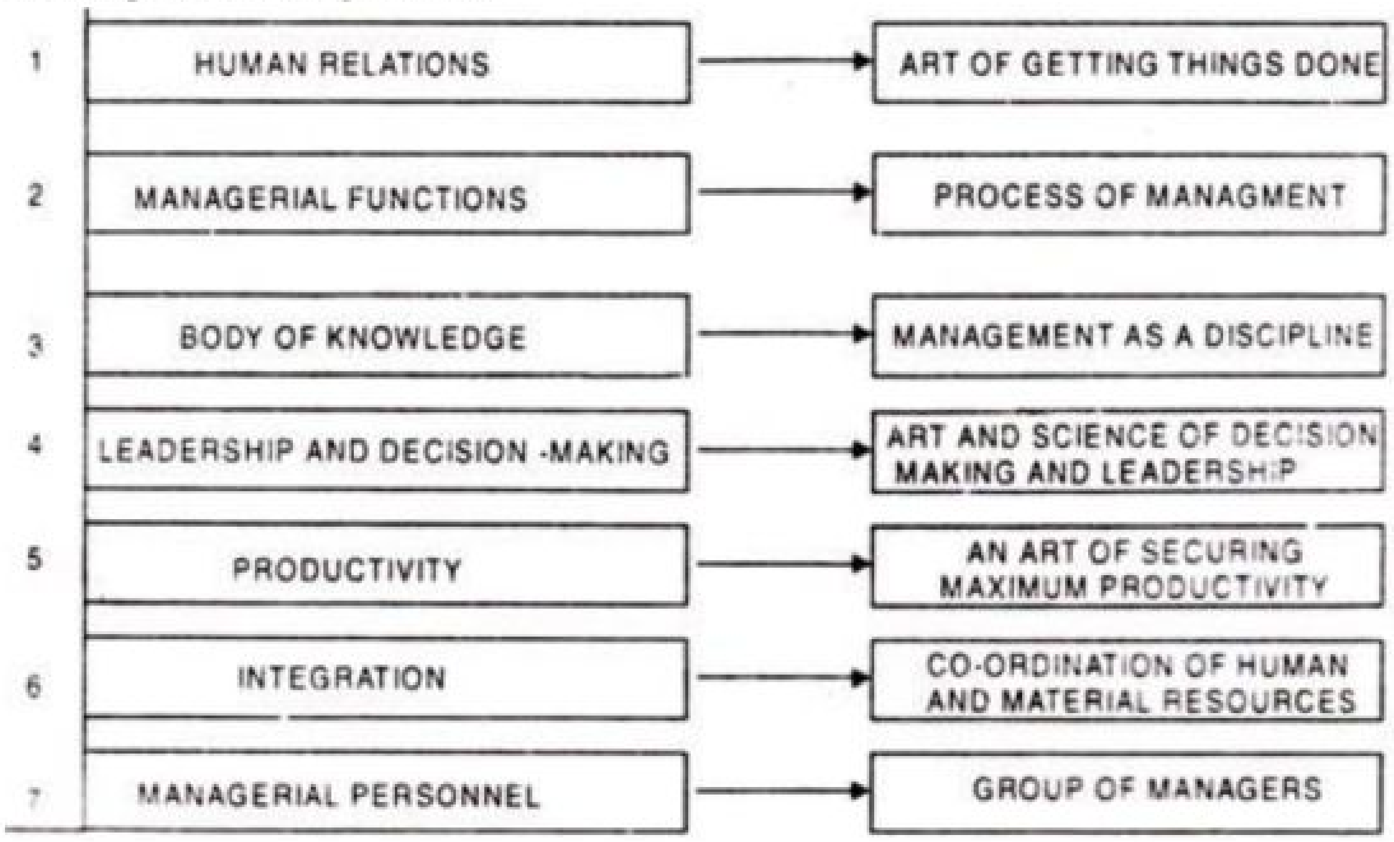
enterprise objectives. The thrust of above mentioned definitions is that integration and co-ordination of various factors of production is essential for running a business properly and this function is undertaken by management.

(G) Management as a Group of Managers:

The term management is frequently used to denote a Refers to managerial group of managerial personnel. When one says that personnel management of such and such company is efficient, he refers to the group of persons who are looking after the working of the enterprise. These persons individually are called managers. "Management is the body or group of people which performs certain managerial functions for the accomplishment of pre-determined goals."

All managers perform managerial functions of planning, organizing, staffing, directing and controlling. These persons collectively arc called 'body of managerial personnel.' In actual practice the term 'management' is used to denote top management of the organization. Top management is mainly concerned with determination of objectives, strategic planning, policy formulation and overall control of the organization.

Concept of Management:



Objectives of Management:

The primary objective of management is to run the enterprise smoothly. The profit earning objective of a business is also to be kept in mind while undertaking various functions.

Following are the broad objectives of management:

1. Proper Utilization of Resources:

The main objective of management is to use various resources of the enterprise in a most economic way. The proper use of men, materials, machines and money will help a business to earn sufficient profits to satisfy various interests. The proprietors will want more returns on their investments while employees, customers and public will expect a fair deal from the management. All these interests will be satisfied only when physical resources of the business are properly utilized.

2. Improving Performance:

Management should aim at improving the performance of each and every factor of production. The environment should be so congenial that workers are able to give their maximum to the enterprise. The fixing of objectives of various factors of production will help them in improving their performance.

3. Mobilizing Best Talent:

The management should try to employ persons in various fields so that better results are possible. The employment of specialists in various fields will be increasing the efficiency of various factors of production. There should be a proper environment which should encourage good persons to join the enterprise. The better pay scales, proper amenities, future growth potentialities will attract more people in joining a concern.

4. Planning for Future:

Another important objective of management is to prepare plans. No management should feel satisfied with today's work if it has not thought of tomorrow. Future plans should take into consideration what is to be done next. Future performance will depend upon present planning. So, planning for future is essential to help the concern.

Scope or Branches of Management:

Management is an all pervasive function since it is required in all types of organized endeavour. Thus, its scope is very large.

The following activities are covered under the scope of management:

(i) Planning,
(ii) Organization
(iii) Staffing.
(iv) Directing,
(v) Coordinating, and
(vi) Controlling.

The operational aspects of business management, called the branches of management, are as follows:

1. Production Management
2. Marketing Management
3. Financial Management.
4. Personnel Management and
5. Office Management.

1. Production Management:

Production means creation of utilities. This creation of utilities takes place when raw materials are converted into finished products. Production management, then, is that branch of management 'which by scientific planning and regulation sets into motion that part of enterprise to which has been entrusted the task of actual translation of raw material into finished product.'

It is a very important field of management ,'for every production activity which has not been hammered on the anvil of effective planning and regulation will not reach the goal, it will not meet the customers and ultimately will force a business enterprise to close its doors of activities which will give birth to so many social evils'.

Plant location and layout, production policy, type of production, plant facilities, material handling, production planning and control, repair and maintenance, research and development, simplification and standardization, quality control and value analysis, etc., are the main problems involved in production management.

2. Marketing Management:

Marketing is a sum total of physical activities which are involved in the transfer of goods and services and which provide for their physical distribution. Marketing management refers to the planning, organizing, directing and controlling the activities of the persons working in the market division of a business enterprise with the aim of achieving the organization objectives.

It can be regarded as a process of identifying and assessing the consumer needs with a view to first converting them into products or services and then involving the same to the final consumer or user so as to satisfy their wants with a stress on profitability that ensures the optimum use of the resources available to the enterprise. Market analysis, marketing policy, brand name, pricing, channels of distribution, sales promotion, sale-mix, after sales service, market research, etc. are the problems of marketing management.

3. Financial Management:

Finance is viewed as one of the most important factors in every enterprise. Financial management is concerned with the managerial activities pertaining to the procurement and utilization of funds or finance for business purposes.

The main functions of financial management include:

(i) Estimation of capital requirements;
(ii) Ensuring a fair return to investors;
(iii) Determining the suitable sources of funds;
(iv) Laying down the optimum and suitable capital

Structure for the enterprise:
(i) Co-coordinating the operations of various departments;
(ii) Preparation, analysis and interpretation of financial statements;
(iii) Laying down a proper dividend policy; and
(iv) Negotiating for outside financing.

4. Personnel Management:
Personnel Management is that phase of management which deals with the effective control and use of manpower. Effective management of human resources is one of the most crucial factors associated with the success of an enterprise. Personnel management is concerned with managerial and operative functions.

Managerial functions of personnel management include:
(i) Personnel planning;
(ii) Organizing by setting up the structure of relationship among jobs, personnel and physical factors to contribute towards organization goals;
(iii) Directing the employees; and
(iv) Controlling.

The operating functions of personnel management are:
(i) Procurement of right kind and number of persons;
(ii) Training and development of employees;
(iii) Determination of adequate and equitable compensation of employees;
(iv) Integration of the interests of the personnel with that of the enterprise; and
(v) Providing good working conditions and welfare services to the employees.

5. Office Management:
The concept of management when applied to office is called 'office management'. Office management is the technique of planning, coordinating and controlling office activities with a view to achieve common business objectives. One of the functions of management is to organize the office work in such a way that it helps the management in attaining its goals. It works as a service department for other departments.

The success of a business depends upon the efficiency of its administration. The efficiency of the administration depends upon the information supplied to it by the office. The volume of paper work in office has increased manifold in these days due to industrial revolution, population explosion, increased interference by government and complexities of taxation and other laws.

Harry H. Wylie defines office management as "the manipulation and control of men, methods, machines and material to achieve the best possible results—results of the highest possible quality with the expenditure of least possible effect and expense, in the shortest practicable time, and in a manner acceptable to the top management."

Purpose, Process & Functions of management- Planning, Organising, Actuating and controlling

Nature of Management Process:

Management is a process which brings the scarce human and material resources together and motivates people for the achievement of objectives of the organization. Management is not a onetime act but an on-going series of interrelated activities. The sum total of these activities is known as management process. It consists of a set of interrelated operations or functions necessary to achieve desired organizational goals. A process is a systematic way of doing things. It is concerned with conversion of inputs into outputs. An analysis of management process will enable us to know the functions which managers perform.

Features of Management Process:

Management process is characterized by the following features:

1. Social Process:

The entire management process is regarded as a social process as the success of all organizational efforts depends upon the willing co-operation of people. Managers guide, direct, influence and control the actions of others to achieve stated goals. Even people outside the organization are influenced by the actions of managers.

2. Continuous Process:

The process of management is on-going and continuous. Managers continuously take up one or the other function. Management cycle is repeated over and over again, each managerial function is viewed as a sub-process of total management process.

3. Universal:

Management functions are universal in the sense that a manager has to perform them irrespective of the size and nature of the organization. Each manager performs the same functions regardless of his rank or position in the organization. Even in a non-business organization managerial functions are the same.

4. Iterative:

Managerial functions are contained within each other the performance of the next function does not start only when the earlier function is finished. Various functions are taken together. For example, planning, organizing, directing and controlling may occur within staffing function. Similarly, organizing may require planning, directing and controlling. So all functions can be thought of as sub-functions of each other.

5. Composite:

All managerial functions are composite and integrated. There cannot be any sequence which can be strictly followed for performing various functions. The sequential concept may be true in a newly started business where functions may follow a particular sequence but the same will not apply to a going concern. Any function may be taken up first or many functions may be taken up at the same time.

Classification of Management Functions:

Different authors have given different managerial functions. Henry Fayol was the first to define specific functions of management. In his words, "To manage is to forecast and plan, to organize, to command, to co-ordinate and to control."

He has given the following functions:

(i) Forecasting and planning
(ii) Organizing
(iii) Commanding
(iv) Co-ordination
(v) Control

Luther Gulick used the word POSDCORB to describe various functions.

This initial describes the following functions: Planning (P). Organizing (O), Staffing (S), Directing (D), Controlling (CO), Reporting (R) and Budgeting (B).

Ralph Davis gave three functions of management: Planning, Organizing and Control. He was of the view that command and co-ordination facilitate control so these should be part of it.

Koontz and O' Donnell have adopted the following functions:

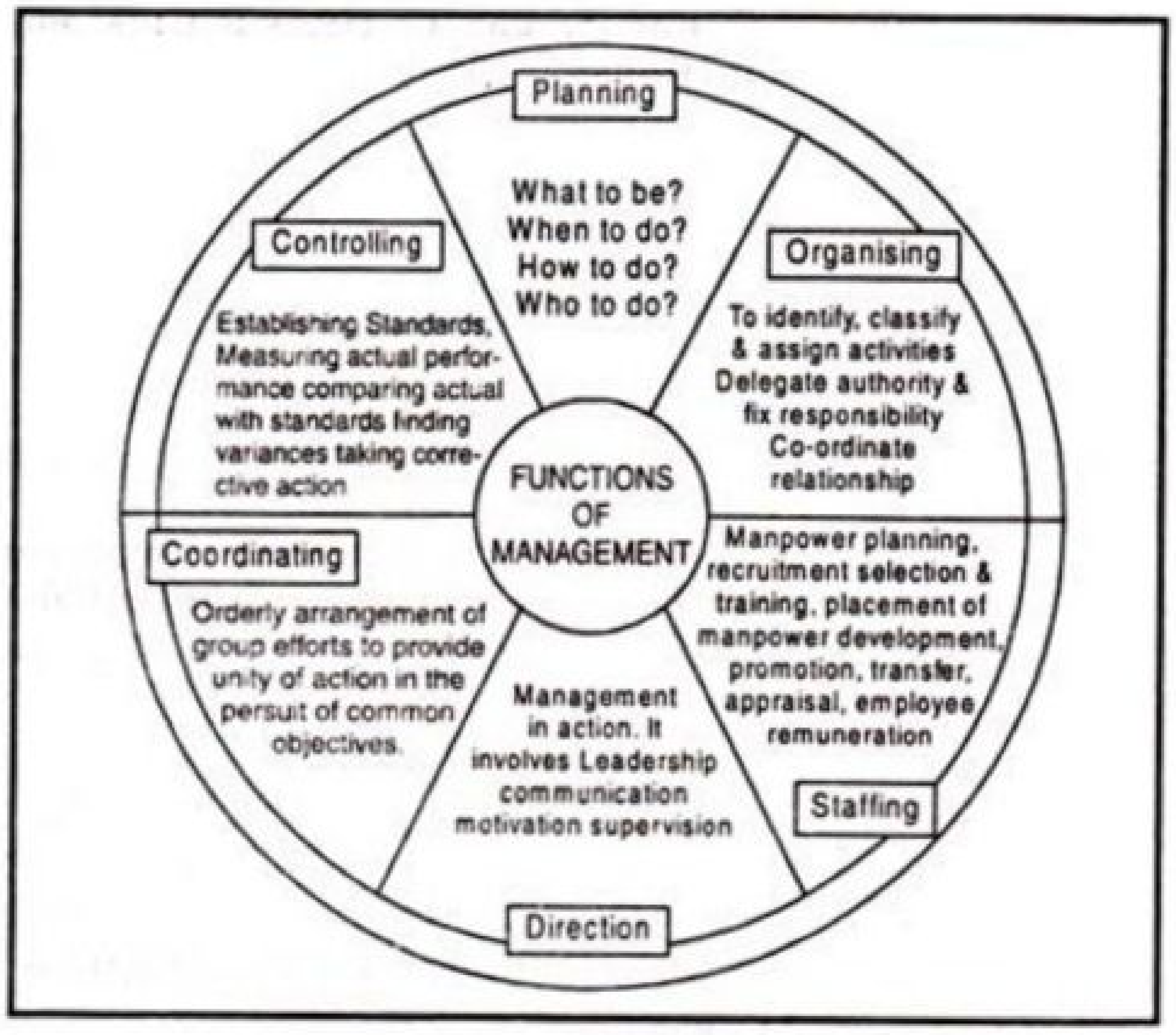
(i) Planning
(ii) Organizing
(iii) Staffing
(iv) Directing and
(v) Controlling.

Earnest Dale has included innovation and representation to the earlier mentioned functions. G.R. Terry classified managerial functions under four heads Planning, Organising, Actuating and Controlling. It can be seen that there is no agreement about specific functions to be performed by the management.

However, the following comprehensive classification can be given of various managerial functions:

1. Planning
2. Organizing

3. Staffing
4. Directing
(a) Leadership (c) Motivation
5. Coordinating
Brief outlines of these functions are given below:



1. Planning:

Planning is a basic managerial function. Planning helps in determining the course of action to be followed for achieving various organizational objectives. It is a decision in advance, what to do when to do, how to do and who will do a particular task. Planning is a process which involves thinking before doing'. Planning is concerned with the mental state of a manager. He thinks before undertaking a work. Other functions of management such as organizing, staffing, directing, coordinating and controlling are also undertaken after planning.

Hart defines planning as "the determination in advance of a line of action by which certain results are to be achieved." According to Terry, "Planning is the selecting and relating of facts and the making and using of assumptions regarding the future in the visualization and formulations of proposed activities believed necessary to achieve desired results."

Planning is a process of looking ahead. The primary object of planning is to achieve better results. It involves the selection of organizational objectives and developing policies, procedure, programmes, budgets and strategies. Planning is a continuous process that takes place at all levels of management. A detailed planning is done in the beginning but the actual performance is reviewed and suitable changes are made in plans when actual execution is done. Plans may be of many kinds, such as short range plans, medium range plans, long range plans, standing plans, single use plans, strategic plans, administrative plans and operational plans.

The process of Planning involves a number of steps:

(i) Gathering information;
(ii) Laying down objectives;
(iii) Developing planning premises;
(iv] Examining alternative courses of action;
(v) Evaluation of action patterns;
(vi) Reviewing limitations
(vii) Implementation of plans.

2. Organizing:

Every business enterprise needs the services of a number of persons to look after its different aspects. The management way sets up the objectives or goals to be achieved by its personnel. The energy of every individual is channelized to achieve the enterprise objectives.

The function of organizing is to arrange, guide, co-ordinate, direct and control the activities of other factors of production, viz., men, material, money and machines so as to accomplish the objectives of the enterprise. In the words of Koontz and O 'Donnel, "Organizing is that part of managing that involves establishing and intentional structure of roles for people in an enterprise to fill." Organization provides the necessary framework within which people associate for the attainment of business objectives.

Louis A. Allen describes organization as, "the process of identifying and grouping work to be performed, defining and delegating responsibility and authority and establishing relationships for the purpose of enabling people to work most effectively together in accomplishing objectives."

The process of organization involves the following steps:

(i) To identifying the work to be performed;
(ii) To classify or group the work;
(iii) To assign these groups of activities or work to individuals;
(iv) To delegate authority and fix responsibility; and
(v) To co-ordinate these authority-responsibility relationships of various activities.

The character and type of organization depends upon the size and nature of the enterprise.

Though there are many types of organizations but generally three types of organizations are in vogue:

(i) Line organization
(ii) Functional organization; and
(iii) Line and staff organization
In line organization authority flows vertically from the top of the hierarchy to the bottom. Under functional organization, the work is divided into different departments. Each department deals in one type of work and it specializes in one work only. A workman has to work under many superiors who specialize in different functions.

Line and staff organization provides for specialists with line executives. It is a combination of line and functional form of organization. A sound organization contributes greatly to the continuity and success of the enterprise. However, an organization is not an end in itself. The organization structure should be flexible.

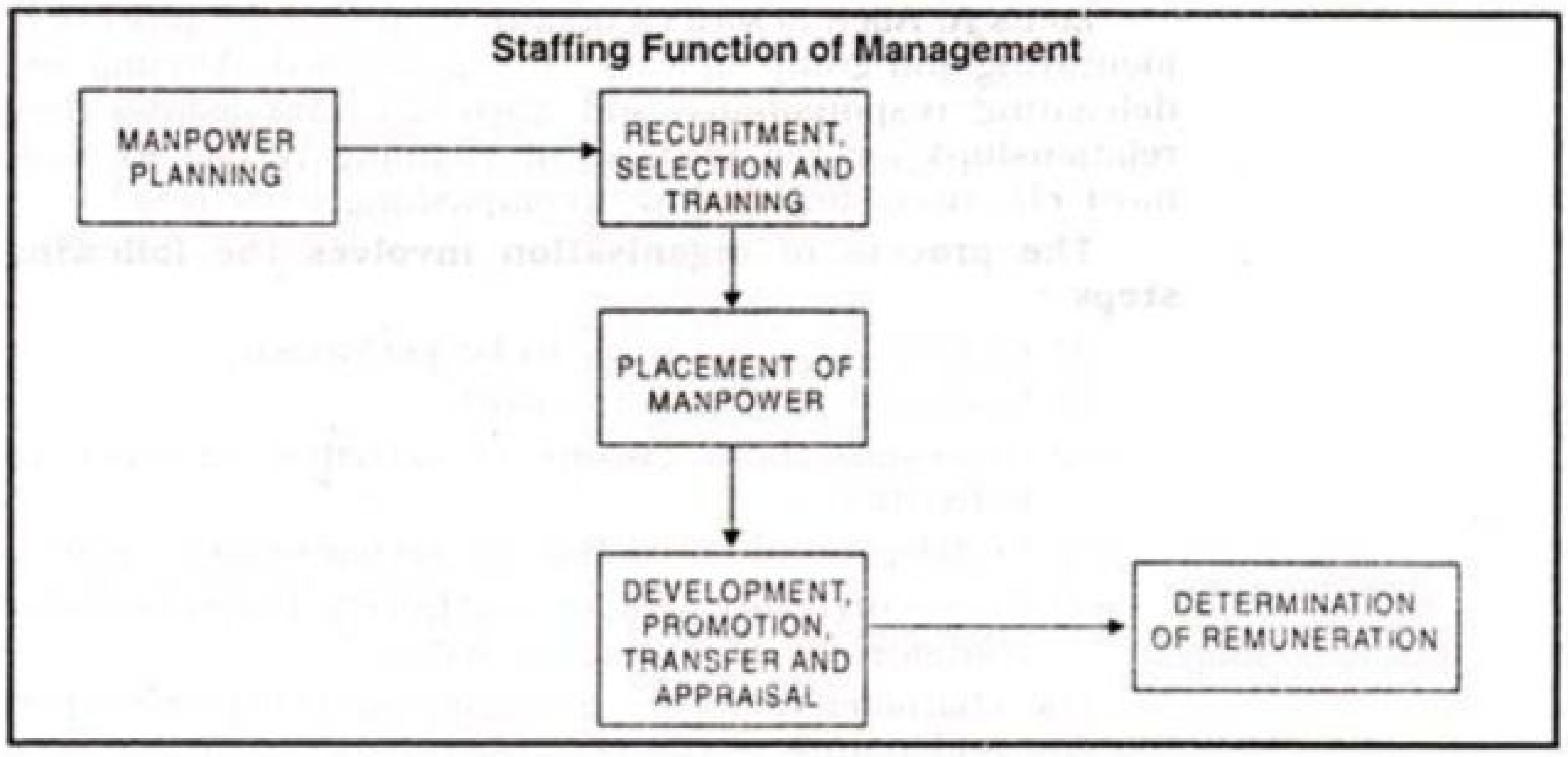
3. Staffing:

The function involves manning the positions created by Concerned with human organization process. It is concerned with human resources of resource planning an organization. In the words of Koontz and O 'Donnel, "staffing is filling, and keeping filled, positions in the organization structure through defining work-force requirements, appraising, selecting, compensating and training."

Thus, staffing consists of the following:

(i) Manpower planning, i.e., assessing manpower requirements in terms of quantity and quality.
(ii) Recruitment, selection and training;
(iii) Placement of man power;
(iv) Development, promotion, transfer and appraisal;
(v) Determination of employee remuneration.

Every manager in an organization has to perform the staffing function in one form or the other, in order to get things done through others. But it is decidedly a difficult managerial function as it concerns human beings whose behaviour and actions cannot be predicted, and that is why it has become a distinct and specialized branch of management.



4. Directing:

Directing is concerned with carrying out the desired through people plans. It initiates organized and planned action and ensures effective performance by subordinates towards the accomplishment of group activities. Direction is called management in action. In the words of George R. Terry, "Direction is moving to action and supplying simulative power to the group."

After planning, organizing and staffing, the manager has to guide and supervise his subordinates. According to Massie, "Directing concerns the total manner in which a manager influences the actions of subordinates. It is the final action of a manager in getting others to act after all preparations have been completed." Directing is a continuous function and is performed at all levels of management.

The main activities involved in direction are as follows:

(a) Leadership
(b) Communication
(c) Motivation; and
(d) Supervision.

(a) Leadership:

A manager has to issue orders and instructions and guide and counsel his subordinates in their work with a view to improve their performance and achieve enterprise objectives. Leadership is 'the process by which an executive or manager imaginatively directs/guides and influences the work of others in choosing and attaining specified goals by mediating between the individual and organization in such a manner that both will get maximum satisfaction'.

Leadership is the ability to build up confidence and zeal among people and to create an urge in them, to be led. To be a successful leader, a manager must possess the qualities of foresight, drive, initiative, self-confidence and personal integrity. Different situations may demand different types of leadership, viz., autocratic leadership, democratic leadership and free rein leadership.

(b) Communication:

Communication constitutes a very important function of management. It is said to be the number one problem of management, today. It is an established fact that managers spend 75 to 90 per cent of their working time in communicating with others. Communication is the means by which the behaviour of the subordinate is modified and change is effected in their actions.

The word 'communication' has been derived from the Latin word 'communis' which means 'common'. Thus, communication means sharing of ideas in common. The essence of communication is getting the receiver and the sender tuned together for a particular message. It refers to the exchange of ideas, feelings, emotions and knowledge and information between two or more persons. Nothing happens in management till communication takes place.

Communication is a two-way process as it involves both information and understanding. It may be written, oral, and gestural. Communication is said to be formal when it follows the formal channels provided in the organization structure. It is informal communication, when it does not follow the formal channels. Communication flows downward from a superior to subordinates and upward from subordinates to a superior. It also flows between two or more persons operating at the same level of authority.

Communication is essential at all levels of management for decision- making and planning. It increases managerial capacity and facilitates control. It has been rightly said that good managers are good communicators and poor managers are poor communicators.

(c) Motivation:

The term motivation is derived from the word 'motive' which means a need, or an emotion that prompts an individual into action. Motivation is the psychological process of creating urge among the subordinates to do certain things or behave in the desired manner. It is a very important function of management. The importance of motivation can be realized from the fact that performance of a worker depends upon his ability and the motivation.

There are many strategies adopted by managers for increasing the motivation of subordinates. According to Michel Jucius, "Motivation means the act of stimulating someone or oneself to get a desired course of action to push the right button to get a desired reaction, a compliment, dollar raise, a smile, a promise of a rise, a new typewriter, a preferred location or a new desk." Thus, a manager has to provide some personal incentive to the subordinates to motivate, persuade and inspire them for contributing their best towards the achievement of enterprise objectives.

The incentives to be proved may be financial, such as increase in wages, or non-financial, like better working conditions, job security, recognition, etc. A sound motivational system must be productive, competitive, comprehensive and flexible, and it must consider the psychological, social, safety, ego and economic needs of the workers.

(d) Supervision:
Supervision is another important element of directing function of management. After issuing instructions, the manager or the supervisor has to see that the given instructions are carried out. This is the aim of supervision. Supervision refers to the job of overseeing subordinates at work to ensure maximum utilization of resources, to get the required and directed work done and to correct the subordinates whenever they go wrong. Though supervision is performed at all levels of management, the major responsibility for supervision lies with the first line of management. Sound organizational set up, effective delegation, human approach, effective communication and management by exception make supervision effective.

