NHU-601: INDUSTRIAL MANAGEMENT

UNIT-I

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1.1 INTRODUCTION:

Industrial Management is the combination of two words – Industrial and Management. Industrial means industry and industry may be defined as the application of complex and sophisticated methods to the production of economic goods and services. On the other hand, management means planning, organizing, coordinating, controlling, motivating and directing various activities in an organization.

CONCEPT OF INDUSTRIAL MANAGEMENT

The combination of these two words results in a new branch of engineering. Thus;

"Industrial management - the branch of engineering that deals with the creation and management of systems that integrate people and materials and energy in productive ways."

According to the concept of industrial management, some important points are as follows:

1. Industrial management term applied to highly organize modern methods of carrying on industrial, especially manufacturing and operations.
2. It involves the environment which includes man, materials, money, and information.
3. The environment with physical and mathematical sciences, humanities and engineering creates an approach for the industrial management and engineering.
4. Industrial management is a process of planning, organizing, directing, controlling, and managing the activities of any industry.
5. It combines and transforms various resources used in the system and subsystem of the organization into value added product in a controlled manner.
6. Industrial Engineering and Management aims to uncover and solve organizational issues by attempting to establish a desirable allocation of management resources through the use of technologies.

OBJECTIVES OF INDUSTRIAL MANAGEMENT:

The ultimate objectives of industrial management are to produce the right quantity of right quality goods at right time. These are attained through:

(1) Manufacturing Costs:

Efforts should be made for the followings:

(i) Reduction in variable costs
(ii) Reduction in fixed costs
(iii) Increase volume of production
(iv) The allocation of the fixed overheads should be made on scientific basis

(2) Machinery and Equipment:

(i) Selection and acquisition of machinery and equipment according to production process

(ii) Utilization of machinery and equipment

(3) Materials:

It must be prescribed in terms of units, rupee value and space requirements.

(4) Manpower:

Manpower must be closely allied with the objectives of selection, placement, training, rewarding and utilization of manpower. Usually, these objectives are considered in terms of employee turnover rates, safety measurements, industrial relations, absenteeism, etc.

(5) Manufacturing Services:

Proper objectives should be set for the installation of important facilities such as power, water supply, material handling, etc.

(6) Product Quality:

A proper balance must be maintained between quality and cost as well as quantity and time schedule.

(7) Manufacturing Schedule:

Time schedule objective directly affects the cost, quality and the goodwill of the business in terms of regularity of shipment. Manufacturing schedules such as operating cycle time, inventory turnover rate, machine utilization rate, direct and indirect man-hours per unit, capacity utilization, machine and labour idle time, set-up, repair and maintenance time, etc.

1.2 EVOLUTION OF INDUSTRIAL MANAGEMENT

The Rise of Factories:

Before the Industrial Revolution, people worked with hand tools, manufacturing articles in their own homes or in small shops. In the third quarter of the 18th century steam power was applied to machinery, and people and machines were brought together under one roof in factories, where the manufacturing process could be supervised. This was the beginning of shop management. In the next hundred years factories grew rapidly in size, in degree of mechanization, and in complexity of operation. The growth, however, was accompanied by much waste and inefficiency. In the developed countries many engineers, spurred by the increased competition of the post-Civil War era, began to seek ways of improving plant efficiency.

THE DEVELOPMENT OF INDUSTRIAL MANAGEMENT

Industrial management has been recognized as an important factor in any country's economic growth from last two centuries. The industrial management began in eighteenth century when *Adam Smith* recognized the economic benefits of specialization of labour. He recommended breaking of jobs down into subtasks and recognizes workers to specialized tasks in which they would become highly skilled and efficient. In the early twentieth century, F.W. Taylor implemented Smith's theories and developed scientific management. From then till 1930, many techniques were developed prevailing the traditional view.

Industrial Management of the Machine: Industrial management also involves studying the performance of machines as well as people. Specialists are

employed to keep machines in good working condition and to ensure the quality of their production. When a new article is to be manufactured it is given a design that will make it suitable for machine production, and each step in its manufacture is planned, including the machines and materials to be used.

1.3 APPLICATION AND SCOPE OF INDUSTRIAL MANAGEMENT

APPLICATION OF INDUSTRIAL MANAGEMENT

Applications of industrial management are summarized in the following departments of industry:

1. Managing and arranging the location of facilities
2. Design of Plant layouts
3. Management of material handling systems
4. Supply chain management.
5. Production and Planning control
6. Quality control & Total quality management
7. Inventory & Materials management
8. Maintenance management
9. Operations management
10. Labor management

SCOPE OF INDUSTRIAL MANAGEMENT

As far as the scope of industrial management is concerned it is applicable in all segments of industry as well as in daily life. As in daily life, we plan our activities; we coordinate available resources and control our activities to achieve certain goals in the most economical way. In the same way any organization must follow the Principles of Management for its survival and growth and to be economically viable. These management principles are applicable to all activities in industry also.