5. Co-ordination:
Co-ordination is one of the most important functions of management. It is essential to channelize the activities of various individuals in the organization for the achievement of common goals. Every department or section is given a target to be achieved and they should concentrate only on their work and should not bother about the work of other organs.

It is left to the management to see that the work of different segments is going according to pre-determined targets and corrective measures have to be taken if there is any deviation. Co-ordination creates a team spirit and helps in achieving goals through collective efforts. It is the orderly arrangement of group effort to provide unity of action in the pursuit of common objectives. Dalton McFarland defines co-ordination as the "process whereby an executive develops an orderly pattern of group effort among his subordinates and secures unity of action in the pursuit of common purposes."

Co-ordination can be classified under two categories:
(i) Vertical and horizontal co-ordination, and
(ii) Internal and external co-ordination.
Whereas vertical co-ordination is the co-ordination between different levels of management, the term horizontal co-ordination is used when co-ordination has to be achieved between departments of the same level of authority. Co-ordination is internal when it is between different sections of the same concern and external when it is required with persons outside the organization.

Co-ordination is regarded as the very essence of management as in order to co-ordinate the activities of his subordinates, a manager has to perform all the other functions of management, viz., planning, organizing, staffing, directing and controlling. It must also be noted by the readers that co-ordination and co-operation do not mean the same thing.

6. Co-ordination and Co-operation:

Co-ordination is much wider term than co-operation. Co-operation indicates the willingness of individuals to help each other. It is an attitude of a group of people and is largely the result of voluntary action. Co-ordination, on the other hand, is a conscious managerial effort which is the result of a deliberate action. Co-operation is essential for the achievement of co-ordination but it is not a substitute for co-ordination. However, both co-operation and co-ordination are essential in management.

7. Controlling:

Controlling can be defined as "determining what is being accomplished, that is evaluating the performance, if necessary, applying corrective measures so that the performance takes place according to plans." Control is essential for achieving objectives of an enterprise. The planning of various activities does not ensure automatic implementation of policies. Control is the process which enables management to get its policies implemented and take corrective actions if performance is not according to the pre-determined standards.

If planning is the beginning of the management process, controlling may be said to be the final stage. If planning is looking ahead, controlling is looking back. Control is not possible without planning and planning is meaningless without control. Control is a line function and executives at various levels of management continuously assess the performance of their subordinates. The main purpose of control is to see that the activity is achieving the desired results. A control system, to be effective, must conform to the nature of activity, report deviations promptly, reflect organization structure, assure corrective action and be economical.

The process of controlling involves the following steps:

(i) Establishing standards of performance;
(ii) Measuring actual performance;
(iii) Comparing the actual performance with the standard;
(iv) Finding variances or deviations, if any; and
(v) Taking corrective action or measures.

Skills and Role of Manager

Functions of Managers at Different Levels:

There is no basic distinction between managers, executives, administrators, and supervisors. To be sure, a given situation may differ considerably among various levels in an organization or various types of enterprises. Similarly, the scope of authority held may vary and the types of problems dealt with may be considerable different.

Furthermore, the person in a managerial role may be directing people in the sales, engineering, or finance department. But the fact remains that, as managers, all obtain results by the establishing environment for effective group endeavour.

All manager carry out managerial functions. However, the time spent for each function may differ. Fig. 27.2 shows an approximation of the relative time spent for each function.

Thus, top-level managers spend more time on planning and organizing than do lower-level managers. Leading, on the other hand, takes a great deal of time for first-line supervisors. The difference in the amount of time spent on controlling various functions only slightly for managers at various levels.

Skills of Managers in the Organizational Hierarchy:

Following are the managerial skills:

(i) Technical Skill:

It is knowledge of and proficiency in activities involving methods, processes, and procedures. Thus, it involves working with tools and specific techniques. For examples, mechanics work with tools, and their supervisor should have the ability to teach them how to use these tools. Similarly, accountants apply specific techniques in doing their job.

(ii) Human Skill:

It is the ability to work with people; it is cooperative efforts; it is teamwork; it is the creation of an environment in which people feel secure and free express their opinions.

(iii) Conceptual Skill:

It is the ability to see the 'big picture' to recognize significant elements in a situation, and to understand the relationships among the elements.

(iv) Design Skill:

It is the ability to solve problems in ways that will benefit the enterprise. To be effective, particularly at upper organizational levels, managers must be able to do more than see a problem. They must have, in addition, the skill of a good design engineer in working out a practical solution to a problem.

If managers merely see the problem and become 'problem watchers,' They will fail. Managers must also have that valuable skill of being able to design a workable solution to the problem in the light of the realities they face.

The relative importance of these skills may differ at various levels in the organization hierarchy. As shown in Fig. 27.3 technical skills are of greatest importance at the supervisory level. Human skills are also helpful in the frequent interactions with subordinates. Conceptual skills, on the other hand, are usually not critical for lower-level supervisors.

At the middle management level, the need for technical skills decreases human skill is still essential; the conceptual skills gain in importance.

At the top management level, conceptual and design abilities and human skills are especially valuable, but there is relatively little need for technical abilities. It is assumed, especially in large companies, that chief executives can utilize the technical abilities of their subordinates. In smaller firms, however, technical experience may still be quite important.

Role of a Manager:

Non-business executive sometimes say that the aim of business managers is simple-to make a profit. But profit is really only a measure of a surplus of sales rupees over expense rupees. In a very real sense, in all kinds of organizations, whether business or non-business, the logical and publicly desirable aim of all managers should be a surplus.

Thus, managers must establish an environment in which people can accomplish group goals with the least amount of time, money, materials, and personal dissatisfaction or in which they can achieve as much as possible of a desired goal with available resources.

In a non-business enterprise such as a police department, as well as in units of a business (such as an accounting department) that are not responsible for total business profits, managers still have goals and should strive to accomplish them with the minimum of resource or to accomplish as much as possible with available resources.

Interpersonal Roles:

(1) The figure head role (performing ceremonial and social duties as the organisation's representative

(2) The leader role and

(3) The liaison role (communicating particularly with outsiders).

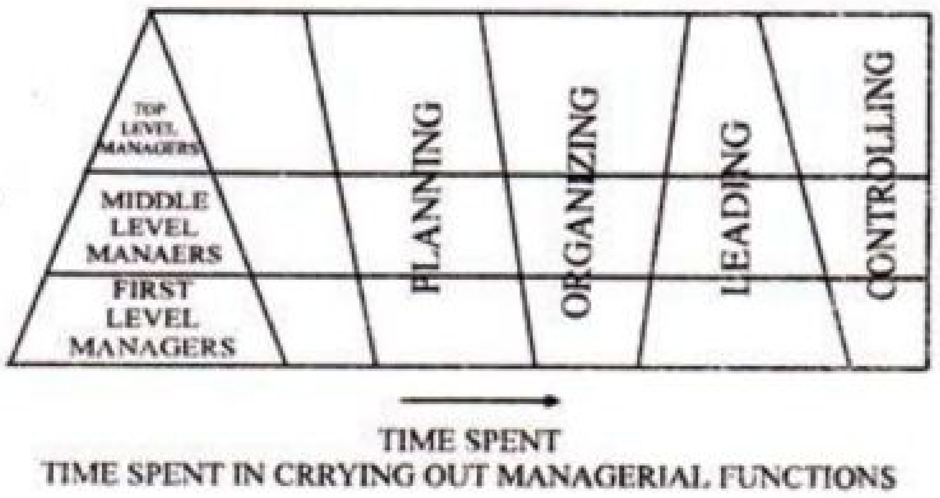


Fig. 27.2

Informational Roles:

(1) The recipient role (receiving information about the operation of an enterprise)

(2) The disseminator role (passing information to subordinates) and

(3) The spokesperson role (transmitting information to those outside the organisation).

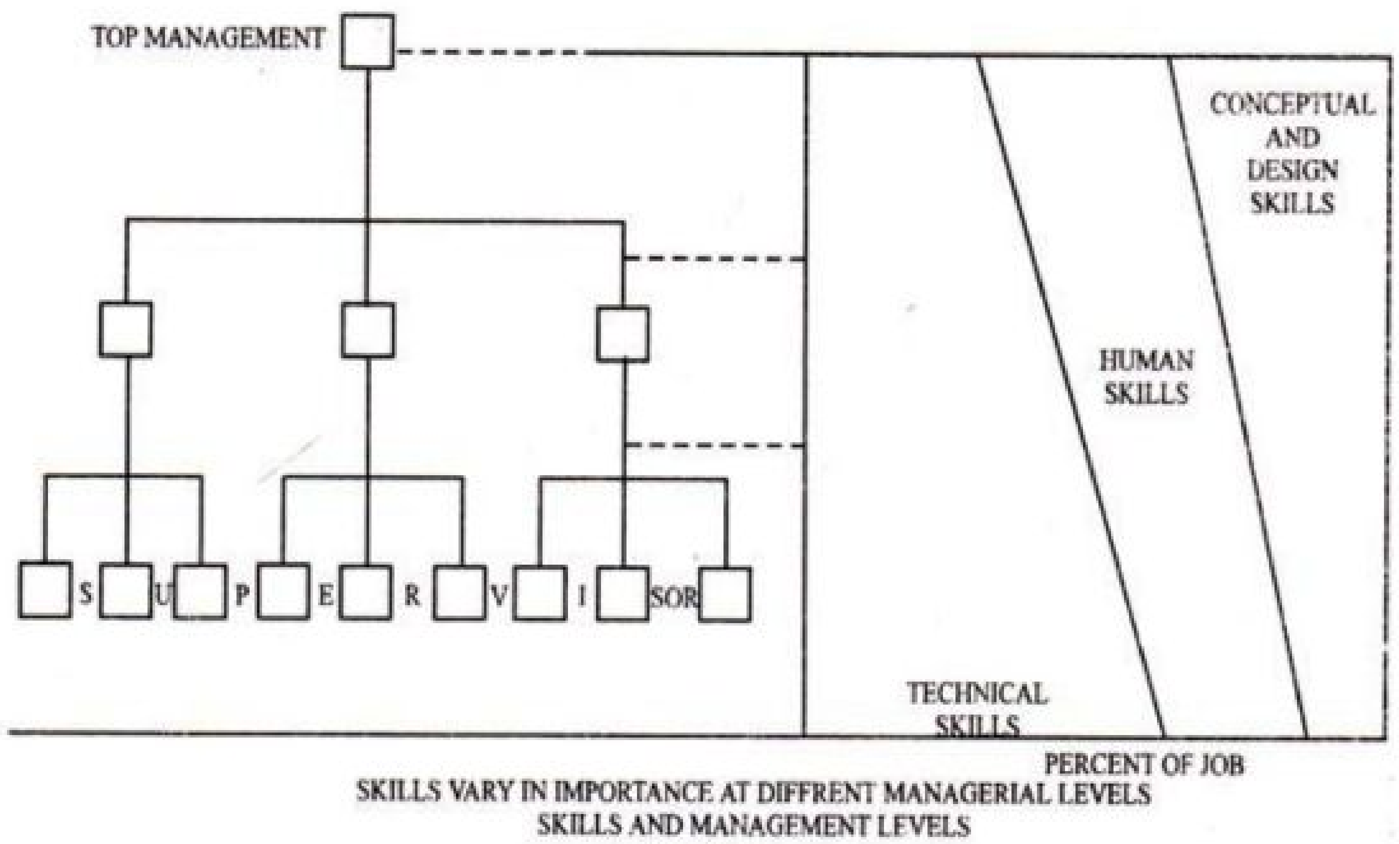


Fig. 27.3

Decision Roles:

(1) The entrepreneurial role.
(2) The disturbance handler role.
(3) The resource allocator role.
(4) The negotiator role.

UNIT IV
PLANNING

Nature and purpose of planning, types of plans, steps in planning process.

All organizations whether it is the government, a private business or small businessman require planning. To turn their dreams of increase in sale, earning high profit and getting success in business all businessmen have to think about future; make predictions and achieve target. To decide what to do, how to do and when to do they do planning.

Meaning:

Planning can be defined as "thinking in advance what is to be done, when it is to be done, how it is to be done and by whom it should be done". In simple words we can say, planning bridges the gap between where we are standing today and where we want to reach.

Planning involves setting objectives and deciding in advance the appropriate course of action to achieve these objectives so we can also define planning as setting up of objectives and targets and formulating an action plan to achieve them.

Another important ingredient of planning is time. Plans are always developed for a fixed time period as no business can go on planning endlessly.

Keeping in mind the time dimension we can define planning as "Setting objectives for a given time period, formulating various courses of action to achieve them and then selecting the best possible alternative from the different courses of actions".

Features/Nature/Characteristic of Planning:

1. Planning contributes to Objectives:
Planning starts with the determination of objectives. We cannot think of planning in absence of objective. After setting up of the objectives, planning decides the methods, procedures and steps to be taken for achievement of set objectives. Planners also help and bring changes in the plan if things are not moving in the direction of objectives.

For example, if an organisation has the objective of manufacturing 1500 washing machines and in one month only 80 washing machines are manufactured, then changes are made in the plan to achieve the final objective.

2. Planning is Primary function of management:
Planning is the primary or first function to be performed by every manager. No other function can be executed by the manager without performing planning function because objectives are set up in planning and other functions depend on the objectives only.

For example, in organizing function, managers assign authority and responsibility to the employees and level of authority and responsibility depends upon objectives of the company. Similarly, in staffing the employees are appointed. The number and type of employees again depends on the objectives of the company. So planning always proceeds and remains at no. 1 as compared to other functions.

3. Pervasive:
Planning is required at all levels of the management. It is not a function restricted to top level managers only but planning is done by managers at every level. Formation of major plan and framing of overall policies is the task of top level managers whereas departmental managers form plan for their respective departments. And lower level managers make plans to support the overall objectives and to carry on day to day activities.

4. Planning is futuristic/Forward looking:
Planning always means looking ahead or planning is a futuristic function. Planning is never done for the past. All the managers try to make predictions and assumptions for future and these predictions are made on the basis of past experiences of the manager and with the regular and intelligent scanning of the general environment.

5. Planning is continuous:

Planning is a never ending or continuous process because after making plans also one has to be in touch with the changes in changing environment and in the selection of one best way.

So, after making plans also planners keep making changes in the plans according to the requirement of the company. For example, if the plan is made during the boom period and during its execution there is depression period then planners have to make changes according to the conditions prevailing.

6. Planning involves decision making:
The planning function is needed only when different alternatives are available and we have to select most suitable alternative. We cannot imagine planning in absence of choice because in planning function managers evaluate various alternatives and select the most appropriate. But if there is one alternative available then there is no requirement of planning.

For example, to import the technology if the licence is only with STC (State Trading Co-operation) then companies have no choice but to import the technology through STC only. But if there is 4-5 import agencies included in this task then the planners have to evaluate terms and conditions of all the agencies and select the most suitable from the company's point of view.

7. Planning is a mental exercise:
It is mental exercise. Planning is a mental process which requires higher thinking that is why it is kept separate from operational activities by Taylor. In planning assumptions and predictions regarding future are made by scanning the environment properly. This activity requires higher level of intelligence. Secondly, in planning various alternatives are evaluated and the most suitable is selected which again requires higher level of intelligence. So, it is right to call planning an intellectual process.

Importance/Significance of Planning:

1. Planning provides Direction:
Planning is concerned with predetermined course of action. It provides the directions to the efforts of employees. Planning makes clear what employees have to do, how to do, etc. By stating in advance how work has to be done, planning provides direction for action. Employees know in advance in which direction they have to work. This leads to Unity of Direction also. If there were no planning, employees would be working in different directions and organisation would not be able to achieve its desired goal.

2. Planning Reduces the risk of uncertainties:
Organisations have to face many uncertainties and unexpected situations every day. Planning helps the manager to face the uncertainty because planners try to foresee the future by making some assumptions regarding future keeping in mind their past

experiences and scanning of business environments. The plans are made to overcome such uncertainties. The plans also include unexpected risks such as fire or some other calamities in the organisation. The resources are kept aside in the plan to meet such uncertainties.

3. Planning reduces over lapping and wasteful activities:

The organisational plans are made keeping in mind the requirements of all the departments. The departmental plans are derived from main organisational plan. As a result there will be co-ordination in different departments. On the other hand, if the managers, non-managers and all the employees are following course of action according to plan then there will be integration in the activities. Plans ensure clarity of thoughts and action and work can be carried out smoothly.

4. Planning Promotes innovative ideas:

Planning requires high thinking and it is an intellectual process. So, there is a great scope of finding better ideas, better methods and procedures to perform a particular job. Planning process forces managers to think differently and assume the future conditions. So, it makes the managers innovative and creative.

5. Planning Facilitates Decision Making:

Planning helps the managers to take various decisions. As in planning goals are set in advance and predictions are made for future. These predictions and goals help the manager to take fast decisions.

6. Planning establishes standard for controlling:

Controlling means comparison between planned and actual output and if there is variation between both then find out the reasons for such deviations and taking measures to match the actual output with the planned. But in case there is no planned output then controlling manager will have no base to compare whether the actual output is adequate or not.

For example, if the planned output for a week is 100 units and actual output produced by employee is 80 units then the controlling manager must take measures to bring the 80 unit production upto 100 units but if the planned output, i.e., 100 units is not given by the planners then finding out whether 80 unit production is sufficient or not will be difficult to know. So, the base for comparison in controlling is given by planning function only.

7. Focuses attention on objectives of the company:

Planning function begins with the setting up of the objectives, policies, procedures, methods and rules, etc. which are made in planning to achieve these objectives only. When employees follow the plan they are leading towards the achievement of objectives. Through planning, efforts of all the employees are directed towards the achievement of organisational goals and objectives.

Limitations of Planning:

1. Planning leads to rigidity:

Once plans are made to decide the future course of action the manager may not be in a position to change them. Following predefined plan when circumstances are changed may not bring positive results for organisation. This kind of rigidity in plan may create difficulty.

2. Planning may not work in dynamic environment:

Business environment is very dynamic as there are continuously changes taking place in economic, political and legal environment. It becomes very difficult to forecast these future changes. Plans may fail if the changes are very frequent.

The environment consists of number of segments and it becomes very difficult for a manager to assess future changes in the environment. For example there may be change in economic policy, change in fashion and trend or change in competitor's policy. A manager cannot foresee these changes accurately and plan may fail if many such changes take place in environment.

3. It reduces creativity:

With the planning the managers of the organisation start working rigidly and they become the blind followers of the plan only. The managers do not take any initiative to make changes in the plan according to the changes prevailing in the business environment. They stop giving suggestions and new ideas to bring improvement in working because the guidelines for working are given in planning only.

4. Planning involves huge Cost:

Planning process involves lot of cost because it is an intellectual process and companies need to hire the professional experts to carry on this process. Along with the salary of these experts the company has to spend lot of time and money to collect accurate facts and figures. So, it is a cost-consuming process. If the benefits of planning are not more than its cost then it should not be carried on.

5. It is a time-consuming process:

Planning process is a time-consuming process because it takes long time to evaluate the alternatives and select the best one. Lot of time is needed in developing planning premises. So, because of this, the action gets delayed. And whenever there is a need for prompt and immediate decision then we have to avoid planning.

6. Planning does not guarantee success:

Sometimes managers have false sense of security that plans have worked successfully in past so these will be working in future also. There is a tendency in managers to rely on pretested plans.

It is not true that if a plan has worked successfully in past, it will bring success in future also as there are so many unknown factors which may lead to failure of plan in future. Planning only provides a base for analysing future. It is not a solution for future course of action.

7. Lack of accuracy:

In planning we are always thinking in advance and planning is concerned with future only and future is always uncertain. In planning many assumptions are made to decide about future course of action. But these assumptions are not 100% accurate and if these assumptions do not hold true in present situation or in future condition then whole planning will fail.

For example, if in the plan it is assumed that there will be 5% inflation rate and in future condition the inflation rate becomes 10% then the whole plan will fail and many adjustments will be required to be made.

External Limitations of Planning:

Sometimes planning fails due to following limitations on which managers have no control.

(i) Natural calamity:

Natural calamities such as flood, earthquake, famine etc. may result in failure of plan.

(ii) Change in competitors' policies:

Sometimes plan may fail due to better policies, product and strategy of competitor which was not expected by manager.

(iii) Change in taste/fashion and trend in the market:

Sometimes plans may fail when the taste/fashion or trend in market goes against the expectation of planners.

(iv) Change in technologies:

The introduction of new technologies may also lead to failure of plans for products using old technology.

(v) Change in government/economic policy:

Managers have no control over government decisions. If government economic or industrial policies are not framed as expected by manager then also plans may fail.

Planning Process:

1. Setting up of the objectives:

In planning function manager begins with setting up of objectives because all the policies, procedures and methods are framed for achieving objectives only. The managers set up very clearly the objectives of the company keeping in mind the goals of the company and the physical and financial resources of the company. Managers prefer to set up goals which can be achieved quickly and in specific limit of time. After setting up the goals, the clearly defined goals are communicated to all the employees.

2. Developing premises:

Premises refer to making assumptions regarding future. Premises are the base on which plans are made. It is a kind of forecast made keeping in view existing plans and any past information about various policies. There should be total agreement on all the assumptions. The assumptions are made on the basis of forecasting. Forecast is the technique of gathering information. Common forecast are made to find out the demand for a product, change in government or competitor policy, tax rate, etc.

3. Listing the various alternatives for achieving the objectives:

After setting up of objectives the managers make a list of alternatives through which the organisation can achieve its objectives as there can be many ways to achieve the objective and managers must know all the ways to reach the objectives.

For example, if the objective is to increase in sale by 10% then the sale can be increased:

(a) By adding more line of products;
(b) By offering discount;
(c) By increasing expenditure on advertisements;
(d) By increasing the share in the market;
(e) By appointing salesmen for door-to-door sale etc.
So, managers list out all the alternatives.

***4. Evaluation of different alternatives*:**

After making the list of various alternatives along with the assumptions supporting them, the manager starts evaluating each and every alternative and notes down the positive and negative aspects of every alternative. After this the manager starts eliminating the alternatives with more of negative aspect and the one with the maximum positive aspect and with most feasible assumption is selected as best alternative. Alternatives are evaluated in the light of their feasibility.

5. Selecting an alternative:

The best alternative is selected but as such there is no mathematical formula to select the best alternative. Sometimes instead of selecting one alternative, a combination of different alternatives can also be selected. The most ideal plan is most feasible, profitable and with least negative consequences.

After preparing the main plan, the organisation has to make number of small plans to support the main plan. These plans are related to performance of routine jobs in the organisation. These are derived from the major plan. So, they are also known as derivative plans. These plans are must for accomplishing the objective of main plan. The common supportive plans are plans to buy equipment, plan for recruitment and selection of employees, plan to buy raw material, etc.

6. Implement the plan:

The managers prepare or draft the main and supportive plans on paper but there is no use of these plans unless and until these are put in action. For implementing the plans or putting the plans into action, the managers start communicating the plans to all the employees very clearly because the employees actually have to carry on the activities according to specification of plans. After communicating the plan to employees and taking their support the managers start allocating the resources according to the specification of the plans. For example, if the plan is to increase in sale by increasing the expenditure on advertisement, then to put it into action, the managers must allot more funds to advertisement department, select better media, hire advertising agency, etc.

7. Follow-up:

Planning is a continuous process so the manager's job does not get over simply by putting the plan into action. The managers monitor the plan carefully while it is implemented. The monitoring of plan is very important because it helps to verify whether the conditions and predictions assumed in plan are holding true in present situation or not. If these are not coming true then immediately changes are made in the plan.

During follow up many adjustments are made in the plan. For example, if the expenditure planning is done keeping in mind 5% inflation rate but in present situation if the inflation rate rises to 10% then during follow up the managers make changes in the plans according to 10% inflation rate.

Plan:

Plan is a document that outlines how goals are going to be met. It is a specific action proposed to help the organization achieve its objectives. There may be more than one way and means of reaching a particular goal but with the help of logical plans, objectives of an organization could be easily achieved.

Single Use Plans:

Single use plans are one time use plan. These are designed to achieve a particular goal that once achieved will not reoccur in future. These are made to meet the needs of unique situations. The duration or length of single use plan depends upon the activity or goal for which it is made. It may last one day or it may last for weeks or months if the project for which it is made is long.

Standing Plans:

Standing plans are also known as Repeat Use Plans. These plans focus on situations which occur repeatedly. Standing plans are used over and over again. They are made once but retain their value over a period of years. Although some revisions and updates are made in these plans from time to time.

Types of Plans:

Planning is a pervasive function which means it is not the task of top level managers only but managers working at different levels perform planning function. The plans framed by top level manager may differ from the plans formed by middle and lower level managers. The different types of plans or common plans formed by the managers at different levels are:

- Objectives – Rules
- Strategy – Programmes
- Policies – Methods
- Procedures – Budgets

1. Objectives:

Objectives are the ends towards which the activities are directed. They are the end result of every activity. An objective:

(a) Should be related to single activity;
(b) Should be related to result and not to activity to be performed;
(c) It should be measurable or must be measured in quantitative term;
(d) It must have a time limit for achievement of objective;
(e) It must be achievable or feasible.
For example, increase in sale by 10% or decrease in rejections by 2%.

2. Strategy:

A strategy is a comprehensive plan to achieve the organisational objectives. The dimensions of strategy are:
(i) Determining long term objectives.
(ii) Adopting a particular course of action.
(iii) Allocating resources for achieving the objectives.
Strategy formulation is the task of top level people and it is must to scan and understand clearly the business environment before framing the strategy. The common decisions in strategy are whether to introduce a new product or not. If to introduce then how, finding out customer for your products making changes in existing products etc. All the strategic decisions are greatly influenced by the business environment. Strategy

defines the future decisions regarding the organisation's direction and scope in the long run.

For example, Choice of advertising media, sales promotion techniques, channels of distribution, etc.

3. Policies:

Policy can be defined as organisation's general response to a particular problem or situation. In simple words, it is the organisation's own way of handling the problems. Policies are made at every level because the managers at every level need to decide or predetermine the way of handling a situation and policy acts as a guide to take decisions in unexpected situation.

Policy formation always encourages initiatives of employees because employees have to deal with situations and the way of handling the situation is decided in consultation with the employees. Then they will be able to handle the situation in a much better way. For example, a school may have policy of issuing admission form only to students who secured more than 60% marks.

"No credit sale policy", etc. Introduction of new product in the market.

4. Procedures:

Procedures are required steps established in advance to handle future conditions. The sequence of steps to be followed by employees in different situations must be predetermined so that everyone follows same steps.

The procedure can be defined as the exact manner in which an activity has to be accomplished.
For example, the procedure for admission in a particular school can be:
(a) Set up a file for applicants;
(b) Accept the field forms and put them in a file;
(c) Ask for other certificates to verify score or marks of students;
(d) Put those documents also in the file;
(e) Give the file to admission in-charge.
Procedures are made common for all the departments to co-ordinate their activities. So procedures cut across all the departmental lines. For example, the procedure to handle the order by manufacturing department may involve sales department also.

5. Rules:

Rules spell out special actions or non-actions of the employees. There is no discretion allowed in rules, i.e., they must be followed strictly and if rules are not followed then strict actions can be taken against employees who are disobeying the rules. Rules are spelt out to create the environment of discipline in the organisation. For example, there can be rule of no smoking in the organisation. Rules generally guide the general behaviour of the employees and employees cannot make any changes in them.

6. Programmes:

Programmes are the combination of goals, policies, procedures and rules. All these plans together form a program. The programmes are made to get a systematic working in the organisation. The programmes create relation between policies, procedures and goals. The programmes are also prepared at different levels. A primary programme is prepared by the top level and then to support the primary programme supportive programmes of different levels are prepared for smooth function of the company.

For example, construction of shopping mall, Development of new product.

7. Methods:

Methods can be defined as formalized or systematic way of doing routine or repetitive jobs. The managers decide in advance the common way of doing a job. So, that

(a) There is no doubt in the minds of employees;

(b) There can be uniformity in actions of the employees;

(c) These help in applying the techniques of standardization and simplification;

(d) Act as guide for employees.

If the common way of doing the job is not decided in advance then there will be confusion and comparison will not be possible. For example, for the valuation of stock, the organisation must decide in advance what method has to be adopted (lifo or fifo). So that everyone follows the same method and comparison with the past value of stock can be done, method for calculation of depreciation.

8. Budget:

Budget is the statement of expected result expressed in numerical terms. In budgets the results are always measurable and most of the time these are financial in nature but it does not mean that company prepares only financial budget. Financial budget is also known as profit plan of the company because it includes the expected income and related expenditures with that income and the profit which the company will earn in the coming year.

Along with financial budget capital budget is prepared to find out the expected capital requirement. Operational budget is prepared where instead of finance hourly units are used stating expected hours the employees will be working. Budgets are prepared by managers at every level and lower level managers generally prepare operational budgets.

The most common budget prepared by managers at different levels is cash budget. This budget estimates the expected cash inflow and cash outflow over a period of time. Cash inflow comes from sales and cash outflow is in the form of expenses. Businessmen can find out net cash position by subtracting cash outflow from cash inflow.

For example, Sale budget

Sales in unit = Rs 1, 00,000

Price per unit = Rs 20

Total Sale budget = Rs 2,000,000

Objectives: nature and importance of objectives, Types of objectives, primary, secondary, individual and personal objectives.

Meaning of Objectives:
Objectives are the ends for the achievement of which managerial activities are directed. Effective management is possible only through the setting up of objectives and all managerial efforts should be directed to achieve these objectives. Objectives constitute the purpose, the attainment of which is necessary for the business. An organization can grow in an orderly way if well-defined goals have been set. Objectives are a pre-requisite for planning. No planning is possible without setting up of objectives.

Objectives are not only helpful in planning but also in other managerial functions like organizing, directing and controlling. Clear cut objectives help in proper decision-making and in achieving better results. The objectives of the organization should be supported by sub-objectives. The objectives have hierarchy and a network. The organizations and managers may have multiple goals and at times they may be incompatible and may lead to conflicts within the organization and within the groups too.

Personal interests may have to be subordinated to organizational goals. The words objectives and goals are generally used interchangeably and various authors and practitioners have not made any distinction between the two, so these words will be used for the same meaning here.

Mc. Farland defines objectives, “Objectives are the goals, aims, or purposes that organizations wish to achieve over varying periods of time.”

In the words of Terry, “A managerial objective is the intended goal which prescribes definite scope and suggests direction to efforts of a manager.”

Mc. Farland suggests that objectives are the goals which an organization wants to achieve whereas Terry describes objectives as the parameters within which an organization has to work and make efforts to achieve them.

Features of Objectives:

Following are the features of objectives:

1. Every organization has objectives rather it is started to achieve certain objectives. All the members of an organization channelize their energies to achieve the stated goals.

2. The objectives of a business organization may be broad as well specific. These may be set for the whole organization or different segments of it. The objectives may be for long term or short periods. The overall objectives of the organization are supported by the sub objectives. For example, the objective of earning a certain percentage of profit in a particular year will be achievable only if objectives of manufacturing, marketing, finance departments support it.

3. Objectives have hierarchy. At organizational level broad objectives are fixed by the top level management. The broad objectives are specified at departmental level and then they are derived for different sections. Various objectives at different levels try to achieve organizational objectives.

4. An organization tries to fulfill the needs and aspirations of society. The organizational objectives should have social sanctions since these are social units. The aspirations of society should be reflected from the business objectives.

5. Business objectives may change as per the environmental changes or change in social needs. The present objectives may have to be changed as per the new situations. The objective of earning profits has of late been associated with the social responsibility of business. Similarly, new objectives may be added or old objectives may be modified or changed.

6. All organizational objectives are inter-related. The achievement of main objectives will require the achievement of subordinate objectives also. The non- achievement of small objectives will also mean the non- achievement of main objective. So all the objectives are inter-related and they cannot be taken up independently.

7. Another important characteristic of objectives is their multiplicity. There may be a number of objectives for which a concern may strive to achieve at the same time. The major objectives may also be more. At every hierarchical level too, the objectives may be many. Different areas of business have their own objectives. Management should try to achieve all the objectives efficiently and effectively.

8. The objectives should be based on practical situations. They should also take into account the philosophy and thinking of the management. The objectives should be realistic so that they may be converted into actual performance. Unrealistic objectives

do more harm than good because they discourage the employees rather than encouraging them.

Classification of Objectives (Types):

Management objectives can be classified as follows:

1. Primary Objectives:

These are the objectives for which a company has been started. Every business aims to earn more and more profits out of its working. Primary objectives are related to the company and not to individuals. Earning of profits out of providing goods and services to the customers is the primary objective of a company. The goods and services are provided as per the requirements of customers. Earning profits through customer satisfaction helps in earning goodwill and regular clientele. The production of goods and services as per determined targets will be achieved through individual goals of employees in the organization.

2. Secondary Objectives:

These objectives help in achieving primary objectives. The targets are identified and efforts are made to increase efficiency and economy in the performance of work. The goals dealing with analysis, advice and interpretation provide support to goals directed by primary objectives. Secondary objectives, like primary objectives, are impersonal in nature. The primary goal of earning profits through providing goods and services will be achieved if there is a plan to add new products in the market at regular intervals. The goal of adding new products will be a secondary goal which will help in achieving the primary objective.

3. Individual Objectives:

These are the goals which individual members in an organization try to achieve on daily, weekly, monthly or yearly basis. These objectives are achievable as subordinate to primary and secondary goals. Most of the individual objects are economic, psychological or non-financial rewards which an individual tries to achieve by using resources of time, skill and effort. An individual tries to satisfy his needs and desires by working in an organization. In order to motivate individuals for raising their performance, organizations offer varied incentives.

4. Social Objectives:

These are the goals of an organization towards society. These include the obligations required by the community, government agencies etc. These also include goals intended to further social, physical and cultural improvement of the society. Social obligations of business has become essential these days. Business has to produce goods and services by taking into consideration health requirements of people. There are expectations that business should also spent a part of its profits for the welfare of community.

Hierarchy of Objectives:

Objectives form a hierarchy ranging from the broad aim to specific individual objectives. At the top of it the main goals of the organization are set. The organization has to see its responsibilities towards society and then towards herself. The organization is required to contribute to the welfare of society by providing good quality products at reasonable cost. The main purpose of the business is to provide a specific level of services or a proper type of goods. The overall objectives of the organization are specified at the top level management.

The objectives of the key areas are also determined at the higher level management. The next in hierarchy comes the objectives of divisions and departments and units and these are decided at middle level management comprising Vice-president or functional managers. The objectives of individuals are decided at the bottom of the hierarchy. The junior level management sets performance standards of individuals.

The hierarchy of objectives is shown in the diagram:

Top Down and Bottom up Approach:

There is some controversy whether the objectives should be fixed at top down or bottom up. In the top down approach upper level managers set objectives for the subordinates while in the bottom up approach subordinates initiate the setting of objectives of their positions and present them to their superiors. The proponents of the top down approach are of the view that overall objectives of the organization should be set at Chief Executive Officer level of top level of management. It will provide a proper synchronization of objectives of different areas and individuals.

On the other hand, the supporters of bottom up approach argue that top management needs to have information from lower levels in the form of objectives. Since subordinates fix their own goals they will be motivated and committed to their performance. It may not be advisable to rely entirely on one approach. Both the approaches should be used wisely for better results. In a practical situation such decisions are linked to factors such as the size of the organization, the organization culture, leadership style of the executive and the urgency of the plan.

Guidelines for setting objectives

Before initiating the process of setting objectives the planner should study the conditions prevailing inside and outside the organization. The strength and weakness of the concern should also be considered. An attempt should be made to improve the inefficient spots.

The following factors should be taken into consideration while formulating business objectives:

1. Classifying the Objectives:
The first important thing to be done in setting objectives is related to the classification of objectives. The objectives are classified into basic, outstanding, major or derivative etc. The basic objectives are essential for the present. The outstanding objectives will need more efforts than normal for their attainment. The major objectives will relate to the organizations while derivative objectives are concerned with departments, sections or individuals. The ultimate aim is to achieve organizational objectives and all other objectives will mingle into main objectives.

2. Determining the Areas of Objectives:
The next thing in setting objectives is the specification of areas for which objectives are to be set. The business is divided into functional areas such as production, marketing, personnel, finance, etc. The objectives for each area are set differently. These objectives are set in conformity with the major organizational objectives. The division of areas enables a proper planning and control.

3. Coordinating Various Objectives:
The objectives of different departments are set separately. The objectives of various departments are coordinated so as to plan main organizational goals. The objectives for key-factor are decided first and then other departmental objectives are set. The key-factor here means strategic factor. Finance may be a key-factor in one concern, output may be in another, materials may be in third, etc. The planning of key-factors is important because other objectives will depend upon it. All the factors should be coordinated in order to achieve overall objectives.

4. Objectives Should be Realistic:
The objectives should be realistic so that they may be attainable by the present men and resources. The objective should take into consideration all the available resources otherwise they will not be realistic. Too high goals will discourage the employees because they will not be achieved. Too low objectives on the other hand, will not

enthuse the employees to give their maximum. So, objectives should be realistic and reasonable.

5. Possibility of Adjustment:

There should not be any rigidity in objectives because these are based on future estimates. Any change in the circumstances will have an effect on the objectives too. The objectives should be modified as and when a situation demands. The production object may have to be modified if the raw materials of a particular type are not available. So, there should be a scope for adjustment to make the objectives practicable.

Decision Making: Importance and limitations of rational decision making, types of decisions- programmed and non-programmed decision making. Process of decision making under certainty, uncertainty and risk.

Decision-making is an important job of a manager. Every day he has to decide about doing or not doing a particular thing. A decision is the selection from among alternatives. "It is a solution selected after examining several alternatives chosen because the decider foresees that the course of action he selects will be more than the others to further his goals and will be accompanied by the fewest possible objectionable consequences. It is the selection of one course of action from two or more alternative courses of action. In the words of Mac Farland, "A decision is an act of choice wherein an executive forms a conclusion about what must be done in a given situation.

A decision represents a course of behaviour chosen from a number of possible alternatives." The way an executive acts or decides the course of action from among various alternatives is an act of decision-making. George Terry says, "Decision-making is the selection based on some criteria from two or more possible alternatives." Though there are many alternatives available for a manager but he has to choose the best out of them.

Characteristics:

Following are the characteristics of decision-making:

1. Decision-making is based on rational thinking. The manager tries to foresee various possible effects of a decision before deciding a particular one.
2. It is a process of selecting the best from among alternatives available.
3. It involves the evaluation of various alternatives available. The selection of best alternative will be made only when pros and cons of all of them are discussed and evaluated.
4. Decision-making is the end product because it is preceded by discussions and deliberations.
5. Decision-making is aimed to achieve organizational goals.

6. It also involves certain commitment. Management is committed to every decision it takes.

Nature of Decision-Making:

A decision is always related to some problem, difficulty or conflict. Decisions help in solving problems or resolving conflicts. There are always differences of opinions, judgments, etc. Managerial decision helps in maintaining group effectiveness. All problems may not require decision- making but merely the supply of information may be sufficient. For example, when will different groups report for re-orientation? The supply of information about training programme may be enough.

Decision problems necessitate a choice from different alternatives. A number of possibilities are selected before making a final selection. Decision-making requires something more than a selection. The material requiring a decision may be available but still a decision may not be reached. A decision needs some sort of prediction for the future on the basis of past and present available information. The effect of a decision is to be felt in future so it requires proper analysis of available material and a prediction for the future. If decision premises do not come true, then decision itself may be wrong.

Sometimes decisions are influenced by adopting a follow- the-leader practice. The leader of the group or an important manager of a concern sets the precedent and others silently follow that decision. Whatever has been decided by the leader becomes a guide for others and they also follow suit. The decisions may also emerge from answers to pertinent questions about the problem. Such answers try to narrow down the choice and help in making a decision.

Techniques or Basis for Decision-Making:

Decision-making has become a complex problem. A number of techniques, extending from guessing to mathematical analyses, are used for decision-making process. The selection of an appropriate technique depends upon the judgment of decision-maker.

Following techniques of decision-making are generally employed:

1. Intuition:

Decision-making by intuition is characterized by inner feeling of the person. He takes a decision as per the dictates of his conscious. He thinks about the problem and an answer is found in his mind. The decision-maker has his own preferences, influences, psychological make-up and these things play a vital role in taking a decision. The past knowledge, training and experience of the decision-maker plays an important role in intuitive decisions.

With this technique of decision-making, decisions are taken quickly and the decision-making capability of the person is also used. In case the intuition of the decision-maker is wrong then decision will also be incorrect. The other techniques of decision-making are also neglected.

2. Facts:

Facts are considered to be the best basis of decision-making. A decision based on facts has its roots in factual data. Such decisions will be sound and proper. The increasing use of computers has helped in systematic analysis of data. The information has become a major tool in managerial decision-making. It may not be possible to secure all relevant facts for taking decisions. Managers, generally, complain of insufficient information. It is also essential that facts should be properly diagnosed, classified and interpreted. Facts alone may not be sufficient for decision-making. The imagination, experience and beliefs of the decision-making also required to comprehend the facts in proper perspective.

3. Experience:

Past experience of a person becomes a good basis for taking decisions. When a similar situation arises then the manager can rely on his past decisions and takes similar decisions. The person sees and understands things in terms of concepts with which he is familiar. Experience should not be followed blindly. The new situations should be analyzed on the basis of past knowledge. A successful decision in the past may not prove useful this time also, on the other hand, a decision once failed need not be avoided for all times in future. Though past experience is a good basis but present situations should be properly analyzed and assessed before taking a decision.

4. Considered Opinions:

Some managers use considered opinions as a basis for decision-making. Besides pertinent statistics, opinions are also given due weightage. Something discussed and considered by more persons become logical and may form a sound basis for decision-making. A marketing manager, before deciding whether to market a new product or not, will like to see marketing statistics as well as considered opinions before finally making a choice.

5. Operations Research:

The traditional methods of taking decision on the basis of intuition, experience, etc. are replaced by systematic techniques based on analysis of data. The operations research is one of the techniques used by modern management for deciding important matters. It helps managers by providing scientific basis for solving organizational problems involving interaction of components of the organization.

6. Linear Programming:

This technique is used to determine the best use of limited resources for achieving given objectives. This method is based on this assumption that there exists a linear relationship between variables and that the limits of variations could be ascertained.

Linear programme can be used for solving problems in areas like production, transportation, warehousing, etc.

Decision Making Conditions:

Decision making involves the selection of one of the alternatives available. A decision taken at present will have effect in future. A decision-maker tries to visualize the conditions in future and take decisions accordingly. So decisions are made in an environment of at least some uncertainty. There are certain risks involved in decision making and the conditions vary from certainty to complete uncertainty. The strategy of taking decisions under different conditions vary.

The conditions under which decisions are taken are as follows:

Certainty:

Under the conditions of certainty, people are reasonably sure about what will happen when they take a decision. The required information is available and it is reliable and the cause and effect relationships are known. The manager makes decisions under such situations at different times with the same results. Under such situations a deterministic model is used, in which all factors are assumed to be exact with the chance playing no role.

Risk:

In a risk situation, factual information may exist but it may be insufficient. Most of the business decisions are taken under risk conditions. The available information does not answer overall questions about the outcome of the decision. A manager has to develop estimates of the likelihood of the various states of events occurring. The estimates may be based on past experience, other available information or intelligence.

In order to improve decision-making under these conditions, one may estimate the objective probabilities of an outcome by using, for example, mathematical models. On the other hand, subjective probability, based on judgment and experiences, may be used. There are a number of tools available which help a manager in taking decisions under such conditions.

Uncertainty:

Under conditions of uncertainty a manager has only little information and he is not sure about its reliability also. Since the manager does not have proper information on which he can develop, the best he can do is to be aware that he has no chance of predicting the events. The interaction of various variables cannot be evaluated for taking decisions. The decision making under uncertainty is a difficult proposition. For example, if a company wants to enter a foreign market, if may not be sure about the consumer preference for the product, economic situation, above all the political conditions.

The conditions in a new market may so fluctuate that proper decision taking becomes a problem. The use of a number of modern techniques may improve the quality of decisions under uncertain conditions. The use of risk analysis, decision trees and preference theory can help in making proper decisions under those situations.

Types of Decisions:

Different decisions differ in nature and significance. Some decisions are taken in routine while some may have to be carefully evaluated.

Various decisions are discussed as follows:

1. Programmed and Non-Programmed Decisions:

Programmed decisions are of a routine nature and are taken within the specified procedures. These decisions are made with regard to routine and recurring problems which require structured solutions. A manager is not required to go through the problem solving procedures again and again for taking programmed decisions.

The decision rules for programmed decisions should be prepared carefully and intelligently so that lower level executives are able to take the decisions without making references to higher managerial levels. No judgment or discretion is needed to find out solutions to such problems. These decisions remain consistent for a relatively longer period of time and over many solutions.

Non-programmed decisions are related to problems which are unique and non-repetitive. The information and knowledge about such decisions is not available. Such decisions are made under new and unfamiliar circumstances. The standard and pre-determined procedures and rules are rendered ineffective in programmed decisions because every decision will have to be taken separately. Non-programmed decisions are usually grade for solving unstructured problems which keep on changing from time to time.

Every problem has to be restructured and analyzed by the manager by using his skill, judgment and creativity. For example, a decision regarding adding a new product, purchase of new machinery, opening a new branch, appointment of a new chief executive are all non- programmed decisions and require separate attention for each decision.

2. Strategic and Tactical Decisions:

Strategic decisions relate to policy matters and need the development and analysis of alternatives. These decisions influence organizational structure, objectives, working conditions, finances etc. Strategic decisions exercise great influence on the functioning and direction of the organization and have long-term implications. They also define and establish the relationship of the organization with external environment. Such decisions require more resources, judgment and skill. Because of their importance, strategic decisions are taken at top managerial levels.

The decisions such as adding a new product or service, introduction of new technology, taking over of another organization, selection of a location are all strategic decisions. These decisions once taken cannot be easily reversed. The impact of these decisions is fairly long because expansion, growth, development and profitability of the organization is linked to them. Strategic decisions somewhat resemble to non-programmed decisions because they possess the characteristics of the latter.

In order to implement strategic decisions, management has to make some tactical, operational or routine decision. One strategic decision may require many operational decisions. These decisions are concerned with routine and repetitive matters arising out of the working of the organization. Such decisions do not require managerial judgment and are taken at lower levels of the management. Tactical decisions are more specific, functional and have short-term implications. Such decisions are taken by referring to established rules, procedures and standards.

3. Individual and Group Decisions:

A decision taken by one person is known as individual decision. In a small concern normally the owner takes most of the decisions, in a bigger concern the routine or simple decisions may be left to a particular manager. Such decisions are generally taken as per predetermined rules and procedures and require less application of judgment and skill. When a manager is required to take a decision, he is supplied with information and other inputs needed for this purpose. All managers, whether at top level or at lower level, take decisions for carrying out their activities.

When decisions are taken by two or more persons, these are known as group decisions. Generally, strategic or other important decisions are taken by groups instead of individuals because of risk involved. The decisions of Board of Directors or Committees come under this category.

Group decisions are normally important and have long-term implications for the concern. A decision regarding introducing a new product, shifting to latest technology, trying labour saving devices etc. may be better taken by a group of specialists than by an individual. Group decisions are generally time consuming but otherwise these are well discussed decisions.

UNIT V
ORGANISING

Nature and purpose of organising: steps in organising/ process of organising, formal and informal organizations; span of control & factors determining effective span.

Organising might be defined as follows:
Organising is that managerial process which seeks to define the role of each individual (manager and operator) towards the attainment of enterprise objectives; with due regard to establishing authority-responsibility relationships among all; and providing for co-ordination in the enterprise-as an in-built device for obtaining harmonious groups action.

As a function of management, organizing is a process; broadly consisting of the following steps:

(i) Determination of the Total Work-Load:

The very first step in the process of organizing is to make a determination of all the activities which are necessary to be undertaken for the attainment of the enterprise objectives. This step of organizing is, in fact, nothing but an estimation of the total work-load that must be done for realizing objectives.

(ii) Grouping and Sub-Grouping of Activities i.e. Creation of Departmentation:

Total activities determined for achieving enterprises objectives must be classified i.e. putting similar or related activities at one place in the form of a group or sub-group.

This step of organizing directly leads to the process of creating departments. If an enterprise is compared to a building; the creation of departments within it would amount to construction of rooms within the building each room meant for a specified special purpose.

(iii) Creation of Manager-Ship through Delegation of Authority:

After the scheme of departmentation is finalized; the next step in the process of organizing would be to entrust the responsibility for the functioning of each department to a distinct manager. Creation of manager-ship, in this manner, requires a requisite delegation of authority to each manager to enable the manager to take care of the job assigned to him.

(iv) Division of Work within the Departmental Set-Up-Human Organization:

Since no single individual can undertake the performance of the whole of the work assigned to one department; it becomes necessary to resort to division of work-assigning to each person only one part of the total job. As a result to undertaking division of work for all departments; there emerges a human organization within the enterprise.

(v) Arrangement of Physical Facilities to Personnel within the Departmental Set-Up-Material Organisation:

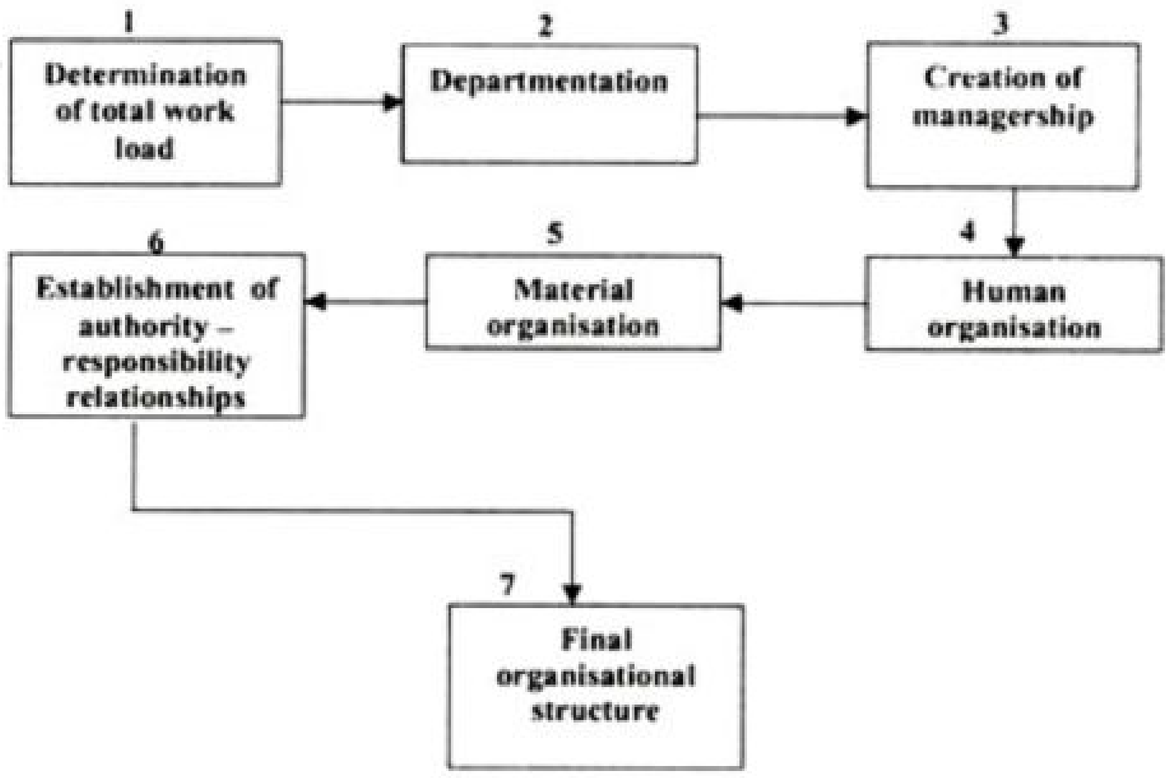
Each individual of the enterprise, working in whatever capacity, in any department, must need the basic physical facilities-raw materials, machines and tools, technology and other inputs-for the proper execution of the assigned task.

When physical facilities are made available to all personnel in all departments; there emerges a material organization (or a physical-technical organization) within the enterprise.

(vi) Definition and Establishment of Authority-Responsibility Relationships;

Having created manager-ship and a human organization within the enterprise; it becomes necessary to devise a system which provides for defining and establishing authority-responsibility relationships among all personnel-managers and operators.

As a matter of fact, such relationships must be defined and established throughout the enterprise both-horizontally and vertically.



Process of organizing leading to the emergence of an orgnisational structure

Points of comment:

Some of the note-worthy comments on the above description of the managerial function of organizing are as follows:

(a) As a result of undertaking the process of organizing, there emerges a structure, called the organisational structure (or simply the organisation). In fact, organizing is a managerial process; an organization is the outcome of it.

(b) While designing the organizational structure, the management must plan and provide for co-ordination throughout the organization both, horizontally and vertically. In fact, co-ordination is an in-built device for ensuring harmonious, effective and economical organizational functioning.

(c) The question of a rightful compromise between centralization and decentralization of authority must also be settled, at least initially, at the organization-processing stage. In fact, while delegating authority to departmental heads and subordinate managers at middle and lower levels of the organization, the top management should decide about the issue, as to whether to equip small managers with more of decision making powers or less of it.

Following are some popular definitions of organizing:

1. "Organising is the establishment of authority relationships with provisions for co-ordination between them, both vertically and horizontally in the enterprise structure".

-Koontz and O 'Donnell

2. "Organising is the process of identifying and grouping the work to be performed, defining and delegating the responsibility and authority and establishing a pattern of relationship for the purpose of enabling people work most effectively to accomplish the objective".

– Louis A. Allen.

Principles of Organisation:

Principles of organization, for sake of clarity of discussion and a better comprehension of these, have been classified in the following manner:

(I) Overall Principles:

(i) Principle of unity of objective

(ii)Principle of simplicity

(iii)Principle of flexibility

(II) Structural Principles:

(iv)Principle of division of work

(v)Principle of functional definition

(vi)Principle of optimum departmentation

(vii) Principle of unity of direction

(viii) Span of management principle

(III) Operational Principles:

(ix) Principle of adequate delegation

(x) Scalar chain principle

(xi) Principle of unity of comment

(xii) Authority-level principle

Following is a brief comment on each of the above-stated principles of organisation under appropriate categories:

(I) Overall Principles:

Under this classification, some of the very fundamental principles of organization are included i.e. principles which are absolutely essential for an effective and logical functioning of the organization.