Reading and learning Industrial Management will enable one to be capable of solving the problems of the organization, may be in a Production Shop, Hospital, Departmental shop, an Educational Institution or even a coffee shop. The problems a manager faces in various organizations are more or less similar to that of Production department but smaller in magnitude. Hence the knowledge of Industrial Management will help anybody managing business activities, tackle the problems encountered.

SCOPE OF INDUSTRIAL MANAGEMENT

(1) Activities relating to industrial system designing

- **(i)** Human factor
- **(ii)** Research and development activities

(2) Activities relating to analysis and control of industrial system

- **(i)** Production planning
- **(ii)** Production control
- **(iii)** Quality control
- **(iv)** Coordination with other departments
- **(v)** Dependent services and departments

IMPORTANCE OF INDUSTRIAL MANAGEMENT

The efficient Industrial Management will give benefits to the various sections of the society. They are:

(i) Consumer benefits from improved industrial productivity, increased use value in the product. Products are available to him at right place, at right price, at right time, in desired quantity and of desired quality.

(ii) Investors: They get increased security for their investments, adequate market returns, and creditability and good image in the society.

(iii) Employee gets adequate wages, job security, improved working conditions and increased Personal and Job satisfaction.

(iv) Suppliers will get confidence in management and their bills can be realized without any delay.

(v) Community: community enjoys benefits from economic and social stability.

(vi) The Nation will achieve prospects and security because of increased productivity and healthy industrial atmosphere.

PROBLEMS OF INDUSTRIAL MANAGEMENT

(1) Problem of location
(2) Problem of selection of production method
(3) Problem of plant layout
(4) Problem of designing of product
(5) Problem of production and inventory control
(6) Problem of quality control
(7) Labour Problem
(8) Problem of cost control

1.4 PRODUCTIVITY: DEFINITION OF PRODUCTIVITY

DEFINITION of 'Productivity'

Productivity is commonly defined as a ratio between the output volume and the volume of inputs. In other words, it measures how efficiently production inputs, such as labour and capital, are being used in an economy to produce a given level of output.

Productivity = Output/Input

Meaning: Productivity is a measure of the efficiency of a person, machine, factory, system, etc., in converting inputs into useful outputs. Productivity is computed by dividing average output per period by the total costs incurred or resources (capital, energy, material, personnel) consumed in that period. Productivity is a critical determinant of cost efficiency.

This can be achieved by

(i) Either producing more output with the same inputs

(ii) Or using fewer inputs for the same outputs

Productivity is a common measure of how well a country, industry or business unit is doing using its resources or factors of production.

Productivity and Production

Production refers to absolute measure of output whereas productivity is a relative term.

Productivity and Profitability

Profitability is the ratio of difference of revenue and cost to investment, i.e. **profitability = (Revenue- cost)/investment**. Profitability can be increased by reducing costs which in turn also increases productivity. However, productivity is a necessary but not a sufficient condition. For example, profitability can be increased by increasing selling price. This may not increase productivity since revenue is not related to productivity. A decrease in the price of the product may lead to decreasing profitability even though productivity may be rising.

Productivity and Efficiency: Productivity is often confused with efficiency. Efficiency is generally seen as the ratio of the time needed to perform a task to some predetermined standard time. However, doing unnecessary work efficiently is not exactly being productive. It would be more correct to interpret productivity

as a measure of effectiveness (doing the right thing efficiently), which is outcome-oriented rather than output-oriented.

1.5 MEASUREMENT OF PRODUCTIVITY

Depending upon who is defining it-whether it is an economist, accountant, manager, politician, union leader, or industrial engineer-you will get a slightly different definition of the term productivity. Productivity as a measure of effectiveness (doing the right thing efficiently), which is outcome-oriented rather than output-oriented. Productivity may also be defined as an index that measures output (goods and services) relative to the input (labour, materials, energy, etc., used to produce the output). As such, it can be expressed as:

Productivity = Output/ Input

There are three major types of productivity measures:

(1) Partial Productivity

(2) Total Factor Productivity

(3) Total productivity

(1) Partial-Factor Productivity

The standard definition of productivity is actually what is known as a partial factor measure of productivity, in the sense that it only considers a single input in the ratio. The formula then for partial-factor productivity would be the ratio of total output to a single input.

Other partial factor measure options could appear as output/labour, output/machine, output/capital, or output/energy. It is the ratio of output to one class of input. For example, labour productivity (the ratio of output to labour input) is a partial productivity measure.