A brief explanation of the principles under this category is as follows:

(i) Principle of unity of objective:

Very simply stated, this principle requires that individual and departmental objectives throughout the enterprise must be perfectly harmonized; and that all objectives must be mutually supportive and collectively contributing to overall common objectives.

(ii) Principle of simplicity:

The observance of this principle requires that the management must, as far as possible, design a simple organizational structure. A simple structure facilitates a better understanding of superior- subordinate relationships; and provides background for better co-operation among people.

(iii) Principle of flexibility:
While designing the organizational structure, the management must provide for in-built devices within the structure itself; which would facilitate changes in the organizational structure to be effected as and when environmental factors-internal and/or external- so demand.

(II) Structural Principles:
Structural principles of organization relate to those aspects of the organization, which have a bearing on the structuring (or the development) of the organization; its fundamental design and shape.

Some of the important principles, in this context, might be the following ones:
(iv) Principle of division of work:
Since the total work of the enterprise cannot be performed by only one person; it is imperative that such work must be suitably divided among a number of persons. In fact, the total managerial work ought to be divided among a number of managers; and the total operational work being divided among a number of operating personnel.

(v) Principles of functional definition:
The above stated principle implies that the role (or job) of each individual and of each department of the enterprise must be suitably defined, in terms of the-work content, the authority and facilities required for job performance and the relationship of the job with those of others, in the enterprise.

(vi) Principle of optimum departmentation:
There are many ways and bases for creating departments within an organization. According to the principle of optimum departmentation, departments in an organization must be so created and maintained-as to facilitate the best attainment of the common objectives of the enterprise.

(vii) Principle of unity of direction:
The principle implies that each group of activities having the same objective must have only one overall head and only one overall or master plan.

As a principle of organization, this concept of unity of direction must be so embedded in designing the organizational structure that for each group of similar activities, there is a provision for only one overall head-having authority over all personnel performing the same function, anywhere, in the organization.

(viii) Span of management principle:

The span of management principle is variously called as- the span of control or the span of supervision. However, the phrase 'span of management' is the widest; including also the notions of span of control and span of supervision.

The span of management principle implies that there is a limit to the number of subordinates; whose work could be effectively managed (controlled or supervised) by a superior.

Points of comment:

Certain useful observations in the context of span of management principle could be made as under:

(a) There is a limit only to effective management; for ineffective or inefficient management, well, there is no limit. Hence, span of management principle is valid, only in the context of effective management. An example would illustrate the significance of this idea.

For example, in school or college class-room, the number of students must be limited; as no teacher, howsoever competent, could effectively impart learning to an indefinite number of pupils.

As against this situation, take the case of a public speaker who could well address a giant gathering of audience; for therein, it does not matter whether and how far the audience is receptive to the speech of the speaker or how effective is the process of communication between the speaker and the audience. In this latter case, span of management principle is neither valid nor applicable.

(b) What exactly is or must be the number of subordinate's less than one superior cannot be asserted with precision or certainty; as the span of management principle is situational. There is no hard and fast number of subordinates which would determine an optimum span of management under all managerial situations.

Among other factors, the competence of the superior and the abilities, skills and requirements of subordinate, are the most dominating factors- likely to determine span of management, in a particular managerial situation.

(c) Span of management principle explains the raison d'eter for the structure of the organization; in case otherwise, a single manager might be in a position to handle and manage the work of all the subordinates; and there would not be any need for a structured organizational structure.

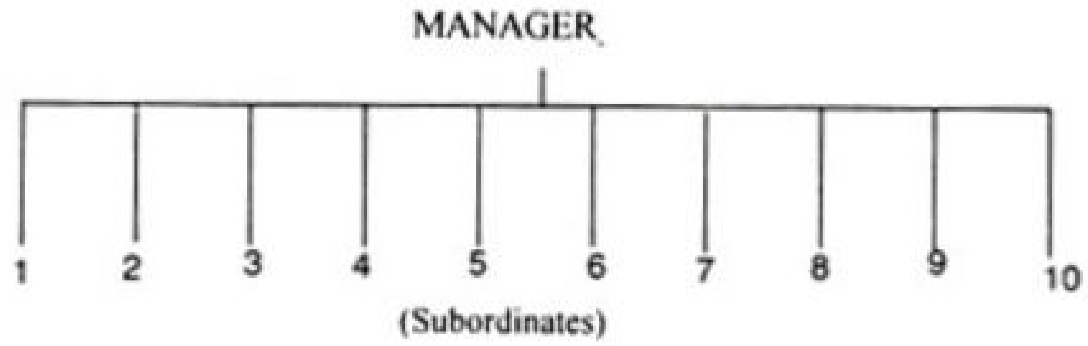
(d) Span of management principle has must to do with the shape of the organizational structure; i.e. whether it would be a tall or a flat-organisational structure. This is the notion implied behind the concepts of narrow vs. wide spans of management.

A narrow span of management is one where a superior can handle rather a smaller number of subordinates; while in a wide span of management, the number of subordinates is 'larger' than manageable under a narrow span of management.

Accordingly, a narrow span of management would result in a somewhat taller shape of the organization; and a wide span of management would lead to a comparatively 'flat' organization structure. Let us take a hypothetical example to illustrate how a 'tall' or a 'flat' organization structure would shape out-depending on whether it is a narrow or a wide span of management.

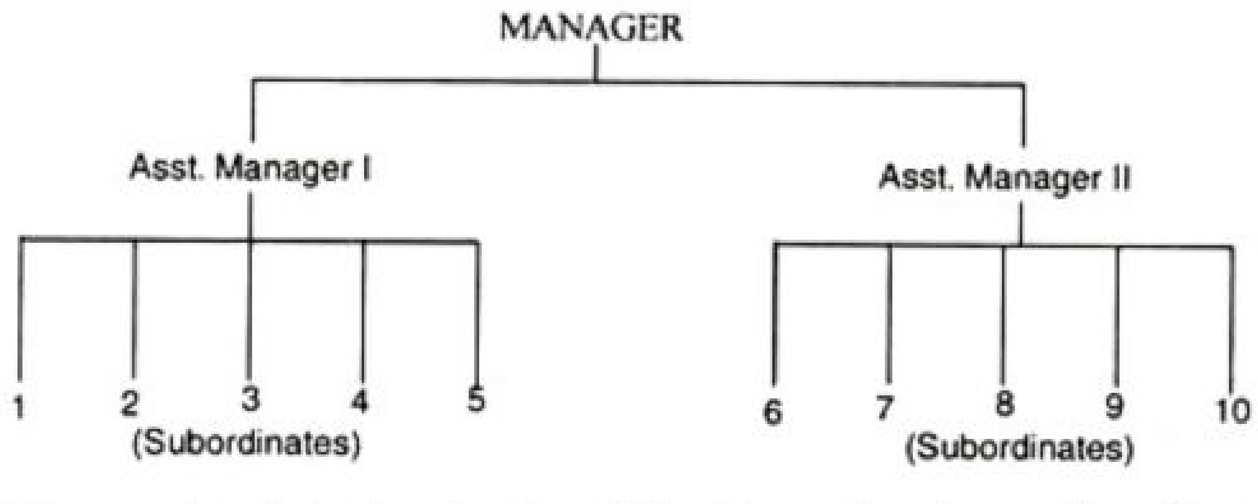
Suppose in an enterprise there are 10 subordinates to managed by the management. Further suppose the span of management is also 10. In this situation, only manager would be required to handle and manage the work of all the ten subordinates.

The organizational structure would appear as follows:



Now, suppose the span of management is only 5. In this case, the manager would be aided by two assistant managers; and controlling 10 subordinates via two assistants-each assistant manager managing the work of 5 subordinates.

The organizational structure in this case would look like somewhat taller than its counterpart under wide span; and will have more layers of the organization. The following chart illustrates this concept.



Without going into the details of the discussion, it would suffice to say that the shape of the organizational structure- tall or flat-has implications for organizational efficiency on grounds of costs of administration, effectiveness of communication and facilities in co-ordination.

(III) Operational Principles:

Operational principles of organization could be suggested to be those which have a bearing on the running or functioning of the organization.

Some important principles, under this category, are as follows:

(ix) Principle of adequate delegation:

By the principle of adequate delegation, we mean that each managerial position be provided with adequate (or necessary or requisite) authority-to enable the holder of the position i.e. the manager to cope successfully with the requirements of his job.

(x) Scalar chain principle:

Scalar chain implies a chain of superiors-ranging from the highest rank to the lowest rank-in an organization. The scalar chain forms the base of authority-responsibility relationships among managers and subordinates, in the organisation; thus promoting mutual understanding among superiors and subordinates at different levels of the organization.

As a principle of organization, scalar chain principle requires its incorporation into the design of the organisation, for ensuring smooth running of the enterprise life.

(xi) Principle of unity of command:

The above-sated principle implies that an employee must receive orders and instructions, only from one superior, at a time. The observance of this principle is desirable for reasons of removing doubts and confusions from the mind of the employees; and for facilitating exact fixation of responsibility on individuals for the results expected of them.

(xii) Authority-level principle:

The authority-level principle implies that managers at particular levels in the management hierarchy must decide only those matters which fall within the purview of the authority vested in their managerial positions.

A natural extension of this principle is that if a manager at any level of the management hierarchy comes across a matter not covered by his authority; the matter must either be referred upwards in the hierarchy or pushed down the hierarchy at the appropriate level for decision.

Importance (or Advantages) of Organisation:

The importance of organization could be highlighted by reference to the role it plays in the enterprise life, considered in the following analytical manner:

(i) Basic role of the organization

(ii) Other aspects of role

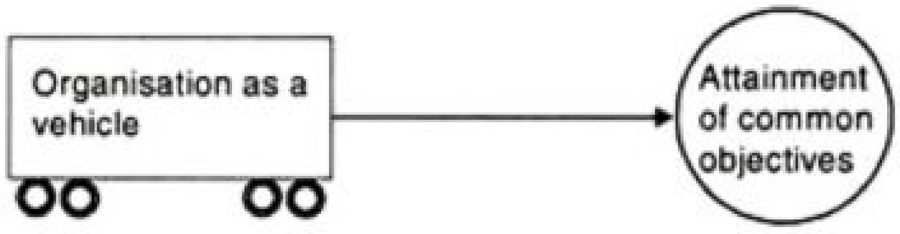
Let us consider the roles of the organization as planned above:

(i) Basic Role of the Organization:

The basic role of the organisation could be expressed by comparing it to a vehicle; which is devised and designed for the attainment of the enterprise objectives.

Just as with the help of a vehicle a person is enabled to reach up to his/her destination; in a similar manner, a group of persons (comprised in the enterprise) is made in a position to reach their destination i.e. the attainment of common objectives via the vehicle of the organisation.

In fact, for the attainment of enterprise objectives, action on the part of individuals, comprised in a group activity, is necessary; and undertaking such action is facilitated in a planned and systematic manager by the organizational structure, i.e. the organisation.



(II) Other Aspects of the Role:

Some important aspects of the role of the organisation could be stated as follows:

(i) Facilitates specialization:

An organisation exists basically to take care of and implement the division of work of various types-among managers, subordinates and operators. Such division of work, leading to specialization in various spheres, is instrumental in bringing about increased human efficiency in the organization functioning.

Point of comment:

Division of work, not only enables an enterprise to take advantages of specialization, in managerial and operational work; it also makes for order and system, in the functioning of the organisation.

(ii) Avoids omissions, overlapping and duplication of efforts:

While dividing work among departments and individuals, during the process of organizing, care is exercised by management to see that:

(a) No part of work, necessary for attainment of objectives, is lost sight of

(b) There is no overlapping or duplication of activities and efforts, while assigning work to individuals and departments.

That way, the organisation leads to an economical, effective and efficient functioning of the enterprise.

(iii) Defines (or clarifies) authority responsibility relationships:

An organizational structure defines and clarifies, authority responsibility relationships among managers and subordinates in the enterprise all through horizontally and vertically. Such clarification of authority responsibility relationships not only means a smooth functioning of the organizational life; but also promotes good human relations, in the organisation through facilitating mutual understanding of one another.

(iv) Facilitates staffing:

The organizational structure is a great aid to efficient staffing. It, by clearly defining various organizational positions-managerial and operational, not only points out to the need for appropriate personnel who must man these positions; but also specifies the requirements to be sought after in various personnel in terms of the abilities and skills needed to perform those jobs.

Point of comment:

A well-defined organizational structure facilitates personnel development, specially of managers, by allowing job-rotation system. Top management can resort to job-rotational technique, as the requirements of jobs defined in the structure indicate the possibility or otherwise for taking an appropriate decision on matters of shifting among different positions.

(v) Provides for co-ordination:

An organisation facilitates co-ordination; as the latter is provided for in the structure of organisation as an in-built device. Needless to say, that a well-designed and defined organizational structure provides for thorough co-ordination-horizontally and vertically; and enables management to relish the essence of manager-ship and take the enterprise to the heights of success.

(vi) Establishes channels of communication:

Communication among the personnel in the enterprise is not only the basis of the operational life of the organisation; but also is instrumental in fostering good human relations-through creating a base for mutual understanding. An organizational structure helps to establish various channels of communication; relating people to one another through the scalar chain and other organizational links.

But for the organisation, communication could only be casual, erratic and least authentic or there could be a situation of an absolute communication gap.

(vii) Facilitates 'Management by Exception':

Management by exception is a philosophy in which the top management would concentrate only on exceptional or critical matters (like strategy formulation, policy-making, controlling significant deviations in performance by personnel etc.); leaving the rest of routine and operational matters to subordinates throughout the enterprise.

Such a system of management i.e. management by exception could not be initiated and installed in the enterprise, just casually or all of a sudden; rather a sound organizational structure paves the Way and creates an environment for the introduction of this philosophy in a gradual and systematic manner.

As a matter of fact, management by exception is noting, but the highest state of decentralization of authority; and the latter could be provided for while designing and structuring the organisation.

(viii) Copes with environmental changes:
Environmental changes being reflected in conditions like-super fast changing technology, accentuating competition, emerging latest social and cultural values, extending State regulation of trade and industry etc. are well taken care of by a sound organisation.

The organisation could, of course, face such challenges by resorting to changes in the systems of management styles, reorganization of departments, providing facilities for research and development and effecting improvements in the operational life and undertaking other like measures.

(ix) Leads to growth and expansion:
A sound organisation leads an enterprise along growth lines. Growth and expansion of the enterprise, which is imperative even for survival in a highly dynamic economy is much facilitated by the organisation through- creating more departments, enlarging existing departments, widening span of management, providing for better and more effective co-ordination and communication devices and all this taking place within the existing system, structure and functioning of the enterprise.

(x) Produces synergism:
A sound organisation through ensuring effective integration of departmental functioning helps the enterprise to take advantage of the synergy feature of the business system. The more compact and responsible is the organizational structure; the more would be the advantages of the synergy effect.

Advantages of organisation – at a glance

1. Organisation as a vehicle for attainment of common objectives
2. Facilitates specialization
3. Avoids omissions, overlapping and duplication of efforts.
4. Defines authority responsibility relationships
5. Facilitates staffing
6. Provides for co-ordination
7. Establishes channels of communication
8. Facilitates management by exception
9. Copes with environmental changes
10. Leads to growth and expansion
11. Produces synergism.

Span of Control

Let us define the principle in the words of Nicholas Henry: "Span of control means that a manager can properly control only a limited number of subordinates, after a certain number is exceeded, communication of commands grows increasingly garbed and control becomes increasingly ineffective and loose". In other words, there is a limit to everything and in public administration an officer cannot control unlimited number of subordinates.

The concept was originally applied in military department and later on the members of scientific school- borrowing it from the military department-introduced it to public administration. Some administrationists believed that the management of an organisation could remarkably be improved by increasing the number of subordinates. But subsequently it was found that the idea or process was wrong. The authority could increase the number of subordinates but that failed to make any impact upon the improvement of the organisation.

After prolonged experimentation it was found that there was a limit to the span of control which means that an executive can never control the activities of unlimited employees. Peter Self argues, "The most specific of the principles of the "scientific" school was that the span of direct supervision should be limited" .It has been suggested that a chief executive can control at most six subordinates and if more employees are put under his supervision that will lead to chaos or mismanagement. It has been maintained that even an officer with high degree of efficiency and large amount of administrative knowledge cannot control large number of workers.

There are several factors that influence or determine the span Control in a particular organization, the most important of these are as follows:

1. The Capacity and Ability of the Executive:
The characteristics and abilities such as leadership, administrative capabilities, ability to communicate, to Judge, to listen, to guide and inspire, physical vigour etc. differ from person to person. A person having better abilities can manage effectively a large number of subordinates as compared to the one who has lesser capabilities.

2. Competence and Training of Subordinates:
Subordinates who are skilled, efficient, knowledgeable, trained and competent require less supervision, and therefore, the supervisor may have a wider span in such cases as compared to inexperienced and untrained subordinates who require greater supervision.

3. Nature of Work:

Nature and importance of work to be supervised is another factor that influences the span of supervision. The work involving routine, repetitive, unskilled and standardized operations will not call much attention and time on the part of the supervisor. As such, the supervisors at the lower levels of organization can supervise the work of a large number of subordinates. On the other hand, at higher levels of management, the work involves complex and a variety of Jobs and as such the number of subordinates that can be effectively managed should be limited to a lesser number.

4. Time Available for Supervision:

The capacity of a person to supervise and control a large number of persons is also limited on account of time available at his disposal to supervise them. The span of control would be generally narrow at the higher levels of management because top managers have to spend their major time on planning, organizing, directing and controlling and the time available at their disposal for supervision will be lesser. At lower levels of management, this span would obliviously be wide because they have to devote lesser time on such other activities.

5. Degree of Decentralization and Extent of Delegation:

If a manager clearly delegates authority to undertake a well- defined task, a well trained subordinate can do it with a minimum of supervisor's time and attention. As such, the span could be wide. On the contrary, "if the subordinate's task is not one he can do, or if it is not clearly defined, or if he does not have the authority to undertake it effectively, he will either fail to perform it or take a disproportionate amount of the manager's time in supervising and guiding his efforts."

6. Effectiveness of Communication System:

The span of supervision is also influenced by the effectiveness of the communication system in the organization. Faulty communication puts a heavy burden on manager's time and reduces the span of control. On the other hand, if the system of communication is effective, larger number of managerial levels will be preferred as the information can be transmitted easily. Further, a wide span is possible if a manager can communicate effectively.

7. Quality of Planning:

If plans and policies are clear and easily understandable, the task of supervision becomes easier and the span of management can be wider. Effective planning helps to reduce frequent calls on the superior for explanation, instructions and guidance and thereby saves in time available at the disposal of the supervisor enabling him to have a wider span. Ineffective plans, on the other hand, impose limits on the span of management.

8. Degree of Physical Dispersion:

If all persons to be supervised are located at the same place and within the direct supervision of the manager, he can supervise relatively more people as compared to the one who has to supervise people located at different places.

9. Assistance of Experts:

The span of supervision may be wide where the services of experts are available to the subordinate on various aspects of work. In case such services are not provided in the organization, the supervisor has to spend a lot of time in providing assistance to the workers himself and as such the span of control would be narrow.

10. Control Mechanism:

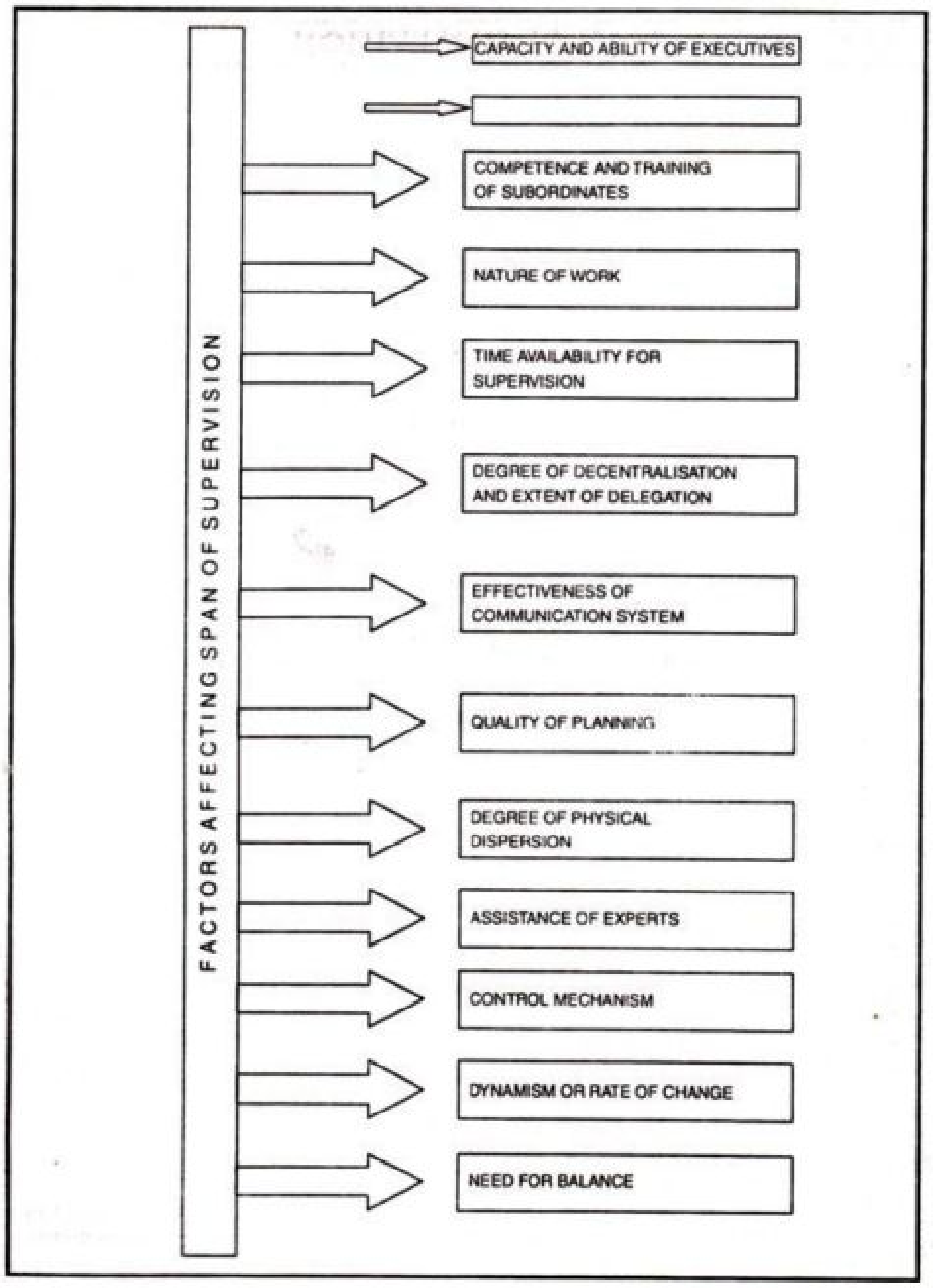
The control procedures followed in an organization also influence the span of control. The use of objective standards enables a supervisor 'management by exception' by providing quick information of deviations or variances. Control through personal supervision favours narrow span while control through objective standards and reports favour wider span.

11. Dynamism or Rate of Change:

Certain enterprises change much more rapidly than others. This rate of change determines the stability of policies and practices of an organization. The span of control tends to be narrow where the policies and practices do not remain stable.

12. Need for Balance:

According to Koontz and O 'Donnel, "There is a limit in each managerial position to the number of persons an individual can effectively manage, but the exact number in each case will vary in accordance with the effect of underlying variable and their impact on the time requirements of effective managing."



Decentralisation of Authority: Nature of decentralisation, degree of decentralisation, decentralisation as philosophy and policy.

Decentralisation of Authority: Definition and Meaning:
'Decentralisation of Authority' refers to the dispersal of authority for decision-making in various levels of organisational operations throughout the organisation.

In the words of Louis A. Allen:
"Decentralisation is the systematic effort to delegate to the lowest levels of authority except that which can be exercised at central points."
Decentralisation is actually an extension of the concept of delegation.

Delegation can take place from one superior to one subordinate and is a complete process, but decentralisation takes place only when the fullest possible delegation or distribution of authority is made to all—or most of the people in the organisation—in respect of the specific function, activity or responsibility.

It is, however, to be remembered that decentralisation does not necessarily mean distribution of authority in respect of all activities.

One function may be decentralized and another stay centralised.

For example, in an automobile manufacturing concern, the sales function may be distributed or decentralised to product division, while labour relations may remain centralised. The extent to which decentralisation exists in any organisation depends on the extent to which clear-cut decision-making authority is vested in levels below the top management level.

Therefore, when delegation is widespread and authority is delegated to lower levels of management, to all, or most of the people who are entrusted with responsibilities, decentralisation of authority takes place.

On the other hand, when delegation is restricted to the top level of management, and the subordinates are simply to implement the decisions taken at the top level, the authority is said to be centralised to that extent.

Decentralisation is a question of degree. It is not what is delegated but how much is delegated. Henry Fayol pointed out **"everything that goes to increase the importance of the subordinate's role is decentralisation, everything which goes to reduce it is centralisation."**

However, there cannot be any absolute centralisation or absolute decentralisation in an organisation. Absolute centralisation is possible if there is one person with absolute authority and there is no other subordinate manager under him that means there is no structured organisation.

Similarly, there is no absolute decentralisation. Actually centralisation and decentralisation are inclinations, tendencies or bents towards reservation of authority in varied degrees. In an organisation, authority may be centralised, but some amount of decentralisation also becomes necessary.

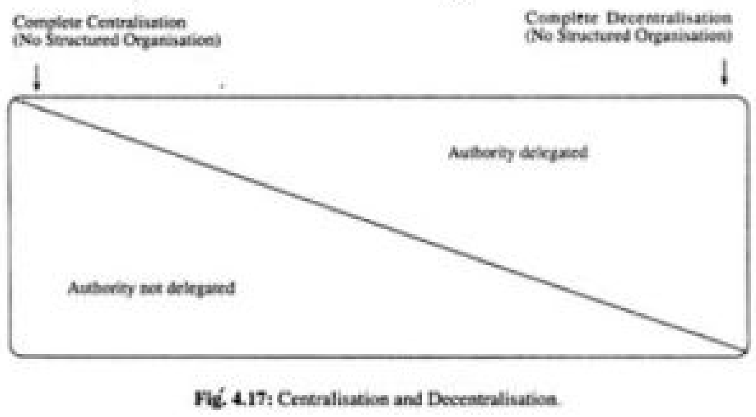


Fig. 4.17: Centralisation and Decentralisation.

Importance of Decentralisation of Authority:

Decentralisation is useful basically to large organisations with multiple products or operating in different geographical locations. Decentralisation becomes inevitable in an industry with every growth in size.

Its importance may be noted as follows:

1. Relief to the Top Executives:

Diminishing the work-load of the senior executives who are already over-burdened, decentralisation helps to reduce the volume of their routine affairs. They can devote greater time and attention to important policy matters by decentralizing authority for routine operational decisions.

2. Motivation of the Subordinates:

Decentralisation motivates the lower level managers by increasing their chances of recognition, improving their status and offering them a feeling of accomplishment. The facility to make decision and function independently activates strong drives among the individuals and, thus, results in increased productivity.

3. Improvement of Work Performance:

The operating decisions in a decentralised setting tend to be of higher quality. Decisions will be more appropriate, timely and quick because they are made nearest to the points of the problem, information and actions. Decisions will also be democratic and acceptable as these are made by the people who are responsible for implementing them.

4. Promotion of the Subordinate's Morale:

Decentralisation tends to promote the subordinate's morale due to relative equalisation of power and authority at all levels of the organisation, scope for participating in problem identification, decision-making and implementation, increased job satisfaction, and reduced gap between problems and decisions, and also between decisions and actions.

5. Increasing Flexibility:

Decentralisation is a structural strategy to manage organisational growth and diversification and to cope with the complexity, uncertainty and volatility of the external environment.

Advantages of Decentralisation:

The advantages of decentralisation may be listed as follows:

1. Increasing Efficiency of Management:

Decentralisation reduces the burden of the top executives, relieves them of the anxiety of details, allows them to concentrate on other important tasks of planning, co-ordination and controlling etc. and increases overall efficiency of the management.

2. Facilitating Diversification of Activities:
Decentralisation facilitates the growth and diversification of product lines. As one single product or a group of related products is made the basis for creating divisions, all important features like present position, future prospects and comparative efficiency of each product can be readily ascertained.

3. Minimisation of Risk:
Decentralisation not only spreads over decision-making authority among various executives of middle and lower level management but also facilitates the availability of the benefits of expert advice of the specialists and thus helps the business in minimising possibilities of loss.

4. Ensuring Quick Performance:
The close contact and consequent greater understanding between the managers and the managed can cope successfully with constant business changes. Thus, it provides a dynamic character to the business and ensures quick decision and prompt action.

5. Developing Future Executives:
When authority is decentralised, the subordinates get the opportunity of exercising their own judgement. They learn how to decide and develop managerial skills. Thus, decentralisation provides a better means of developing future managers and executives.

This is probably the most important benefit, particularly in our country where shortage of competent managers is the major limiting factor of the rapid growth of our economy and principal industries.

6. Motivating the Subordinates for Better Performance:
By consistent and adequate delegation of managerial work, the organisation structure promotes individual initiative and mutual understanding and motivates the subordinates for higher performance.

7. Improvement of Morale:
Decentralisation stimulates the formation of small cohesive groups. Since local managers are given a large degree of authority, they weld their people into well-knit groups. With high degree of participation, constant effort to communicate, and continuous interest in the welfare of the members of the group, they are able to secure a high degree of morale among the subordinates.

Disadvantages of Decentralisation:
Decentralisation offers marked benefits and no large organisation can hope to sustain without it. In spite of that, there are many disadvantages or limitations in decentralization process.

Some of the major problems of decentralisation are noted below:

1. Problem of Co-ordination:
Decentralisation calls for a high degree of differentiation of functions and tasks. The top management authority may find it difficult to co-ordinate the diverse goals, functions and activities of different autonomous decision-making units or divisions.

The executives may develop narrow outlook and sectional interests may overshadow the organisational goals. Therefore, maintaining co-ordination among the departments becomes more difficult.

2. Lack of Uniformity:
Decentralisation may lead to inconsistencies in the organisation when uniform procedures are not followed by various departments. Each department may formulate its own policies and procedures.

3. Costly and Uneconomical:
Decentralisation tends to increase the cost of operation of the enterprise. It involves duplication of procedure, equipment and services as there are autonomous and self-sufficient units or departments in terms of physical facilities and trained personnel.

4. Delay in Decision-making:
Decentralisation becomes an important handicap in case of quick emergency decisions. Some executives do not like to share the responsibility of decision-making.

5. Limitation of Scale:
To bring about decentralisation it is necessary to create departments and divisions. This is possible only when an enterprise is large enough and tends itself to departmentation and divisionalisation. Thus, small organisations do not have much scope for decentralisation.

Basic Principles of Decentralisation:

The basic principles of decentralisation may be stated as follows:

1. Proximity of Decision-making Points:
All schemes of decentralisation must aim at providing for the proximity of the decision-making points nearer to the place of action.

2. Real Delegation of Authority:
Successful and proper decentralisation demands full and real delegation of authority. Reporting or checking of details before arriving at decisions by the subordinates will make decentralization ineffective.

3. Confidence in the Subordinates:
The superiors must place full confidence in the abilities of the subordinates in taking correct decisions at the right time without interfering in their day-to-day functioning.

4. Conciliation between Line and Staff Personnel:

Staff Personnel, with their experience and talent, must advise and encourage the inexperienced Line Operators so that correct decisions may be taken by them.

5. Parity of Responsibility and Authority:

In order to make decentralisation effective and successful, the subordinate must shoulder responsibility commensurate with the authority which is exercised by him.

6. Conviction about the Superiority of Decentralised Decision:

The top managers must be convinced that the aggregate of many individuals' decision will always be better and superior in the general interest than the centrally planned and controlled decisions.

7. Result-oriented Personnel Policies:

Result of personnel policies must be capable of being measured and compared with the standards already laid down. There should be arrangements for offering reward or inflicting penalty, respectively, in respect of the success or failure of these personnel policies.

Factors Determining the Degree of Decentralisation:

The degree and nature of decentralisation are generally influenced by the following factors:

1. Size of the Organisation:

Decentralisation depends on the size of the organisation. The larger the size of the concern, the greater shall be the number of decisions and the need for decentralisation of authority.

2. History of the Enterprise:

Decentralisation of authority depends on the way the organisation has been built up over the period of time. Organisations built under the direction of the owner-founders are likely to show a marked tendency to minimise decentralisation. On the contrary, the enterprises created through combination, amalgamation or merger tends to be more decentralised.

3. Outlook of the Top Managers:

The character and philosophy of the top level managers have considerable influence on the extent to which authority is decentralised. When the top executives believe in individual freedom, there will be a high degree of decentralisation. But if the top managers is conservative and prefers centralised control, there is likely to be centralisation of authority.

4. Availability of Competent Managers:

Availability of qualified managers directly affects the degree of decentralisation, because the exercise of authority requires competence on the part of those who exercise authority. When the managers at lower levels are able and experienced there is more chance for decentralisation. Lack of trained executives restricts decentralisation.

5. Dispersal of Operations:

Authority tends to be decentralised when the operations of the organisation are dispersed over different territories. Geographical dispersion of activities makes communication difficult under centralised decision-making. For example, the activities of banking, insurance and transport organisations have to be decentralised.

6. Uniformity of Policy:

Decentralisation will tend to be limited in all those cases where uniformity of policy is of a critical importance to the business such as policy of fixation of wages or prices or public relations, etc.

7. Control Techniques:

Poor control techniques or inefficient business systems tend to encourage centralisation. Effective techniques to control the work of the subordinates, well-established systems and procedures, improvement in accounting techniques enable greater decentralisation in bigger concerns.

8. Importance of Decision:

Greater the impact of a decision on the success and survival of the enterprise, higher is the degree of centralisation. Vital and crucial decisions involving investment of huge capital funds are taken at the top level, because top officials are better trained and more experienced and, hence, the authority is not decentralised.

9. Rate of Change in the Organisation:

The rate of change in the organisation also affects the degree to which authority may be decentralised. If the business is fast developing and it is facing problems of expansion, there is more chance that authority will be decentralised. As against this, in old and, well-established or slow-moving organisations, there is a natural tendency to centralize authority.

10. Environmental Influence:

External factors like government policies, trade union activities, tax policies etc. also have significant influence on the degree of decentralisation. Many of the problems of industry such as labour disputes, price fixation, etc. are to be tackled at the top level of management, thus encouraging centralisation rather than decentralisation.

Delegation of authority: Meaning of authority/delegation, steps in the process of delegation, factors determining the degree of delegation, art of delegation.

Delegation of Authority is an important step in organising. It means granting of authority by the superior manager to his subordinates in order to accomplish particular assignments.

When the work of an executive increases so much in volume that he cannot cope with it, he has to divide it among his subordinates.

This process of dividing the work with others and giving them authority to do it is referred to as 'Delegation'.

So, Delegation may be defined as the process of entrusting some part of the work of operations or management to others; thus sharing one's responsibilities with others. It involves granting the right to decision-making in certain defined areas and charging the subordinates with responsibility for carrying out the assigned tasks.

In the words of N. R. Spriegel:

"Delegation is the act of conferring authority by higher source of authority."

The process of dividing up the work of an enterprise among people creates a number of jobs or positions for both the managers and the operators. Organisation being a mechanism to provide for integrated and co-operative action, all managerial and operating jobs are to be tied together in a consistent manner. Delegation is the element that holds the jobs or positions together.

The chief executive of an enterprise cannot personally manage all the activities.

Obviously, for the individual departments, there must be departmental managers and, for the divided sections of a particular department, there should exist sectional managers. These departmental and sectional managers derive their authority from the chief executive.

The chief executive delegates a part of his authority to different subordinates for enabling them to discharge the work responsibilities or duties in all areas of the business.

In delegating authority, the chief executive retains some reserved authority for his own performance as well as the power of demanding accountability from the subordinates for ensuring satisfactory performance on their part. This accountability can never be delegated by a manager to his subordinates.

Thus, delegation is the means by which a manager can share his duties with his immediate subordinates who, in turn, delegate to their subordinates, and the process is continued until managerial work reaches the supervisors at the lowest level of management and operating work is assumed by the workers.

By means of delegation, the manager extends his area of operation. Delegation enables the managers to distribute their load of work to others—thus leaving them free to concentrate on the other important functions of management. Besides, it influences the relationship between the subordinate and his superior and the performance of the subordinate.

Features of Delegation of Authority:

Delegation of authority has the following features or characteristics:

1. Delegation is authorization to a manager to act in a certain manner. The degree of delegation prescribes the limits within which a manager has to decide the things. Since the formal authority originates at the top level, it is distributed throughout the organisation through delegation and re-delegation.

2. Delegation has dual characteristics. As a result of delegation, a subordinate employee receives authority from his superior, but, at the same time, his superior still retains all his original authority. George Terry comments on this concept: **"It is something like imparting knowledge. You share with others who then possess the knowledge, but you still retain the knowledge too."** Delegation does not imply reduction in the authority of a manager.

3. Delegation does not mean a manager loses control and power. Authority once delegated can be enhanced, reduced or withdrawn depending on the situation or requirement. For example, change in the organisation structure, policy, procedure, methods etc. may require change in the degree of delegation of authority.

4. A manager delegates authority out of the authority vested in him. He cannot delegate which he himself does not possess. Moreover, he does not delegate his full authority to his subordinates, because if he delegates all his authority, he passes his position to the subordinates.

5. Delegation of authority is always made to the position created through the process of organising. The individual occupying a position may exercise the authority so long as he holds the position. Therefore, the authority is recovered fully from the individual when he moves from the particular position.

6. The extent of authority to be delegated depends upon several factors, like the ability and willingness of the executive to delegate, the ability of the subordinates to accept delegation, the confidence of the superior in his subordinates, the philosophy of management, etc.

7. Delegation of authority may be specific or general. It is specified when the courses of action for particular objectives are specified. It is general when these are not specified, though objectives may be specified.

Necessity of Delegation of Authority:

Delegation of authority is the most essential requirement for successful management. It is the key to organisation and a cementing force for binding the formal organisation together. In a big concern, due to its complexities, delegation is a must.

It is not possible and practicable for a chief executive to manage and control everything. In spite of the fact that the ultimate responsibilities rest on him, he delegates some of his activities and authority to many of his subordinates.

The delegation of authority arises from the natural limitations of the human being. As the organisation grows up or becomes more complex, a point may be reached at which the single manager is no longer able to cope with the full load of responsibilities.

He finds that neither time nor his own capacity and knowledge permits him to give adequate attention to the proper utilisation of human and material factors upon which effective management is based. This is the reason that gives rise to the need for delegation.

Apart from physical limitation the need for delegation arises in a big complex organisation for securing expert's services. It is also not practicable for a chief executive to give specialist's advice on every matter. He may have time and energy but he may not have the skill.

A business has different kinds of jobs, some of which may require specialist persons for their accomplishment. The top executive delegates these responsibilities to the experts, viz., secretary, accountant, and legal adviser. Moreover, for a business with branches situated at different places, there is no alternative to delegation.

Delegation also ensures continuity in business because the managers at lower levels are enabled to acquire valuable experience in decision-making. They get an opportunity to develop their abilities and gain enough competence to fill higher positions in case of need.

Process or Elements of Delegation:

The process of delegation involves the following three essential elements:

1. Assignment of Duties:

As one manager cannot perform all the tasks, he must allocate a part of his work to the subordinates. The sharing of duties between a manager and his subordinates can only be done when the work is divided into parts. In delegating duties, the manager has to decide what part of the work he will keep for himself and what parts should be transferred to his subordinates.

Defining the work of the subordinates by their superior manager is known as assignment of duties. It also covers defining of the results expected from the subordinates. The manager may assign various duties in terms of goals, functions or results.

Duties may also be assigned in terms of job description. Expressing the duties in terms of goals will probably result in more effective delegation, because it provides mental satisfaction to the subordinates of being involved in fulfilling a mission through the performance of certain allotted activities. Duties should be allocated according to the qualification, experience and aptitude of the subordinates.

2. Granting of Authority:

If the delegated duties are to be discharged by the subordinates, they must be granted requisite authority for enabling them to perform such duties. Assignment of duties is meaningless unless adequate authority is given to the subordinates. The same rights and powers as would have been necessary on the part of a manager for his self-performance are to be conferred upon his subordinates.

In the process of delegating authority, the executive gives power or permission to the subordinate to use certain rights— such as the right to spend money, to direct the work of other people, to use raw materials and other property, or to represent the organisation to outsiders. Effective delegation, however, requires that the limits of authority should be made clear to each subordinate.

The superior and the subordinate should clearly understand the subordinate's right to act, to request others to act, and to maintain discipline. The superior can delegate only that for which he has the authority and power to perform. He, however, does not give away the total authority; he only delegates a part of it, retaining the ultimate authority and responsibility to himself.

3. Creation of Obligation or Accountability for Performance:

The last step in the process of delegation of authority is the creation of moral compulsion or obligation on the part of the subordinates for the satisfactory performance of their duties. The subordinates to whom authority is delegated must be made answerable for the proper performance of the assigned duties and for the exercise of delegated authority.

The creation of obligation is—in real sense—assumption of responsibility by the subordinates. By accepting an assignment (i.e. a delegated task), a subordinate, in effect, gives his promises to do his best in carrying out his duties. His obligation to do the task assigned makes him accountable to the delegator for discharge of his duties.

As the manager himself remains ever accountable to his superior for the satisfactory performance of the work, he has to exercise control over the performance of his subordinates. This control is exercised through demanding accountability from the subordinates. Duty and authority can be delegated by a manager to his subordinates, but accountability flows from subordinates to the superior in an upward direction.

The process of delegation is shown in the following diagram:

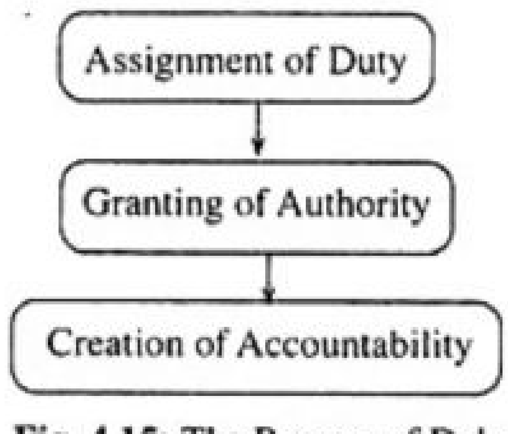


Fig. 4.15: The Process of Delegation.

Benefits of Delegation of Authority:

Delegation provides the following advantages:

1. Basis of Effective Functioning:

Delegation lays down the basis of effective functioning of an organisation. By establishing structural relationships throughout the organisation, delegation helps in securing co-ordination of various activities for accomplishing the enterprise objectives.

2. Reduction in Work-Burden of the Chief Executive:

Delegation reduces the executive burden by way of relieving the superior of the need to attend to minor or routine duties. It, thus, enables him to devote greater attention and effort towards broader and more important responsibilities.

3. Benefits of Specialised Service:

Delegation enables the manager to utilise the specialised knowledge and experience of the persons at lower levels.

4. Efficient Running of Branches:

In the modern world, where a business rarely confines its activities to a single place, only delegation can provide the key to smooth and efficient running of the various branches of the business at places far and near.

5. Aid to Expansion and Diversification of Business:

As delegation provides the means of extending and multiplying the limited capacity of the superior, it is instrumental for encouraging expansion and diversification of the business.

6. Aid to Employee Development:

Delegation permits the subordinates to enlarge their jobs, to develop their capacity and to broaden their understanding. By forcing the subordinates to assume greater responsibilities and to make important decisions, the superior insists on the development of subordinates executive talents. Delegation improves the morale of the subordinates by way of raising their status and importance in the organisation.

Difficulties and Problems in Delegation of Authority:

Delegation is apparently a simple process, but, in practice, certain difficulties and problems generally crop up to hamper this process. This is often partly on account of the superior manager's attitude towards delegating authority and partly due to the subordinate's hesitation in accepting delegation.

These difficulties or obstacles in the way of proper delegation may be summarised as follows:

(A) Reluctance on the Part of the Executives:

A superior manager is likely to delegate less authority in the following situations:

1. Superiority complex:

Some executives tend to feel that they can do the job better themselves, and, for this reason, they do not delegate their authority. They consider themselves indispensable—neither they respect the ideas of others nor do they give the subordinates a chance to prove their merit.

2. Maintenance of tight control:

A manager does not delegate authority because he wants to maintain tight control over the operation assigned to him.

3. Lack of confidence in the subordinates:

A manager may not delegate authority because he feels that his subordinates are not capable and reliable. He lacks confidence in his subordinates. If delegation is not made, the future manager has no opportunity to gain experience. Confidence is built up gradually and on the basis of success.

4. Lack of ability to direct:

Many managers have difficulty in giving suitable directions to guide the efforts of the subordinates. Sometimes the boss may like to delegate authority but may not be able to do it effectively due to his inability to identify, interpret and communicate the essential features of his plans. So, an executive who lacks ability to direct cannot delegate.

5. Absence of control techniques that warn of coming troubles:

In the cases where the executive in charge of operations has practically no means of knowing serious difficulties in the working of the organisation in advance, he may hesitate in delegating authority.

6. Conservative and cautious temperament:

A conservative and over-cautious manager will never like to take any risk. Since delegation of the task to a subordinate involves some elements of chance or risk, the executive may hesitate to delegate anything to anyone.

7. Fear of exposure:

A superior manager, specially an incompetent one, may not like to delegate simply because adequate delegation may reveal his weakness and shortcomings. This may happen specially when the superior has poor operating procedures, methods and practices. He feels that delegation may undermine his influence and prestige in the organisation. He keeps all the authority to himself for fear of being exposed.

8. Fear of the subordinates:

A manager may not delegate adequate authority because of his fears of the subordinates. The fear of a subordinate's growth may be real. It can take two forms. First, the subordinate might show that he can perform the superior's work so well that he becomes entitled to the manager's position, status or prestige.
Second, the subordinate's increasing ability might earn him a promotion to some other part of the organisation and the superior may lose his best subordinate. In this case, the superior may adopt a defensive behaviour. He simply fails to delegate the kind of authority that would have such a result.

9. Love for authority:
A superior may not delegate his authority specially if he is an autocrat. Such a manager has intense desire to dominate others, to make his importance felt in the organisation, and to see that his subordinates come frequently for approval. He thinks that delegation will lead to reduction of his influence in the organisation.

(B) Reluctance on the Part of the Subordinates:
The subordinates may not always like to accept delegation and shoulder responsibility.
A subordinate may shrink from accepting authority for the following reasons:

1. Dependence on the boss for decisions:
If a subordinate finds it easier to depend upon his boss for taking decisions while tackling problems, he may avoid accepting authority even when his boss is ready to delegate it,

2. Fear of criticism:
The subordinates sometimes fear criticism on the part of their superiors. This fear is often justified. In fact, some superiors tend to criticize any action taken by a subordinate and even a small genuine mistake. This discourages initiative, causes resentment, and destroys a subordinate's self-confidence.

3. Lack of information or resources:
A subordinate will generally be unwilling to accept authority when adequate information, working facilities, and resources required for the proper performance of a task are not available.

4. Lack of self-confidence and fear of failure:
A subordinate who does not possess self-confidence will generally try to shirk responsibility even though the executive is prepared to delegate. Such subordinates often feel that they will fail, and so, do not want additional responsibilities through delegation.

5. Inadequacy of positive incentive:

A subordinate hesitates in accepting more work delegated to him by the boss if he does not get sufficient positive incentives in the form of recognition, credit, and other rewards.

6. Over-work:

When the subordinates are already over-burdened with duties, they may avoid delegation because they feel that they will not be able to do an additional task along with those which they presently have been assigned. This may be a perfectly legitimate reason.

Fig. 4.16: Difficulties in Delegation.

Basic Principles of Delegation of Authority:

Delegation, to be effective, must be governed by certain working rules or principles.

The following rules or principles are fundamental in relation to delegation of authority:

1. Functional Definition:

Before delegating authority, a manager should define clearly the functions to be performed by the subordinates. The objectives of each job, the activities involved in it, and its relationship with other jobs should be clearly defined.

2. Delegation by Result Expected:

Authority should be delegated to a position according to the results expected from that position. Duties of the subordinates become clear to them only when they understand what activities they must undertake and what results they must show. By spelling out the duties in terms of goals or expected results, advance notice is to be given to the subordinates as to the criteria on which their performance will be judged.

3. Clarity of Lines of Authority:

Each position in the organisation is linked with others through authority relationships, some directly through line authority, others indirectly. More clearly these lines of authority are defined more effective is the delegation of authority. A clear understanding of the lines of authority is needed for smooth functioning of the organisation. Everyone must know from whom he gets authority and to whom his authority must be referred.

4. Level of Authority:

It implies delegation of decision-making authority to the competent managers at some level. The superior is not expected to interfere with the decision-making process which is, by delegation, within the competence of the subordinate manager at the lower organisation levels concerned.

5. Absoluteness of Responsibility:

Responsibility cannot be delegated. An executive cannot free himself from his own obligations to his superior by delegating duties. In fact, by delegating authority he increases his responsibility as he will be now accountable to his superior for the acts of his subordinates also. The ultimate responsibility for the accomplishment of the task is his, even though it has been assigned to his subordinates.

6. Parity of Authority and Responsibility:

A subordinate should be given necessary authority to perform his assigned duties. Authority must correspond to perform his responsibility. There must be a proper balance between authority and responsibility of a subordinate. It is unfair to hold a person responsible for something over which he has no authority.

Responsibility without authority will make a subordinate ineffective as he cannot discharge his duties. Similarly, authority without responsibility will make the subordinate irresponsible. Therefore, authority and responsibility should be co-extensive.

7. Motivation:

It should be the policy of the managers to provide material and psychological incentives to the subordinates so that they spontaneously accept the delegated responsibility and duty and exercise the authority delegated to them. Higher wages, bonus, promotion to better positions, greater recognition and prestige etc. may have a stimulating effect for productive performance of duties.

A number of factors influence the decision about delegation. Some of these are discussed as follows:

1. Company's History:

The history of the company influences the degree of delegation. A company grown over a period of time has a tendency to centralize powers. When a concern is small then most of the decision-making is done by the owner. With the growth of business, the tendency to centralize powers remains. On the other hand if a concern is the outcome of a merger, amalgamation or combination there may be a great amount of decentralization. If a company is working on a decentralized pattern it will be run in the same way even on its acquisition. So the growth history a concern influences the degree of delegation.

2. Availability of Capable Persons:

The element of delegation is linked to the availability of subordinate managers. If sufficient persons are available who can take responsibility then delegation can easily be done. Generally, managers complain that sufficient subordinate managers are not available who can be assigned important duties. Unless subordinates are delegated the powers they will not learn the art of management. With additional experience and training their judgment would be improved and they will become more capable subordinates.

Many large firms push decision-making to the lower ranks of the organization for the purpose of developing and training managerial manpower. A subordinate may be given small powers in the beginning. As he develops his managerial capabilities he can be assigned more important work. One thing should be clear that unless otherwise powers are delegated to lower levels, the concern will not be able to develop subordinate managers. The delegation process should be continually pursued so that people are trained to undertake more responsibilities.

3. Importance and Costliness of Decisions:

The importance and costliness of decisions greatly influences the degree of delegation. Generally speaking, the costlier and more important the decision, the greater the probability of its being made at the upper level of the managerial hierarchy. Decision-making also requires various facts and figures about the issue. A manager will ensure that he gets all required information for deciding the issue. This type of information is easily available at higher levels of management.

A manager knows that he can delegate authority and not responsibility. Some decisions can influence the whole organization. Any wrong decision on such important matters can damage the enterprise beyond control. Such decisions are taken at higher level because these persons have the past experience of deciding such things. In a manager's career he should first be given authority to take decisions which are not too costly so that he is able to learn from his experience.

4. Size of the Enterprise:

The extent of delegation is linked to the size of the enterprise. In a large unit more decision making is needed at various levels of management. The problems of communication and co-ordination often arise in such units. If decision-making is closer to the place of action it will save time, paper work is reduced, misunderstandings in communication can largely be eliminated. There is a tendency to decentralize in big units for avoiding many difficulties.

5. Available Controls:

A manager delegating authority wants to be sure that it is used in accordance with his intentions and the general objectives of the organization. In order to achieve this there must be control devices. Generally, managers hesitate to delegate due to the reason that they do not know how to control. They have a feeling that it takes more time to exercise control than exercising the authority themselves. It will be better to set up some control devices. The better the control devices, the more will be the delegation of authority.

6. Types of Enterprise:

The degree of delegation of authority may also be influenced by the type of enterprise. If the enterprise is in an industry which is rapidly expanding, as in the electronic field, top management will have to delegate otherwise it will be over burdened with many decisions. Decentralization of authority will take place even if the subordinate managers do not have adequate experience to exercise authority. Management should make guidelines for subordinate managers for taking proper decision.

If the enterprise operates in a static industry then all decision-making is done at the central level. In case of banking and insurance the growth is slow and decision making remains at the top. So delegation of authority depends upon the nature of the enterprise.

7. Environmental Factors:

In addition to internal factors delegation may be influenced by internal factors too. These factors may be natural unions, government control over business and tax policies. Some large concerns have to deal with workers' unions at national level. All the negotiations are done and decisions are taken at national level. In such a situation the things are decided at head quarter level and are applicable at all levels. It, therefore, follows that within the area of labour relations, decision-making is decentralized. The same holds true as applied to government control over business, and tax laws.

Line/staff organization: Line organization, staff organization, line and staff organization, functional and committee organization, the nature of line and staff relationship.

Forms of Organisational Structure: Line , Functional, and Line and Staff Organisation (with respective advantages and disadvantages)

The adoption of a particular form of organisational structure largely depends upon the nature, scale and size of the business. The organisational structure is primarily concerned with the allocation of activities or tasks and delegation of authority.

1. Line Organisation:

Line organisation is the simplest and the oldest type of organisation. It is also known as scalar organisation or military type of organisation. In the words of J.M. Lundy, "It is characterized by direct lines of authority flowing from the top to the bottom of the organizational hierarchy and lines of responsibility flowing in an opposite but equally direct manner."

An important characteristic of such type of organisation is superior-subordinate relationship. Superior delegates authority to another subordinate and so on, forming a line from the very top to the bottom of the organisation structure. The line of authority so established is referred as "line authority." Under this type of organisation authority flows downwards, responsibility moves upwards in a straight line. Scalar principle and unity of command are strictly followed in line organisation.

This type of organisation resembles with the army administration or military type of organisation. As in case of military, commander-in-chief holds the top most position and has the entire control over the army of the country, which in turn is developed into main area commands under major-generals.