Advantages

1) Easy to understand.Easy to obtain the data.
2) Easy to compute the productivity indices
3) Some partial productivity indicator data is available industry wide.
4) Good diagnostic tools to pinpoint areas for productivity improvement, if used along with total productivity indicators.

Limitations

1) If used alone, can be very misleading and may lead to costly mistakes.
2) Do not have the ability to explain overall cost increases.
3) Tend to shift the blame to the wrong areas of management control.
4) Profit control through partial productivity measures can be a hit- and-miss approach.

(2) Total-factor productivity (Multiple Factor Productivity)

It is the ratio of net output to the sum of associated labour and capital (factor) inputs. By "net output," we mean total output minus intermediate goods and services purchased. Notice that the denominator of this ratio is made up of only the labour and capital input factors.

Multifactor Productivity = Net Output / Labour Input + Capital Input

Advantages

1) The data from company records are relatively easy obtained.
2) Usually appealing from a corporate economist's viewpoint.

Limitations

1) Does not capture the impact of materials and energy inputs.

2) The value-added approach to defining the output is not very appropriate in a company setting because it is difficult for operational managers to relate the value-added output to production efficiency.
3) Not appropriate when material costs from a sizable portion of total product costs since the impact of material input is not directly shown in this productivity measure.

(3) Total productivity:

It is the ratio of total output to the sum of all input factors. Thus, a total productivity measure reflects the joint impact of all the inputs in producing the output. As such the formula would appear as:

Total Factor Productivity = Total output/ Total Input

One example is a ratio computed by adding standard hours of labour actually produced, plus the standard machine hours actually produced in a given time period divided by the actual hours available for both labour and machines in the time period.

Advantages

1) Considers all the quantifiable output and input factors; therefore, is a more accurate representation of the real economic picture of a company.
2) Profit control through the use of total factor productivity indices is a tremendous benefit to top management.
3) If used in conjunction with partial measures, can direct management attention in an effective manner.
4) Sensitivity analysis is easier to perform; Easily related to total costs.

Limitations

1) Data for computations are relatively difficult to obtain at product and customer levels, unless data collection systems are designed for this purpose.
2) As with the partial and total- measures, does not consider intangible factors of output and input in a direct sense.

Example: Consider the ABC Company. The data for output produced and inputs consumed for a particular time period are given below.

Output = $1000

Human input = 300

Material input = 200

Capital input = 300

Energy input = 100

Other expense input = 50

It is assumed that these values are in constant dollars with respect to a base period. Then the partial, total-factor, and total productivity values are computed as follows:

Partial productivities:

Human productivity = output/human input = 1000/300 = 3.33

Material productivity = output/material input = 1000/200 = 5

Capital productivity = output/capital input = 1000/300 = 3.33

Energy productivity = output/energy input = 1000/100 = 10

Other expense productivity = output/other expense input = 1000/50 = 20

Assume that the company purchases all its materials and services, including the energy, machinery and equipment (on lease), and other services, such as marketing, advertising, information processing, consulting, etc.

1.6 PRODUCTIVITY INDEX

Since productivity is a relative measure, for it to be meaningful or useful it must be compared to something. For example, businesses can compare their productivity values to that of similar firms, other departments within the same firm, or against past productivity data for the same firm or department (or even one machine). This allows firms to measure productivity improvement over time, or measure the impact of certain decisions such as the introduction on new processes, equipment, and worker motivation techniques.

Productivity Index = Productivity during the current year/

Productivity during the base period

In order to have a value for comparison purposes, organizations compute their productivity index. A productivity index is the ratio of productivity measured in some time period to the productivity measured in a base period.

For example, if the base period's productivity is calculated to be 1.75 and the following period's productivity is calculated to 1.93, the resulting productivity index would be 1.93/1.75 = 1.10.

This would indicate that the firm's productivity had increased 10 percent. If the following period's productivity measurement fell to 1.66 the productivity index of 1.66/1.75 = 0.95 it would indicate that the organization's productivity has fallen to 95 percent of the productivity of the base period. By tracking productivity indexes over time, managers can evaluate the success, or lack thereof, of projects and decisions.

FACTORS AFFECTING PRODUCTIVITY

There is quite a variety of factors which can affect productivity, both positively and negatively. These include:

1. capital investments in production, technology, equipment&facilities
2. economies of scale
3. workforce knowledge and skill resulting from training and experience
4. technological changes; work methods
5. procedures; systems
6. quality of products&processes
7. quality of management
8. legislative and regulatory environment
9. general levels of education
10. social environment
11. geographic factors

The first 6 factors are highly controllable at the company or project level. Numbers 7 and 8 are marginally controllable, at best. Numbers 9 and 10 are controllable only at the national level, and 11is uncontrollable.