Each area has brigade under brigadier-generals, each brigade is fabricated into regiments under its colonels, each regiment into battalions under majors, each battalion into companies under captains, each company sub-divided under its lieutenants and so on drawn to corporal with his squad.

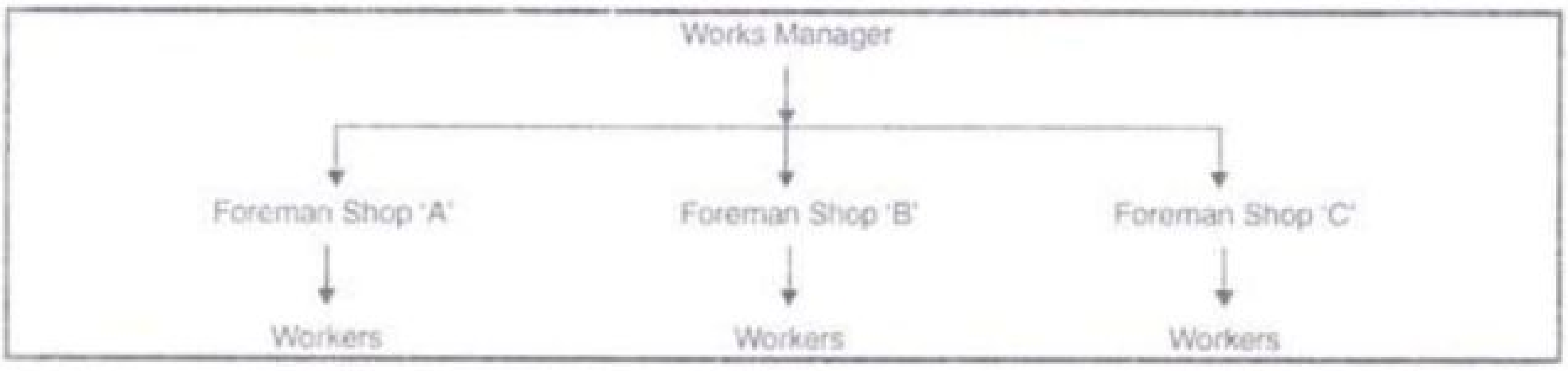
Types of line organization:

Line organisation is of two type's viz. (a) Simple or Pure Line Organisation (b) Departmental Line Organisation

(a) Simple or Pure Line Organisation:

In the 'Pure Line organisation' the activities (at any level of management) are the same with each man performing the same type of work and the divisions primarily exist for the purpose of control and direction. In practice, such type of organisation rarely exists.

The following diagram shows the pure line organisation:



In this type of organisation all the workers perform the same type of work. The departmental divisions are made only for the sake of convenience of supervision and management.

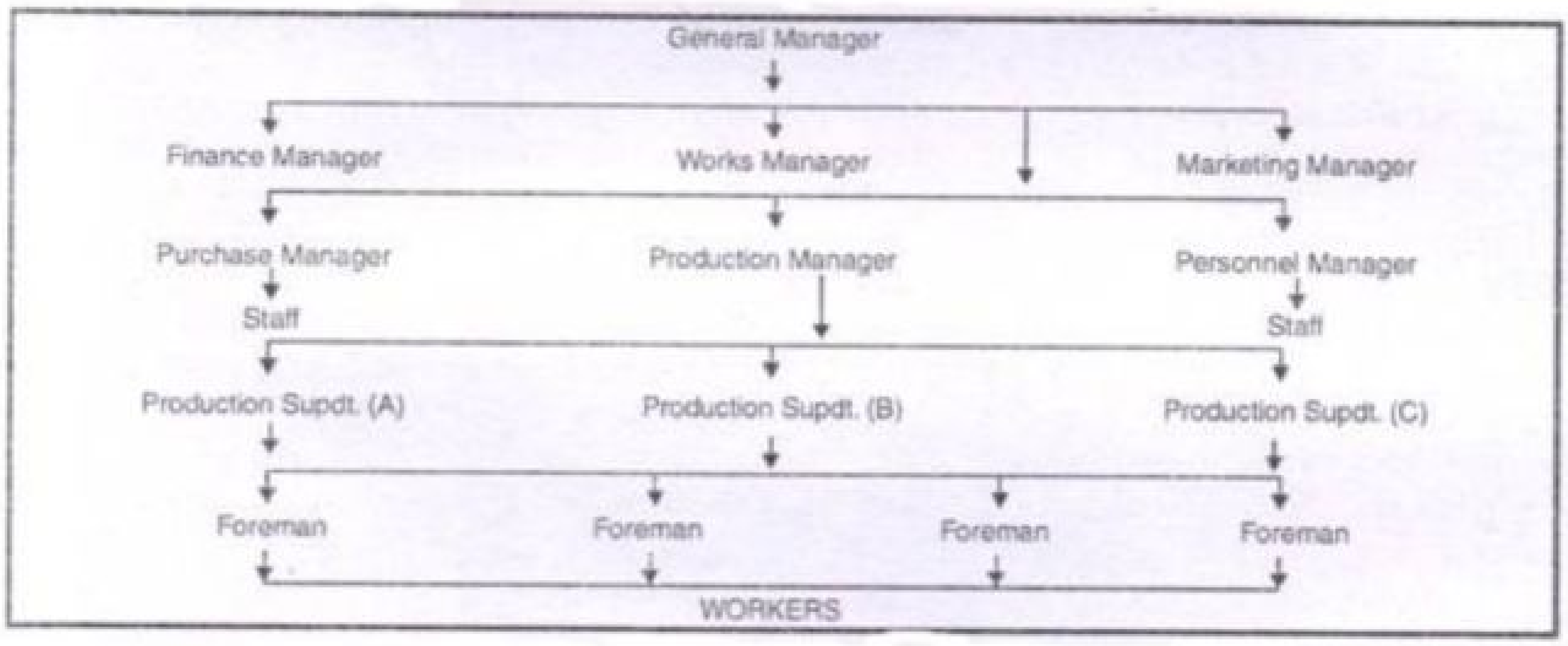
(b) Departmental line organisation:

Under this type of organisation, an organisation is divided into various departments headed by different departmental heads. All the departments operate under the ultimate control of general manager. The orders flow directly from the general manager to all the departmental heads that in turn pass on to their respective subordinates.

Likewise, the subordinates, in turn, communicate the orders to the workers under them. The various departmental heads will be perfectly independent of each other and they will enjoy equal status the central idea, in the formation of such departments is not similarly or dis-similarity of functions or activities, but unity of control and line authority and responsibility from the top of the organisation to the bottom.

Suitability of line organization:

The line organisation can be successfully followed where (a) scale of operations is limited or business is on small scale basis, (b) work is simple and routine in nature, (c) business is being done in continuous type of industries like oil refining, sugar, spinning and weaving etc., (d) the labour management problems are not complex and can be easily resolved, (e) the machinery is automatic, and (J) the workers are disciplined.



Characteristics of line organization:

The main features of line organisation are as follows:

1. Orders and instructions flow from top to the bottom, whereas requests and suggestions move from bottom to top.
2. The principle of unity of command is the most salient feature of this type of organisation. In simple words, the orders are received by the subordinates from one boss.
3. The subordinates are accountable to their immediate superior.
4. There are limited numbers of subordinates under one superior.
5. This is simple to operate and control.
6. Co-ordination can be easily achieved.

Advantages of line organization:

Following are the main advantages of line organisation:

1. Simplicity:

It is very simple to establish and operate. It can be easily understood by the employees.

2. Fixed responsibility:

Duties and responsibilities are clearly defined for each individual with reference to the work assigned to him. As a result everybody knows to whom he is responsible and who are responsible to him. Nobody can avoid responsibility.

3. Discipline:

This type of organisation ensures better discipline in the enterprise. Singleness of responsibilities facilitates discipline in the organisation. The workers at the lower levels will be more loyal and responsible to one single boss rather than to a number of bosses.

4. Flexibility:

It is flexible in the sense that it is subject to quick adjustments to suit to changing conditions. In the words of Wheeler, "It permits rapid and orderly decisions in meeting problems at various levels of organisation". In simple words, it is more adaptive to the changed circumstances.

5. Co-ordination:

It helps to achieve effective co- ordination. All the activities pertaining to single department are controlled by one person.

6. Direct communication:

As there will be direct communication between the superior and the subordinates at different levels it would be helpful in achieving promptness in performance.

7. Unity of command:

Every worker is accountable to one boss in the department under this type of organisation. In this manner it is in accordance with the principle of unity of command.

8. Economical:

It is not complex and expensive. It is simple and economical in operation. It does not need any expert and specialised personnel.

9. Quick decisions:

On account of its simple operation and unified control and responsibility, decisions can be taken promptly. The process of decision-making is further quickened as the decision is taken by one person.

10. Executive development:

Under this organisation, the department head is fully responsible for every activity in his department. He discharges his responsibilities in an efficient manner. He comes across many problems and obstacles in performing his duties.

This provides him an ample opportunity to enhance his capabilities and organisational abilities and is greatly helpful in his overall development and performance.

Disadvantages of line organization:

Following are the main drawbacks of line organisation:

1. Overloading:

The main disadvantage of this system is that it tends to overload the existing executive with too many responsibilities. The work may not be performed effectively on account of innumerable tasks before the single executive.

2. Lack of specialization:

Absence of managerial specialisation is the major drawback of this system. On account of many functions and complexities it is very difficult for a single individual to control all the matters effectively.

The executive may not be expert in all aspects of managerial activities. The burden of responsibilities on the shoulders of the manager can crush him under the heavy workload.

3. Scope for favoritisms:

There may be a good deal of favouritism and nepotism under this type of organization. As the concerned officer will judge the performance of the persons at work according to his own norms, it is possible that efficient people may be left behind and inefficient or 'yes men' may get higher and better posts.

4. Lack of co-ordination:

In reality it is very difficult to achieve proper coordination among various departments operating in an organisation. This is because each departmental manager or head carries the functioning of his department in accordance with the ways and means suitable to him.

This leads to lack of uniformity in operation among various departments which is detrimental in achieving proper coordination in the overall functioning of the various departments operating in the organisation.

5. Lack of initiative:

Under line organization, ultimate authority lies in the hands of top management and departmental managers or heads have little powers. This adversely affects their initiative and enthusiasm to motivate the subordinates working under them.

6. Lack of communication from lower ranks:

Under line organisation suggestions move from down to upwards the superiors usually do not pay attention to suggestions sent by lower ranks. This leads to inadequacy of communication from subordinates to superiors.

2. Functional Organisation:

F.W. Taylor, who is better known as the father of scientific management developed the concept of 'Functional Organisation'. As the very name suggests, functional organisation implies that the organisation should be based on various functions. Taylor's functional approach is mainly based on principle of specialization and tries to bring about organisational balance.

The principle of specialisation embodies the concept that both the workers and the supervisors can develop a higher degree of proficiency by separating the manual from the mental requirements. Taylor recommended that there should be functionalisation even at the shop level where workers have to produce goods. He felt that the usual practice of putting one foreman incharge of some 40 to 50 workers should be avoided.

Taylor's concept of Functional Foremanship (as he puts it), is a system comprising of eight different foremen discharging different functions. Every worker in the organisation is directly connected with these foremen.

The eight specialist foremen are:

(a) Route Clerk, (b) Instructions Card Clerk, (c) Time and Cost Clerk, (d) Shop Disciplinarian, (e) Gang Boss, (f) Speed Boss, (g) Repair Boss, and (h) Inspector. The first four bosses operate from Planning Department, whereas the other four are known as Executive Functional Bosses. They function in the production department.

A brief explanation of these eight functional foremen is given below:

(a) Route clerk:

He lays down the exact path or route to be followed by raw material transforming it into finished product.

(b) Instruction card clerk:

He prepares detailed instructions to be followed in doing the work as per the route laid down by the route clerk.

(c) Time and cost clerk:

He determines the total time to be taken in the completion of a product and also works out the cost of production per unit and total cost. He prepares various work schedules and cost sheets in order to have proper control over time and cost incurred in producing goods.

(D) Shop disciplinarian:

He is responsible for maintaining proper discipline in the organisation. In fact, he is the guardian of orderliness in the factory. In the words of Kimball and Kimball Jr. "The shop disciplinarian is responsible for discipline and good order, fie is also the peacemaker and assists in adjusting wages."

He is helpful in resolving minor disputes regarding wages, holidays, working conditions and hours of work etc. He initiates a proper code of conduct in the organisation.

(e) Gang boss:

He makes the availability of different machines and tools required by workers to carry out their work. He also provides various production designs, drawings, raw materials etc.

(f) Speed boss:

He controls the speed of different machines operating in the organisation. He sometimes demonstrates the workers the proper speed with which the machines should operate. He undertakes proper supervision over speed of machines.

(g) Repair boss:

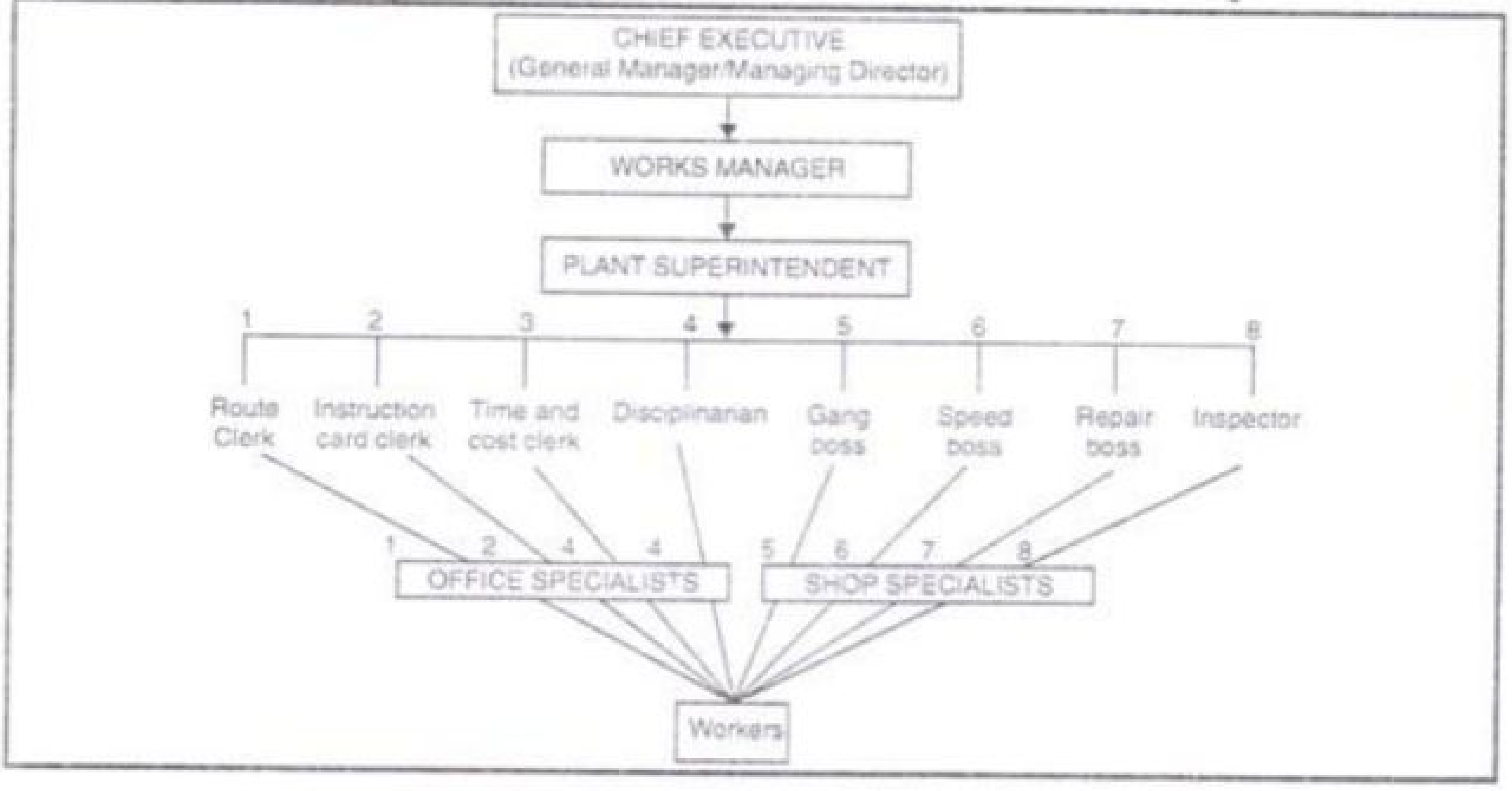
He is concerned with proper maintenance and repairs of machines for keeping them in working order. In the words of Spriegel, "His job of maintenance includes cleaning the machine, keeping it free from rust and scratches, oiling it properly and preserving the standards which have been set up for the auxiliary equipment connected with the machine such as belts, counter shafts and clutches." His main task is to undertake immediate repair of the defective machines so that the work may not suffer.

(h)Inspector:

He checks and certifies the quality of work i.e., whether or not it is up to pre-determined standards. Achievement of pre-set standards is confirmed by the inspector. He develops the feeling of quality consciousness among the workers. In order to carry out his job effectively, an inspector must possess proper knowledge and the technicalities involved in quality control.

The following diagram shows Taylor's Functional Foremanship:

The following diagram shows Taylor's Functional Foremanship :

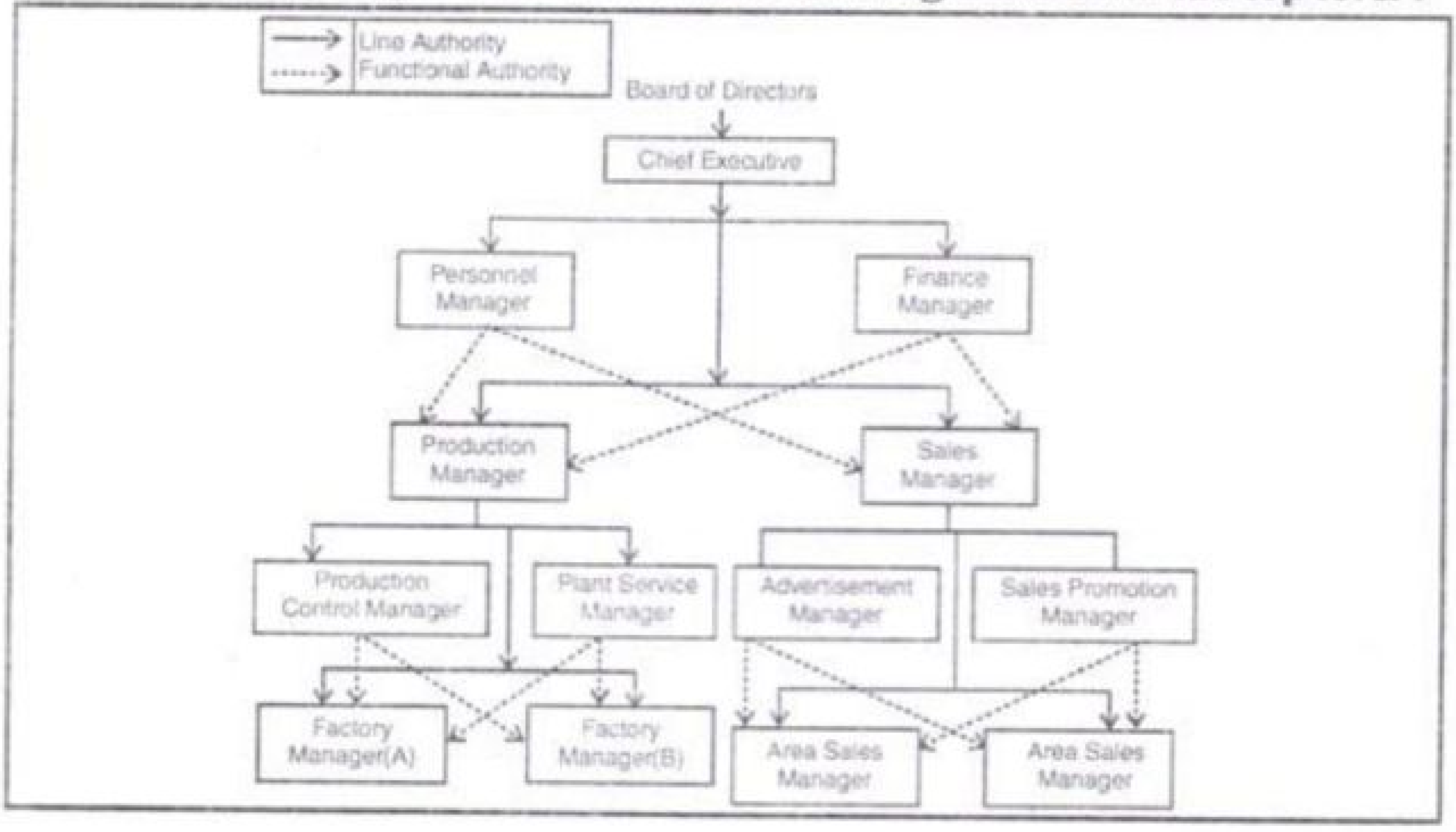


While developing the concept of Functional Foremanship, F.W. Taylor suggested that it is unscientific to overload a foreman with entire responsibility of running a department. He advocated that direction of work should be decided by functions and not be mere authority.

He thought that to be successful in performing his duties a foreman should possess various qualities viz., education, special or technical knowledge, manual dexterity or strength, tact, energy, honesty, common sense and good health".

Spriegel has nicely explained Functional Organization. "Each worker, instead of coming into contact with one superior, would receive his orders from a group of specialised supervisors, each of whom performs a particular function."

The following diagram shows the functional organisation at the top level :



Functional organisation also operates at higher level of management. The whole work in the organisation is divided in various departments. Similar type of work and transactions are put in one department under the control of a departmental manager or head. Various departments are also known as functional areas of management viz., Purchases, Sales, Finance, Production, and Personnel etc. The respective managers of these departments will be responsible for carrying out various activities of their departments in the organisation.

For example, marketing manager will be responsible for carrying out marketing activities and personnel manager will be responsible for looking after the personnel matters in all the departments of the organisation.

The underlying idea of functional organisation at the top level of management is that a subordinate anywhere in the organization will be controlled and commanded directly by number of managers operating in different departments.

Advantages of functional organisation. Following are the main benefits derived from functional organisation:

1. Specialisation:

This system derives the benefits of specialisation. As every functional incharge is an expert in his area, he will guide using his specialisation and with the help of the subordinates, try to attain the specified objectives.

2. Increased efficiency:

This type of organisation ensures enhanced efficiency as the workers operate under the expert and competent personnel and perform limited operations.

3. Limited duties:

The functional foremen have to carry out the limited number of duties concerning their area of work. This considerably reduces the burden of work and makes possible for the foreman to carry out the work in the best possible manner.

4. Scope for expansion:

Functional organisation offers a great scope for expansion of business enterprise without any dislocation and loss of efficiency as each man grows on account of his own speciality.

5. Flexibility:

It is flexible pattern of organisation. A change in organisation can be made without disturbing the whole organisation. In the words of Louis A. Allen, "Function as a whole can he cut by eliminating positions at the lower levels without seriously affecting its total performance."

Disadvantages of Functional Organization:

Despite the above advantages, this type of organization suffers from the following disadvantages:

1. Conflict in authority:

The authority relationship violates the principle of 'unity of command'. It creates several bosses instead of one line authority. It leads to conflict and confusion in the minds of the workers to whom they should obey and whom they should ignore.

2. Difficulty in pinpointing responsibility:

On account of the non-application of the principle of 'unity of control', it is very difficult for the top management to fix the responsibility of a particular foreman. There arises a tendency for shirking of responsibility.

3. Expensive:

This pattern of organisation is quite impracticable and expensive. Multiplicity of experts increases the overhead expenditure. The small organisations cannot afford to install such a system.

4. Discipline is slackened:

Discipline among the workers as well as lower supervisory staff is difficult to maintain as they are required to work under different bosses and this may hamper the progress of the organisation.

5. Lack of co-ordination:

Appointment of several experts in the organisation creates the problem of co-ordination and delay in decision-making especially when a decision requires the involvement of more than one specialist.

3. Line and Staff Organisation:

The line and staff organisation is an improvement over the above mentioned two systems viz, line organisation and functional organisation. The line organisation concentrates too much on control whereas the functional system divides the control too much.

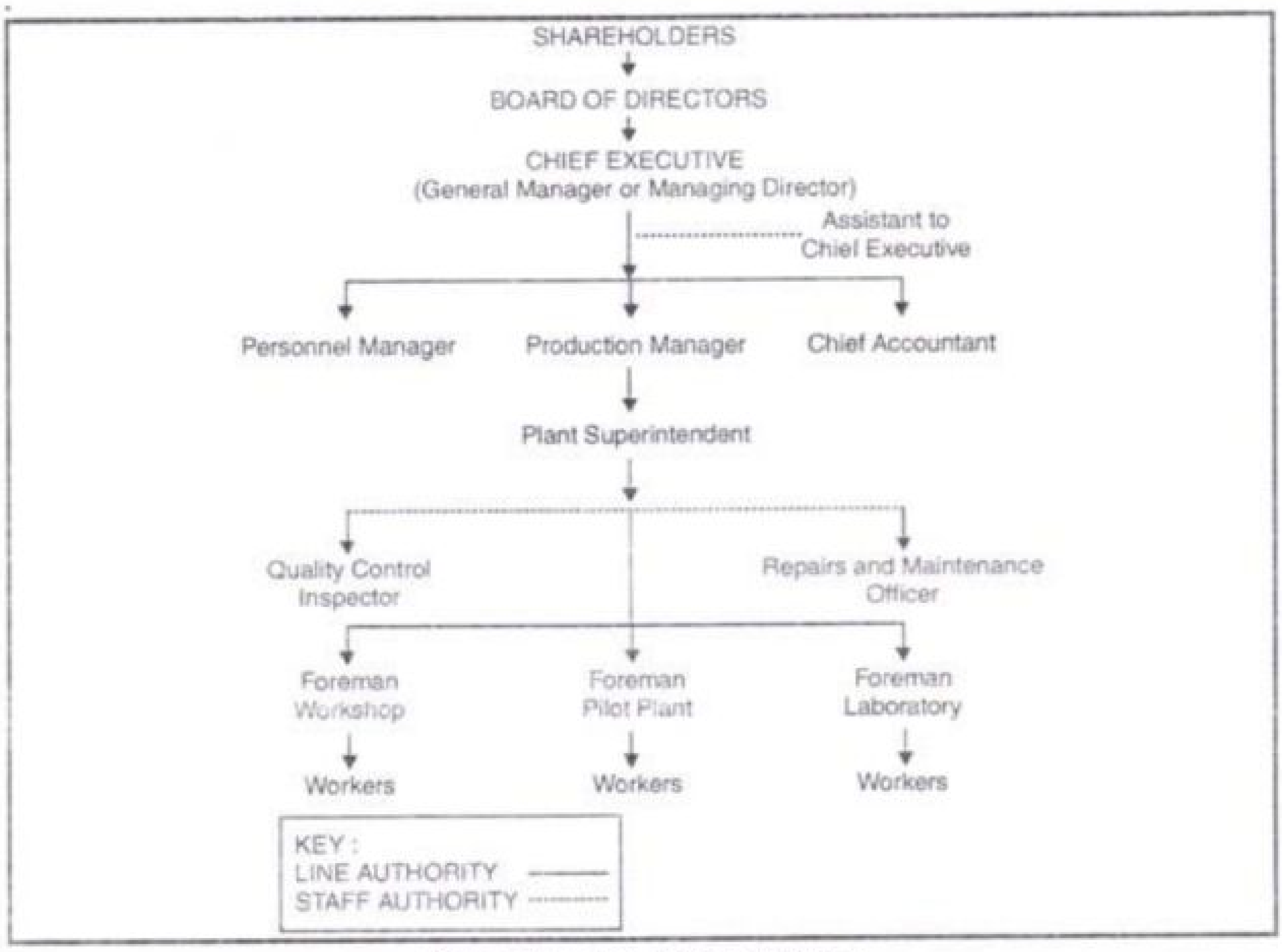
The need was, therefore, for a system that will ensure a proper balance between the two. The need has been fulfilled by line and staff organisation. The system like line organisation also owes its birth to army.

The commanders in the field who are line officers are assisted by the staff that helps them in formulating strategies and plans by supplying valuable information. Similarly in organisation, line officers get the advice of the staff which is very helpful in carrying on the task in an efficient manner. However, staff's role is advisory in nature. Line officers are usually assisted by staff officers in effectively solving various business problems.

The staff is usually of three types viz:

(a) Personal Staff:

This includes the personal staff attached to Line Officers. For example, personal assistant to general manager, secretary to manager etc. The personal staff renders valuable advice and assistance to Line Officers.



Showing Line and Staff Organisation

(b) Specialised Staff:

This category includes various experts possessing specialised knowledge in different fields like accounting, personnel, law, marketing, etc. They render specialised service to the organisation.

For example, a company may engage a lawyer for rendering legal advice on different legal matters. Similarly, it may engage a chartered accountant and a cost accountant for tackling accounting problems.

(c) General Staff:

This comprises of various experts in different areas who render valuable advice to the top management on different matters requiring expert advice.

Advantages of Line and Staff Organization

Important advantages of Line and Staff Organisation are:

1. Specialisation:

This type of organisation is based on planned specialisation and brings about the expert knowledge for the benefit of the management.

2. Better decisions:

Staff specialists help the line manager in taking better decisions by providing them adequate information of right type at right time.

3. Lesser Burden on line officers:

The work of the line officers is considerably reduced with the help of staff officers. Technical problems and specialised matters are handled by the Staff and the routine and administrative matters are the concern of Line Officers.

4. Advancement of research:

As the work under this type of organisation is carried out by experts, they constantly undertake the research and experimentation for the improvement of the product. New and economical means of production are developed with the help of research and experimentation.

5. Training for line officer:

Staff services have proved to be an excellent training medium for Line Officers.

Disadvantages of Line and Staff Organisation:

1. Conflict between line and staff authorities:

There may be chances of conflict between line and staff authorities. Line Officers resent the activities of staff members on the plea that they do not always give correct advice. On other hand staff officials complain that their advice is not properly carried out.

2. Problems of line and staff authority:

There may be confusion on the relationship of line and staff authorities. Line Officers consider themselves superior to Staff Officers. The Staff Officers object to it.

3. Lack of responsibility:

As the staff specialists are not accountable for the results, they may not perform their duties well.

4. The system is quite expensive:

The appointment of experts involves a heavy expenditure. Small and medium size organisations cannot afford such a system.

5. More reliance on staff:

Some of the line officers excessively rely on the staff. This may considerably reduce the line control.

UNIT VI
ACTUATING

Nature and purpose of Actuating,

From the whole set of management processes, implementation (actuating) is the most important management function. In planning and organizing functions more related to abstract aspects of the management process, while the actuating functions are even more emphasis on activities that relate directly to the people in the organization

In this case, George R. Terry (1986) suggested that the actuating an attempt to move the group members in such a way that they desire and strive to achieve corporate goals and objectives of the members of the company because its members had also wanted to achieve those goals.

From the **above definition**, implementation (actuating) nothing but an attempt to make the plan a reality, with the various directives and motivating for each employee to carry out activities in an optimal fit with the role, duties and responsibilities.

The **important thing to consider** in the conduct (**actuating**) is that an employee will be motivated to do something if: (1) feels confident will be able to do, (2) believes that the work has added value for themselves, (3) not being encumbered by personal problems or other more important tasks, or urgent, (4) the task is for the relevant trust and (5) the relationship between friends in the harmonious organization.

Steps in actuating process.

1. Building an organization, that possess the capability to put the strategies into action successfully.
2. Supplying resources, in sufficient quantity, to strategy-essential activities.
3. Developing policies which encourage strategy.
4. Such policies and programs are employed which helps in continuous improvement.
5. Combining the reward structure, for achieving the results.
6. Using strategic leadership.

Essentials of Human Resource Management: Importance and functions of Human resource management, Importance of Human resource planning, Recruitment, selection, training and development, performance appraisal, compensation packages, promotions, transfers demotion and separation etc.

Human Resource Management: Meaning, Objectives, Scope and Functions!

Meaning:

Before we define HRM, it seems pertinent to first define the term 'human resources'. In common parlance, human resources means the people. However, different management experts have defined human resources differently. For example, Michael J. Jucius has defined human resources as "a whole consisting of inter-related, inter-dependent and interacting physiological, psychological, sociological and ethical components".

According to Leon C. Megginson "From the national point of view human resources are knowledge, skills, creative abilities, talents, and attitudes obtained in the population; whereas from the view-point of the individual enterprise, they represent the total of the inherent abilities, acquired knowledge and skills as exemplified in the talents and aptitude of its employees".

Sumantra Ghosal considers human resources as human capital. He classifies human capita into three categories-intellectual capitals, social capital and emotional capital.

Intellectual capital consists of specialized knowledge, tacit knowledge and skills, cognitive complexity, and learning capacity.

Social capital is made up of network of relationships, sociability, and trustworthiness Emotional capital consists of self-confidence, ambition and courage, risk-bearing ability, and resilience. Now it is clear from above definitions that human resources refer to the qualitative and quantitative aspects of employees working in an organisation.

Let us now define human resource management.

In simple words, HRM is a process of making the efficient and effective use of human resources so that the set goals are achieved. Let us also consider some important definitions of HRM.

According to Flippo "Personnel management, or say, human resource management is the planning, organising, directing and controlling of the procurement development compensation integration, 4intenance, and separation of human resources to the end that individual, organisational and social objectives are accomplished".

The National Institute of Personnel Management (NIPM) of India has defined human resource/personnel management as "that part of management which is concerned with people at work and with their relationship within an enterprise. Its aim is to bring together and develop into an effective organisation of the men and women who make up an enterprise and having regard for the well-being of the individuals and of working groups, to enable them to make their best contribution to its success".

According to Decenzo and Robbins "HRM is concerned with the people dimension in management. Since every organisation is made up of people, acquiring their services, developing their skills, motivating them to higher levels of performance and ensuring that they continue to maintain their commitment to the organisation are essential to achieving organisational objectives. This is true, regardless of the type of organisation-government, business, education, health, recreation, or social action".

Thus, HRM can be defined as a process of procuring, developing and maintaining competent human resources in the organisation so that the goals of an organisation are achieved in an effective and efficient manner. In short, HRM is an art of managing people at work in such a manner that they give their best to the organisation for achieving its set goals.

Objectives:
The primary objective of HRM is to ensure the availability of right people for right jobs so as the organisational goals are achieved effectively.

This primary objective can further be divided into the following sub-objectives:

1. To help the organisation to attain its goals effectively and efficiently by providing competent and motivated employees.

2. To utilize the available human resources effectively.

3. To increase to the fullest the employee's job satisfaction and self-actualisation.

4. To develop and maintain the quality of work life (QWL) which makes employment in the organisation a desirable personal and social situation.

5. To help maintain ethical policies and behaviour inside and outside the organisation.

6. To establish and maintain cordial relations between employees and management.

7. To reconcile individual/group goals with organisational goals.

Werther and Davis have classified the objectives of HRM into four categories as shown in table 1.2.

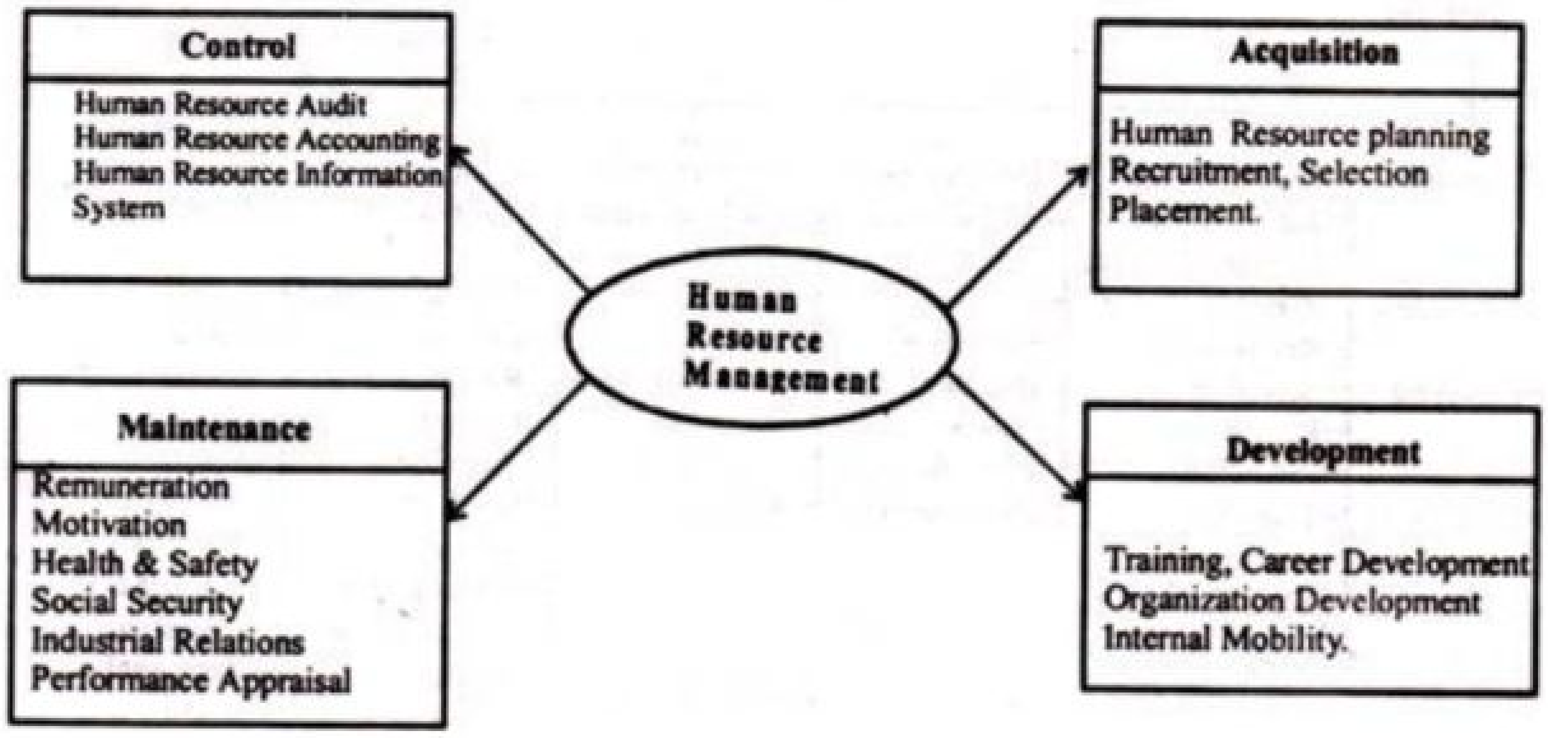
Table 1.2: HRM Objectives and Functions:

HRM Objectives	*Supporting Functions*
1. Societal Objectives	1. Legal compliance 2. Benefits 3. Union-management relations
2. Organisational Objectives	1. Human resource planning 2. Employee relations 3. Selection 4. Training and development 5. Appraisal 6. Placement 7. Assessment
3. Functional Objectives	1. Appraisal 2. Placement 3. Assessment
4. Personal Objectives	1. Training and development 2. Appraisal 3. Placement 4. Compensation 5. Assessment

Scope:

The scope of HRM is, indeed, very vast and wide. It includes all activities starting from manpower planning till employee leaves the organisation. Accordingly, the scope of HRM consists of acquisition, development, maintenance/retention, and control of human resources in the organisation (see figure 1.1). The same forms the subject matter of HRM. As the subsequent pages unfold, all these are discussed, in detail, in seriatim.

Fig. 1.1: Scope of HRM



The National Institute of personnel Management, has specified the scope of HRM as follows:

1. The Labour or Personnel Aspect:

This is concerned with manpower planning, recruitment, selection, placement, transfer, promotion, training and development, lay-off and retrenchment, remuneration, incentives, productivity, etc.

2. Welfare Aspect:

It deals with working conditions, and amenities such as canteen, creches, rest and lunch rooms, housing, transport, medical assistance, education, health and safety, recreation facilities, etc.

3. Industrial Relations Aspects:

This covers union-management relations, joint consultation, collective bargaining, grievance and disciplinary actions, settlement of disputes, etc.

Functions:

We have already defined HRM. The definition of HRM is based on what managers do. The functions performed by managers are common to all organizations. For the convenience of study, the function performed by the resource management can broadly be classified into two categories, viz.

(1) Managerial functions, and

(2) Operative functions (see fig. 1.2).

These are discussed in turn.

(1) Managerial Functions:

Planning:

Planning is a predetermined course of actions. It is a process of determining the organisational goals and formulation of policies and programmes for achieving them. Thus planning is future oriented concerned with clearly charting out the desired direction of business activities in future. Forecasting is one of the important elements in the planning process. Other functions of managers depend on planning function.

Organising:

Organising is a process by which the structure and allocation of jobs are determined. Thus organising involves giving each subordinate a specific task establishing departments, delegating authority to subordinates, establishing channels of authority and communication, coordinating the work of subordinates, and so on.

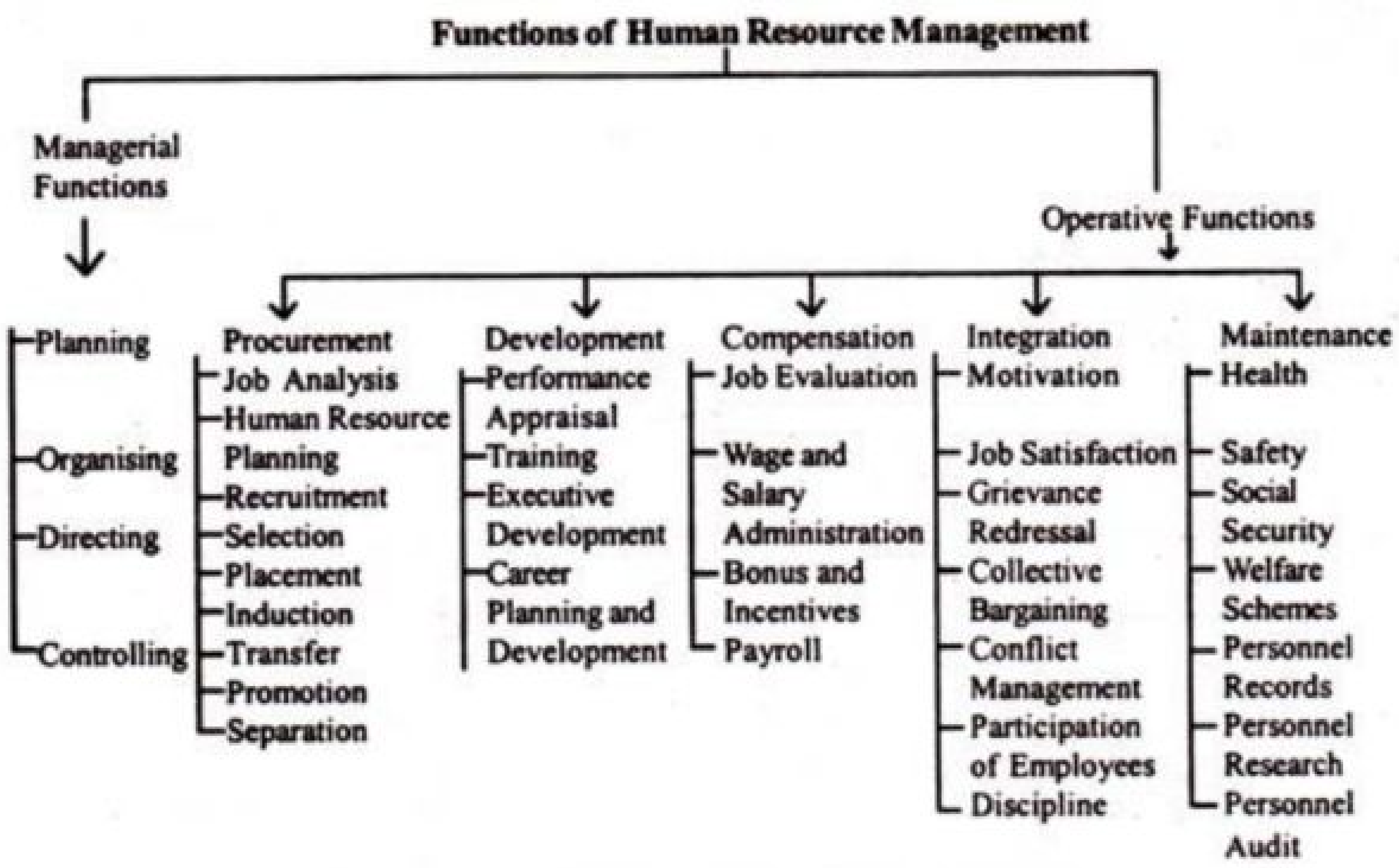


Fig. 1.2 : Functions of Human Resource Management

Staffing:

TOs is a process by which managers select, train, promote and retire their subordinates This involves deciding what type of people should be hired, recruiting prospective employees, selecting employees, setting performance standard, compensating employees, evaluating performance, counseling employees, training and developing employees.

Directing/Leading:

Directing is the process of activating group efforts to achieve the desired goals. It includes activities like getting subordinates to get the job done, maintaining morale motivating subordinates etc. for achieving the goals of the organisation.

Controlling:

It is the process of setting standards for performance, checking to see how actual performance compares with these set standards, and taking corrective actions as needed.

(2) Operative Functions:

The operative, also called, service functions are those which are relevant to specific department. These functions vary from department to department depending on the nature of the department Viewed from this standpoint, the operative functions of HRM relate to ensuring right people for right jobs at right times. These functions include procurement, development, compensation, and maintenance functions of HRM.

The operative functions of human resource or personnel department are discussed below:

1. Employment:

The first operative function of the human resource of personnel department is the employment of proper kind and number of persons necessary to achieve the objectives of the organisation. This involves recruitment, selection, placement, etc. of the personnel.

Before these processes are performed, it is better to determine the manpower requirements both in terms of number and quality of the personnel. Recruitment and selection cover the sources of supply of labour and the devices designed to select the right type of people for various jobs. Induction and placement of personnel for their better performance also come under the employment or procurement function.

Each element of recruitment and selection has a contribution to make in helping to find the most suitable candidates for any given post and you should view recruitment and retention as entailing the eight stages that follow.

Stage 1 – Job Vacancy
Stage 2 – Job Analysis
Stage 3 – Attracting Candidates
Stage 4 – Screening Candidates
Stage 5 – Interviewing Candidates
Stage 6 – Selecting and Appointing Candidates
Stage 7 – Induction & Training
Stage 8 – Employee Evaluation

2. Development:

Training and development of personnel is a follow up of the employment function. It is a duty of management to train each employee property to develop technical skills for the job for which he has been employed and also to develop him for the higher jobs in the organisation. Proper development of personnel is necessary to increase their skills in doing their jobs and in satisfying their growth need.

For this purpose, the personnel departments will device appropriate training programs. There are several on- the-job and off-the-job methods available for training purposes. A good training program should include a mixture of both types of methods. It is important to point out that personnel department arranges for training not only of new employees but also of old employees to update their knowledge in the use of latest techniques.

3. Compensation:

This function is concerned with the determination of adequate and equitable remuneration of the employees in the organisation of their contribution to the organisational goals. The personnel can be compensated both in terms of monetary as well as non-monetary rewards.

Factors which must be borne in mind while fixing the remuneration of personnel are their basic needs, requirements of jobs, legal provisions regarding minimum wages, capacity of the organisation to pay, wage level afforded by competitors etc. For fixing the wage levels, the personnel department can make use of certain techniques like job evaluation and performance appraisal.

4. Maintenance (Working Conditions and Welfare):

Merely appointment and training of people is not sufficient; they must be provided with good working, conditions so that they may like their work and workplace and maintain their efficiency. Working conditions certainly influence the motivation and morale of the employees.

These include measures taken for health, safety, and comfort of the workforce. The personnel department also provides for various welfare services which relate to the physical and social well-being of the employees. These may include provision of cafeteria, rest rooms, counseling, group insurance, education for children of employees, recreational facilities, etc.

5. Motivation:

Employees work in the organisation for the satisfaction of their needs. In many of the cases, it is found that they do not contribute towards the organisational goals as much as they can. This happens because employees are not adequately motivated. The human resource manager helps the various departmental managers to design a system of financial and non-financial rewards to motivate the employees.

6. Personnel Records:

The human resource or personnel department maintains the records of the employees working in the enterprise. It keeps full records of their training, achievements, transfer, promotion, etc. It also preserves many other records relating to the behaviour of personnel like absenteeism and labour turnover and the personnel programs and policies of the organisation.

7. Industrial Relations:
These days, the responsibility of maintaining good industrial relations is mainly discharged by the human resource manager. The human resource manager can help in collective bargaining, joint consultation and settlement of disputes, if the need arises. This is because of the fact that he is in possession of full information relating to personnel and has the working knowledge of various labour enactments.

The human resource manager can do a great deal in maintaining industrial peace in the organisation as he is deeply associated with various committees on discipline, labour welfare, safety, grievance, etc. He helps in laying down the grievance procedure to redress the grievances of the employees. He also gives authentic information to the trade union leaders and conveys their views on various labour problems to the top management.

8. Separation:
Since the first function of human resource management is to procure the employees, it is logical that the last should be the separation and return of that person to society. Most people do not die on the job. The organisation is responsible for meeting certain requirements of due process in separation, as well as assuring that the returned person is in as good shape as possible. The personnel manager has to ensure the release of retirement benefits to the retiring personnel in time.

3. Advisory Functions:
Human resource manager has specialised education and training in managing human resources. He is an expert in his area and so can give advise on matters relating to human resources of the organisation.

He offers his advise to:
1. Advises Top Management:
Personnel manager advises the top management in formulation and evaluation of personnel programs, policies and procedures. He also gives advice for achieving and maintaining good human relations and high employee morale.

2. Advises Departmental Heads:
Personnel manager offers advice to the heads of various departments on matters such as manpower planning, job analysis and design, recruitment and selection, placement, training, performance appraisal, etc.

Human Resource Planning :

Objectives:

The main objective of having human resource planning is to have an accurate number of employees required, with matching skill requirements to accomplish organisational goals.

In other words, the objectives of human resource planning are to:

1. Ensure adequate supply of manpower as and when required.
2. Ensure proper use of existing human resources in the organisation.
3. Forecast future requirements of human resources with different levels of skills.
4. Assess surplus or shortage, if any, of human resources available over a specified period of time.
5. Anticipate the impact of technology on jobs and requirements for human resources.
6. Control the human resources already deployed in the organisation.
7. Provide lead time available to select and train the required additional human resource over a specified time period.

According to Sikula "the ultimate purpose/objective of human resource planning is to relate future human resources to future enterprise need so as to maximise the future return on investment in human resources".

Need for and Importance of HRP:

The need for human resource planning in organisation is realised for the following reasons:

1. Despite growing unemployment, there has been shortage of human resources with required skills, qualification and capabilities to carry on works. Hence the need for human resource planning.

2 Large numbers of employees, who retire, die, leave organisations, or become incapacitated because of physical or mental ailments, need to be replaced by the new employees. Human resource planning ensures smooth supply of workers without interruption.

3. Human resource planning is also essential in the face of marked rise in workforce turnover which is unavoidable and even beneficial. Voluntary quits, discharges, marriages, promotions and seasonal fluctuations in business are the examples of factors leading to workforce turnover in organisations. These cause constant ebb and flow in the work force in many organisations.

4. Technological changes and globalisation usher in change in the method of products and distribution of production and services and in management techniques. These changes may also require a change in the skills of employees, as well as change in the number of employees required. It is human resource planning that enables organisations to cope with such changes.

5. Human resource planning is also needed in order to meet the needs of expansion and diversification programmes of an organisation.

6. The need for human resource planning is also felt in order to identify areas of surplus personnel or areas in which there is shortage of personnel. Then, in case of surplus personnel, it can be redeployed in other areas of organisation. Conversely, in case of shortage of personnel, it can be made good by downsizing the work force.
Human resource planning is important to organisation because it benefits the organisation in several ways.

The important ones are mentioned below:
1. Human resource planning meets the organisation need for right type of people in right number at right times.
2. By maintaining a balance between demand for and supply of human resources, human resource planning makes optimum use of human resources, on the one hand, and reduces labour cost substantially, on the other.
3. Careful consideration of likely future events, through human resource planning might lead to the discovery of better means for managing human resources. Thus, foreseeable pitfalls might be avoided.
4. Manpower shortfalls and surpluses may be avoided, to a large extent.
5. Human resource planning helps the organisation create and develop training and succession planning for employees and managers. Thus, it provides enough lead time for internal succession of employees to higher positions through promotions.
6. It also provides multiple gains to the employees by way of promotions, increase in emoluments and other perquisites and fringe benefits.
7. Some of the problems of managing change may be foreseen and their consequences mitigated. Consultations with affected groups and individuals can take place at an early stage in the change process. This may avoid resistance for change.
8. Human resource planning compels management to asses critically the strength and weaknesses of its employees and personnel policies on continuous basis and, in turn, take corrective measures to improve the situation.
9. Through human resource planning, duplication of efforts and conflict among efforts can be avoided, on the one hand, and coordination of worker's efforts can be improved, on the other.
10. Last but no means the least, with increase in skill, knowledge, potentialities, productivity and job satisfaction, organisation becomes the main beneficiary. Organisation is benefitted in terms of increase in prosperity/production, growth, development, profit and, thus, an edge over its competitors in the market.

Levels of Human Resource Planning:
Human resource planning is useful at different levels.
At the National Level:
Human resource planning by Government at the national level covers population projections, programme of economic development, educational and health facilities, occupational distribution and growth, mobility of personnel across industries and geographical regions.

At the Sector Level:
This would cover manpower requirements of the agricultural sector, industrial sector and service sector.
At the Industry Level:
This would forecast manpower need for specific industries, such as engineering, heavy industries, textile industries, plantation industries, etc.
At the Level of Industrial Unit:
It relates to the manpower needs of a particular enterprise.

Leadership: Meaning and importance, Leadership qualities

Meaning:
Leadership is an important element of the directing function of management. Wherever, there is an organized group of people working towards a common goal, some type of leadership becomes essential. "The power of leadership is the power of integrating. The leader stimulates what is best in us he unites and concentrates what we feel only gropingly and shatteringly. He is a person who gives form to the uncoarctate energy in every man. The person who influences me most is not he who does great Deeds, but he who makes me feel that I can do great deeds." Marry Parker Follet.

Leadership is the ability to build up confidence and zeal among people and to create an urge in them to be led. To be a successful leader, a manager must possess the qualities of foresight, drive, initiative, self-confidence and personal integrity. Different situations may demand different types of leadership.

Definitions:
Leadership has been defined in various ways. Stogdill has rightly remarked that there are almost as many definitions of leadership as there are people who have tried to define it.

The definitions given by some famous authors and management experts are given below:
1. Koontz and O'Donnell, Leadership is the ability of a manager to induce subordinates to work with confidence and zeal.

2. Dubin, R.Leadership is the exercise of authority and making of decisions.

3. Allford and Beaty, Leadership is the ability to secure desirable actions from a group of followers voluntarily, without the use of coercion.

4. George R. Terry, Leadership is the activity of influencing people to strive willingly for group objectives.

5. Hemphill, J.K., Leadership is the initiation of acts which result in a consistent pattern of group interaction directed towards the solution of a mutual problem.

6. Jame J.Cribbin, Leadership is a process of influence on a group in a particular situation at a given point of time, and in a specific set of circumstances that stimulates people to strive willingly to attain organisational objectives and satisfaction with the type of leadership provided.

7. Peter Drucker, Leadership is not making friends and influencing people, i.e., salesmanship it is the lifting of man's visions to higher sights, the raising of man's personality beyond its normal limitations.

In the various definitions of leadership the emphasis is on the capacity of an individual to influence and direct group effort towards the achievement of organizational goals. Thus, ' we can say that leadership is the practice of influence that stimulates subordinates or followers to do their best towards the achievement of desired goals.

Nature and Characteristics of Leadership:

An analysis of the definitions cited above reveals the following important characteristics of leadership:

1. Leadership is a personal quality.
2. It exists only with followers. If there are no followers, there is no leadership?
3. It is the willingness of people to follow that makes person a leader.
4. Leadership is a process of influence. A leader must be able to influence the behaviour, attitude and beliefs of his subordinates.
5. It exists only for the realization of common goals.
6. It involves readiness to accept complete responsibility in all situations.
7. Leadership is the function of stimulating the followers to strive willingly to attain organizational objectives.
8. Leadership styles do change under different circumstances.
9. Leadership is neither bossism nor synonymous with; management.

Leadership Functions:

Following are the important functions of a leader:

1. Setting Goals:

A leader is expected to perform creative function of laying out goals and policies to persuade the subordinates to work with zeal and confidence.

2. Organizing:

The second function of a leader is to create and shape the organization on scientific lines by assigning roles appropriate to individual abilities with the view to make its various components to operate sensitively towards the achievement of enterprise goals.

3. Initiating Action:

The next function of a leader is to take the initiative in all matters of interest to the group. He should not depend upon others for decision and judgment. He should float new ideas and his decisions should reflect original thinking.

4. Co-Ordination:

A leader has to reconcile the interests of the individual members of the group with that of the organization. He has to ensure voluntary co-operation from the group in realizing the common objectives.

5. Direction and Motivation:

It is the primary function of a leader to guide and direct his group and motivate people to do their best in the achievement of desired goals, he should build up confidence and zeal in the work group.

6. Link between Management and Workers:

A leader works as a necessary link between the management and the workers. He interprets the policies and programmes of the management to his subordinates and represents the subordinates' interests before the management. He can prove effective only when he can act as the true guardian of the interests of his subordinates.

Importance of Leadership in Management:

The importance of leadership in any group activity is too obvious to be over-emphasized. Wherever, there is an organized group of people working towards a common goal, some type leadership becomes essential. Lawrence A. Appley remarked that the time had come to substitute the word leadership for management.

Although the concern for leadership is as old as recorded history, it has become more acute during the last few decades due to the complexities of production methods, high degree of specialization and social changes in the modern organizations. A good dynamic leader is compared to a 'dynamo generating energy' that charges and activates the entire group in such a way that near miracles may be achieved. The success of an enterprise depends to a great extent, upon effective leadership.'

The importance of leadership can be highlighted from the following:

1. It Improves Motivation and Morale:

Through dynamic leadership managers can improve motivation and morale of their subordinates. A good leader influences the behaviour of an individual in such a manner that he voluntarily works towards the achievement of enterprise goals.

2. It Acts as a Motive Power to Group Efforts:
Leadership serves as a motive power to group efforts. It leads the group to a higher level of performance through its persistent efforts and impact on human relations.

3. It Acts as an Aid to Authority:
The use of authority alone cannot always bring the desired results. Leadership acts as an aid to authority by influencing, inspiring and initiating action.

4. It is Needed at All Levels of Management:
Leadership plays a pivotal role at all levels of management because in the absence of effective leadership no management can achieve the desired results.

5. It Rectifies the Imperfectness of the Formal Organisational Relationships:
No organizational structure can provide all types of relationships and people with common interest may work beyond the confines of formal relationships. Such informal relationships are more effective in controlling and regulating the behaviour of the subordinates. Effective leadership uses there informal relationships to accomplish the enterprise goals.

6. It Provides the Basis for Co-operation:
Effective leadership increases the understanding between the subordinates and the management and promotes co-operation among them.

Process or Techniques of Effective Leadership:
The following are the techniques of effective leadership:
1. The leader should consult the group in framing the policies and lines of action and in initiating any radical change therein.
2. He should attempt to develop voluntary co-operation from his subordinates in realizing common objectives.
3. He should exercise authority whenever necessary to implement the policies. He should give clear, complete and intelligible instructions to his subordinates.
4. He should build-up confidence and zeal in his followers.
5. He should listen to his subordinates properly and appreciate their feelings.
6. He should communicate effectively.
7. He should follow the principle of motivation.

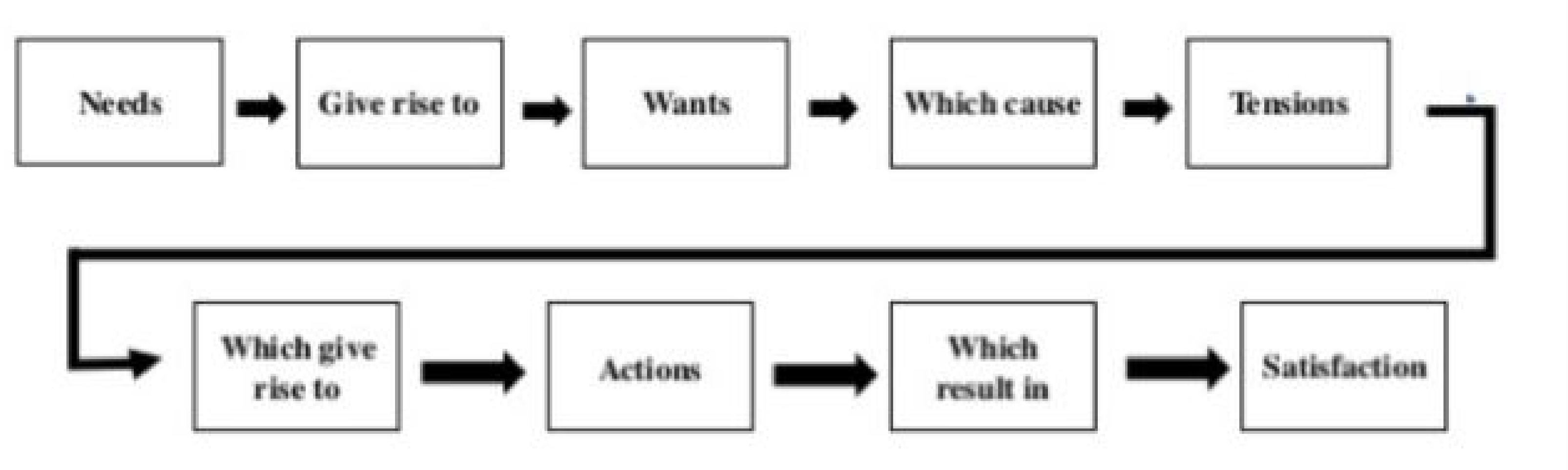
Qualities of a Good Leader:
A successful leader secures desired behaviour from his followers. It depends upon the quality of leadership he is able to provide. A leader to be effective must possess certain basic qualities. A number of authors have mentioned different qualities which a person should possess to be a good leader.

Some of the qualities of a good leader are as follows:

1. Good personality.
2. Emotional stability.
3. Sound education and professional competence.
4. Initiatives and creative thinking.
5. Sense of purpose and responsibility.
6. Ability to guide and teach.
7. Good understanding and sound judgment.
8. Communicating skill.
9. Sociable.
10. Objective and flexible approach.
11. Honesty and integrity of character.
12. Self-confidence, diligence and industry.
13. Courage to accept responsibility

Motivation: The need – want - satisfaction chain.

As consumers begin to identify and feel that a need exists, there occurs an inner urge or a drive towards taking an action so as fulfil the need. This inner urge and the impelling action to put in efforts to fulfill the need and attempt at satisfaction is referred to as motivation. In terms of consumer behavior, when a consumer realizes that there exists a state of felt deficiency (need), it gets translated into a variety of options (wants) from which a consumer may chose. The need/want lead to a state of tension in the mind of the consumer and an urge to act (buy/consume), so as to fulfill the need or want. This manifests itself into a goal, which is actually the behavior (act to purchase or consume), which puts an end to the urge to act. The entire action may ultimately lead to feelings of satisfaction, neutrality or dissatisfaction. Thus, the study of consumption behavior begins with when an individual recognizes a need and begins to take action to satisfy it. What he desires is an ultimate goal i.e. satisfaction of a need/want.



NEED-WANT-SATISFACTION CHAIN

UNIT VII
CONTROLLING

Nature and purpose of controlling, steps in controlling/ process of controlling, types of controls, Requirements of effective control systems.

An effective organization is one where managers understand how to manage and control. The objective of control as a concept and process is to help motivate and direct employees in their roles. Understanding managerial control process and systems is essential for the long- term effectiveness of an organization.
Without enough control systems in place, confusion and chaos can overwhelm an organization. However, if control systems are "choking" an organization, the organization will suffer from erosion of innovation and entrepreneurship.

Concept of Control:

The term control has different connotations depending upon the context of the use of the term. In manufacturing it refers to a Device or mechanism installed or instituted to

guide or regulates the activities or operation of an apparatus, machine, person, or system; in law it refers to controlling interest and in management as an authority to order and manage the workings and management of an entity.
Control is a management process to aim at achieving defined goals within an established timetable and comprises of three components: (1) setting standards, (2) measuring actual performance, and (3) taking corrective action.

Characteristics of Control:
Following characteristics of control can be identified:

1. Control is a Managerial Process:
Management process comprises of five functions, viz., planning, organizing, staffing, directing and controlling. Thus, control is part of the process of management.
2. Control is forward looking:
Whatever has happened has happened, and the manager can take corrective action only of the future operations. Past is relevant to suggest what has gone wrong and how to correct the future.
3. Control exists at each level of Organization:
Anyone who is a manager, has to involve into control – may be Chairman, Managing Director, CEO, Departmental head, or first line manager. However, at every level the control will differ – top management would be involved in strategic control, middle management into tactical control and lower level into operational control.
4. Control is a Continuous Process:
Controlling is not the last function of management, but it is a continuous process. Control is not a one-time activity, but a continuous process. The process of setting the standards needs constant analysis and revision depending upon external forces, plans, and internal performance.
5. Control is closely linked with Planning:
Planning and controlling are closely linked. The two are rightly called as 'Siamese twins' of management. "Every objective, every goal, every policy, every procedure and every budget become standard against which actual performance is compared.
Planning sets the ship's course and controlling keeps it on course. When the ship begins to veer off the course, the navigator notices it and recommends a new heading designed to return the ship to its proper course. Once control process is over its findings are integrated into planning to prescribe new standards for control.
6. Purpose of Controlling is Goal Oriented and hence Positive:
Control is there because without it the business may go off the track. The controlling has positive purpose both for the organization (to make things happen) and individuals (to give up a part of their independence for the attainment of organizational goals).

Process of Control:
Following are the steps involved into the process of control:

1. Establish the Standards:

Within an organization's overall strategic plan, managers define goals for organizational departments in specific, precise, operational terms that include standards of performance to compare with organizational activities. However, for some of the activities the standards cannot be specific and precise.

Standards, against which actual performance will be compared, may be derived from past experience, statistical methods and benchmarking (based upon best industry practices). As far as possible, the standards are developed bilaterally rather than top management deciding unilaterally, keeping in view the organization's goals.

Standards may be tangible (clear, concrete, specific, and generally measurable) – numerical standards, monetary, physical, and time standards; and intangible (relating to human characteristics) – desirable attitudes, high morale, ethics, and cooperation.

2. Measure Actual Performance:

Most organizations prepare formal reports of performance measurements both quantitative and qualitative (where quantification is not possible) that the managers review regularly. These measurements should be related to the standards set in the first step of the control process.

For example, if sales growth is a target, the organization should have a means of gathering and reporting sales data. Data can be collected through personal observation (through management by walking around the place where things are happening), statistical reports (made possible by computers), oral reporting (through conferencing, one-to-one meeting, or telephone calls), written reporting (comprehensive and concise, accounting information – normally a combination of all. To be of use, the information flow should be regular and timely.

3. Compare Performance with the Standards:

This step compares actual activities to performance standards. When managers read computer reports or walk through their plants, they identify whether actual performance meets, exceeds, or falls short of standards.

Typically, performance reports simplify such comparison by placing the performance standards for the reporting period alongside the actual performance for the same period and by computing the variance—that is, the difference between each actual amount and the associated standard.

The manager must know of the standard permitted variation (both positive and negative). Management by exception is most appropriate and practical to keep insignificant deviations away. Timetable for the comparison depends upon many factors including importance and complexity attached with importance and complexity.

4. Take Corrective Action and Reinforcement of Successes:

When performance deviates from standards, managers must determine what changes, if any, are necessary and how to apply them. In the productivity and quality-centered environment, workers and managers are often empowered to evaluate their own work.

After the evaluator determines the cause or causes of deviation, he or she can take the fourth step— corrective action.
The corrective action may be to maintain status quo (reinforcing successes), correcting the deviation, or changing standards. The most effective course may be prescribed by policies or may be best left up to employees' judgment and initiative. The corrective action may be immediate or basic (modifying the standards themselves).

Importance of Control:

1. Guides the Management in Achieving Pre-determined Goals:
The continuous flow of information about projects keeps the long range of planning on the right track. It helps in taking corrective actions in future if the performance is not up to the mark.

2. Ensures Effective Use of Scarce and Valuable Resources:
The control system helps in improving organizational efficiency. Various control devices act as motivators to managers. The performance of every person is regularly monitored and any deficiency if present is corrected at the earliest.
Controls put psychological pressure on persons in the organization. On the other hand control also enables management to decide whether employees are doing right things.
3. Facilitates Coordination:
Control helps in coordination of activities through unity of action. Every manager will try to coordinate the activities of his subordinates in order to achieve departmental goals.
Similarly the chief executive also coordinates the functioning of various departments. The control acts as a check on the performance and proper results are achieved only when activities are coordinated.
4. Leads to Delegation and Decentralization of Authority:
A decision about follow-up action is also facilitated. Control makes delegation easier/better. Decentralization of authority is necessary in big enterprises. The management cannot delegate authority without ensuring proper control.
The targets or goals of various departments are used as a control technique. Various control techniques like budgeting, cost control; pre action approvals etc. allow decentralization without losing control over activities.

5. Spares Top Management to Concentrate on Policy Making:
For control processes management's attention is not required every now and then. The management by exception enables top management to concentrate on policy formulation.

Why do people Oppose Control?
Many people are averse to the concept of control for the following reasons:

(i) New, more "organic" forms of organizations (self-organizing organizations, self-managed teams, network organizations, etc.) allow organizations to be more responsive and adaptable in today's rapidly changing world. These forms also cultivate empowerment among employees, much more than the hierarchical, rigidly structured organizations of the past.

(ii) Many people assert that as the nature of organizations has changed so must the nature of management control. Some people go so far as to claim that management shouldn't exercise any form of control whatsoever.
They claim that management should exist to support employee's efforts to be fully productive members of organizations and communities – therefore, any form of control is completely counterproductive to management and employees.

(iii) Some people even react strongly against the phrase "management control". The word itself has a negative connotation, e.g., it can sound dominating, coercive and heavy-handed. It seems that writers of management literature now prefer use of the term "coordinating" rather than "controlling".

(iv) People also oppose controls as they are thought of decreasing autonomy, stifling creativity, threatening security, and perpetuating oppression. This may lead to change in expertise and power structure, and social structure in the organisation.

Types of Control:

Controls can be numerous in kind. These may be classified on the basis of (a) timing, (b) designing systems, (c) management levels, and (d) Responsibility

On the basis of timing:

Control can focus on events before, during, or after a process. For example, a local automobile dealer can focus on activities before, during, or after sales of new cars. Such controls may be respectively called as Preventive, Detective, and Corrective.

On this basis the control may be:

(i) Feed forward Control
(ii) Concurrent Control
(iii) Feedback Control

1. Feed forward Control:

The objective of feed forward control or preliminary control is to anticipate the likely problems and to exercise control even before the activity has started or problem has occurred or been reported. It is future directed.
This kind of control is very popular in airlines. They go in for preventive maintenance activities to detect and prevent structural damage, which may result in disaster. These controls are evident in the selection and hiring of new employees. It helps in taking action beforehand.

In case of feedback control, one relies on historical data, which will come after the activity has been performed. This means information is late and the rectification is not possible. One can make correction only for future activities.

That means whatever wrong has been done is done, and it cannot be undone. Though, future-directed control is largely disregarded in practice, because managers have been excessively dependent on accounting and statistical data for the purpose of control. In the absence of any means of looking forward, reference to history is considered better than no reference at all.

However, the concept of feed forwarding has been applied now and then. One common way managers have practised it is through careful and repeated forecasts using the latest available information, comparing what is desired with the forecasts, and introducing program changes so that forecasts can be made more promising.

2. Concurrent Control:

Concurrent control monitors ongoing employee activity to ensure consistency with quality standards takes place while an activity is on or in progress. It involves the regulation of ongoing activities that are part of transformation process to ensure that they conform to organizational standards.

The technique of direct supervision is the best-known form of concurrent control. Concurrent control is designed to ensure that employees' activities produce the correct results and to correct the problems, if any, before they become costly.

In case of computer typing, if the spelling is wrong or construction is incorrect, the programme immediately alerts the user. Many manufacturing operations include devices that measure whether the items being produced meet quality standards.

Since concurrent control involves regulating ongoing tasks, it requires a complete understanding of the specific tasks involved and their relationship to the desired and product.

Concurrent control sometimes is called steering, screening or yes-no control, because it often involves checkpoints at which decisions are made about whether to continue progress, take corrective action, or stop work altogether on products or services.

3. Feedback Control:

The control takes place after the job is over. Corrective action is taken after analysing variances with the planned standards at the end of the activity. It is also known as 'post action control', because feedback control is exercised after the event has taken place.

Such control is used when feed forward or concurrent is not possible or very costly; or when exact processes involved in performing a work is difficult to specify in advance.

The twin advantages of feedback control are that meaningful information is received with regard to planning efforts, and feedback control enhances employee motivation.

On the basis of designing Control Systems:

Three approaches may be followed while designing control systems, viz., Market Control, Bureaucratic Control, and Clan Control. However, most organisations do not depend only on just one of them.

1. Market Control:

Control is based upon market mechanisms of competitive activities in terms of price and market share. Different divisions are converted into profit centres and their performance is evaluated by segmental top line (turnover), bottom line (profit) and the market share.

Using market control will mean that the managers in future will allocate resources or create departments or other activities in line with the market forces.

2. Bureaucratic Control:

Bureaucratic control focuses on authority, rule and regulations, procedures and policies. Most of the public sector units in India go in for bureaucratic control.

If they do not go by the rulebook, the legislative committees and the ministries under whom they work will reprimand them. In a hospital no medicine can be used unless the prescription is there and it is recorded in the issue register, even if the patient may die in between.

3. Clan Control:

The control systems are designed in a way that give way to shared vision, shared values, norms, traditions and beliefs, etc., part of the organisational culture.

It is not based upon hierarchical mechanisms, but work-related and performance measures. This kind of control is most suitable for the organisations which use team style of work groups and where technology changes very fast.

On the basis of Levels:

People at different level have different planning responsibilities, so do they undertake controlling. On the basis of levels controls, can be categorised as Operational, Structural, Tactical, and Strategic.

1. Operational Control:

Its focus remains upon the processes used by the organisation for transforming the inputs (resources) into outputs (products/services). Operational controls are used at the lower management. It is exercised almost every day. Quality control, financial controls are part of operational controls.

2. Structural Control:

Are the different elements of organisation structure serving their intended aims? Is there overstaffing? Is the ratio of staff to line increasing? Necessary action is to be undertaken.

Two important forms of structural control can be bureaucratic control and clan control, about which we have already talked. Structural control is exercised by top and middle management.

3. Tactical Control:
Since tactical control deals with the departmental objectives, the controls are largely exercised by middle management levels.

4. Strategic Control:
Strategic controls are early warning systems. Strategic control is the process to determine whether the effectiveness of a corporate, business and functional strategies are successful in helping organisations to meet its goals. Strategic controls are exercised by top level management.

On the basis of Responsibility:
Who has the responsibility of controlling? The responsibility may rest with the person executing the things or with the supervisor or manager. This way control may be internal and external.
Internal control permits highly motivated people to exercise self-discipline. External control means that the thread of control is in the hands of supervisor or manager and control is exercised through formal systems.

Requirements of Effective Control System:
A control system is not an automatic phenomenon but deliberately created. Though different organisations may design their control systems according to their unique and special characteristics or conditions, yet in designing a good and effective control system the following basic requirements must be kept in view:

1. Focus on Objectives and Needs:
The effective control system should emphasise on attainment of organizational objectives. It should function in harmony with the needs of the enterprise. For example, the personnel department may use feed forward control for recruiting a new employee, and concurrent control for training.
At the shop level, control has to be easy, but more sophisticated and broad ranging controls may be developed for higher level managers. Thus, controls should be tailored to plans and positions.

2. Immediate Warning and Timely Action:
Rapid reporting of variations is at the core of control. An ideal control system could detect, not create bottlenecks and report significant deviation as promptly as possible so that necessary corrective action may be taken well in time. This needs an efficient system of appraisal and timely flow of information.

3. Indicative, Suggestive as well as corrective:

Controls should not only be able to point to the deviations, but they should also suggest corrective action that is supposed to check the recurrence of variations or problems in future.

Control is justified only if indicated or experienced deviations from plans are corrected through appropriate planning, organizing, staffing and directing. Control should also lead to making valuable forecasts to the managers so that they become aware of the problems likely to confront them in the future.

4. Understandable, Objective, and Economical:

Controls should be simple and easy to understand, standards of performance are quantified to appear unbiased, and specific tools and techniques should be comprehensive, understandable, and economical for the managers.

They must know all the details and critical points in the control device as well as its usefulness. If developed and complex statistical and mathematical techniques are adopted, then proper training has to be imparted to managers.

Standards should be determined based on facts and participation. Effective control systems must answer questions such as, "How much does it cost?" "What will it save?" or "What are the returns on the investment?"

The benefits of controls should outweigh the costs. Expensive and elaborate control systems will not suit, for example to small enterprise.

5. Focus on Functions and Factors:

Control should emphasise the functions, such as production, marketing, finance, human resources, etc and focus on four factors – quality, quantity, timely use and costs. Not one, but multiple controls should be adopted.

6. Strategic Points Control:

Control should be selective and concentrate on key result areas of the company. Every detail or thing cannot and is not to be controlled in order to save time, cost and effort.

Certain strategic, critical or vital points must be identified along with the expectations at those points where failures cannot be tolerated and appropriate control devices should be designed and imposed at those stages.

Controls are applied where failure cannot be tolerated or where costs cannot exceed a certain amount. The critical points include all the areas of an organization's operations that directly affect the success of its key operations.

7. Flexibility:

Control must not become ends in themselves. It must be environment friendly and be able to make modifications or revisions necessitated by the rapidly changing and complex business environment. Flexibility in control system is generally achieved by the use of alternative plans or flexible budgets.

8. Attention to Human Factor:

Excess control causes corruption. It should not arouse negative reactions but positive feelings among people through focus on work, not on people. The aim of control should be to create self-control and creativity among members through enmeshing it in the organisational culture. Employee involvement in the design of controls can increase acceptance.

9. Suitability:

Controls have to be consistent with the organization structure, where the responsibility for action lies, position, competence, and needs of the individuals who have to interpret the control measures and exercise control. The higher the quality of managers and their subordinates, the less will be the need for indirect controls.

Control Techniques:

Many techniques have been developed to control the activities in management. The list is very long, and it is difficult to describe them all.

Some of the important techniques are:

Financial Control:

Finance is related with mobilization of funds and their utilization and the return on them. Financial control is exercised through the following:

1. Financial Statements:

Income statement (telling about expenses, segmental incomes, overall income and expenses, and the net profit/loss), and Balance Sheet (shows the net worth at a single point of time and the extent to which the debt or equity finance the assets)

2. Financial Audits:

Financial audits, either internal or external are conducted to ensure that the financial management is done in line with the generally accepted policies, procedures, laws, and ethical guidelines. Audits may be internal (by Organisation's own staff), external (statutory audit by chartered accountants), and management audit (by experts).

3. Ratio Analysis:

Ratio analysis monitors liquidity, profitability, debt, and activity related aspects.

4. Budgetary Controls:

Budgetary control is the process of constructing budgets, comparing actual performance with the budget one and revising budgets or activities in the light of changed conditions.

Budgetary control is as such not related only to finance area, but all functional areas do take help of budgetary control. Budgets help not only in planning but also help to keep a tab on overall spending.

Budgeting may be top-down (managers prepare the budget and ask subordinates to use); bottom-up (figures come from lower levels and adjusted at upper levels); zero-based (justifying allocation of funds on the basis of activities or goals); and flexible budgeting (varying standards and varying allocations).

5. Break-even Analysis:

It is a tool of profit planning and deals with cost-volume-profit relationships.

6. Accounting:

Accounting includes responsibility accounting, cost accounting, standard cost approach, direct costing, and marginal costing.

Marketing Control:

In the field of marketing, to see that customer gets right product at the right price at the right place and through right communication, the control is exercised through the following:

Market Research:

It is to assess customers' needs, expectations and the delivery; and the competitive scenario.

Test Marketing:

To assess consumer acceptance of a new product, a small-scale marketing is done. HUL uses Chennai for most of its test marketing.

Marketing Statistics:

Marketing managers control through marketing ratios and other statistics.

Human resource control:

Human resource control is required to have a check on the quality of new personnel and also to monitor performances of existing employees so as to determine firm's overall effectiveness.

Goal setting, instituting policies and procedures to guide them are to help them. Common controls include performance appraisals, disciplinary programmes, observations, and development assessments.

Information Control:

All organizations have confidential and sensitive information to be kept secret. How to control access to computer databases is very important. This has become a key contemporary issue in control. Organizations keep a watch on employee's computer usage in general and internet in particular.

Production Control:

To ensure quality production in right quantity at right time economically production controls are required. Two of the important techniques include: Inventory control (ABC Analysis, Economic Order Quantity, Just-in time inventory control), and quality control (through inspection, statistical quality control).

Project Control:

Network analysis is most suitable for the projects which are not routine in minimizing cost and completing project well in time. Network analysis makes use of two techniques – Programme Evaluation and Review Technique (PERT), and Critical Path Method (CPM).