PROCEDURES FOR IMPROVING PRODUCTIVITY

Productivity improvement can be achieved in a number of ways. If the level of output is increased faster than that of input, productivity will increase. Conversely, productivity will be increased if the level of input is decreased faster than that of output. Also, an organization may realize a productivity increase from producing more output with the same level of input. Finally, producing more output with a reduced level of input will result in increased productivity.

1. Improving the Existing Method of Plant Operations
2. Purpose of Operation; Design of Part
3. Tolerance and Specifications
4. Effective Utilization of Methods
5. Process of Manufacturing
6. Set up and Tools; Working Conditions.
7. Material Handling; Plant Layout

As a cautionary word, organizations must be careful not to focus solely on productivity as the driver for the organization. Organizations must consider overall competitive ability. Firm success is categorized by quality, cycle time, reasonable lead time, innovation, and a host of other factors directed at improving customer service and satisfaction.

1.7 PRODUCTION SYSTEMS:

Production system involves in producing goods with the help of an efficient management, utilizing land, lobour, machines, capital and materials. A production system constitutes an efficient process with an organized procedure for accomplishing the transformation of input elements to useful output products.

TYPES OF PRODUCTION SYSTEM

The types of production system are grouped under two categories viz.,

I. Continuous Production System

(i). Mass Production

(ii). Process Production

a. Analytical Production

b. Synthetic Production

(iii). Assembly Line

II. Intermittent Production System

(i). Job Production

(ii). Batch Production

Now let's discuss in detail each of the above-mentioned categories.

I. CONTINUOUS PRODUCTION SYSTEM:

Under this method, production remains continuous in anticipation of future demand. Standardization is the basis of mass production. In this method, the production activity continues for 24 hours or on three shifts a day basis. A steel plant, for **example**, belongs to this type. Other examples include bottling plant, soft drink industry, fertilizer plant, power plant, etc.

Characteristics:

The continuous production possesses the following characteristics.

1. It is very highly automated (process automation), and highly capital intensive.
2. Items move from one stage to another automatically in a continuous manner.
3. The products, tools, materials and methods are standardised.
4. Production is done in anticipation of demand.
5. Each machine in the system is assigned a definite nature of work.
6. Any fault in flow of production is immediately corrected otherwise it will stop the whole production process.

Advantages of Continuous production:

A properly planned flow production method, results in the following advantages:

1. It gives better quality, large volume but less variety of products.
2. The product is standardised and any deviation in quality etc. is detected at the spot.
3. There will be accuracy in product design and quality.
4. It will help in reducing direct labour cost.
5. A weakness in any operation comes to the notice immediately.
6. There may not be any need of keeping work-in-progress, hence storage cost is reduced.
7. As the raw materials are purchased on a large scale, higher margin of profit can be made on purchase.

Disadvantages

1. During the period of less demand, heavy losses on invested capital may take place.
2. Because all the machines are dedicated and special purpose type, the system is not changeable to other type of production.
3. Most of the workers handle only a particular operation repetitively, which can make them feel monotonous.
4. As this type of production is on the large scale, it cannot fulfill individual taste.

The types of continuous production system include:

1. Mass production flows, and
2. Process production flows.
3. Assembly Line Production

They are explained below:

(1) Mass production: In this type, a large number of identical items are produced; however, the equipment need not be designed to produce only this type of items. Both plant and equipment are flexible enough to deal with other products needing the same production processes. For **example,** a highly mechanized presses shop that can be utilized to produce different types of components or products of steel metal without the need of major changes.

(2) Process or Flow production: Flow production is the manufacture of a product by a series of operations, each article going on to a succeeding operation as soon as possible. There is no time gap between the work done at one process and the starting at the next. The flow of production is continuous and progressive. Some famous **examples** are automobiles, engines, house-hold machinery, chemical plants, petroleum, medicines etc.

a. **Analytical Production:** Here a raw material is broken down into different products. For examples, crude oil is analyzed into gas, petrol, kerosene and diesel oil etc.
b. **Synthetic Production:** It involves mixing of two or more materials to manufacturing a product. For example, lauric acid, myristic acid, plasmatic acid, stearic acid, linoleic acids are synthesized to manufacturing soap.

(3) Assembly Line Production:

It was developed in the automobiles industry in USA. Assembly line is a particularly useful when a limited variety of similar products is to be produced on a mass scale or in fairly large batches on a continuous basis. The design of assembly line involves the proper balancing of technology and other manufacturing facilities so as to develop a rational approach of optimization of results.

II. INTERMITTENT PRODUCTION SYSTEM

Intermittent means something that starts (initiates) and stops (halts) at irregular (unfixed) intervals (time gaps).

In the intermittent production system, goods are produced ***based on customer's orders***. These goods are produced on a small scale. The flow of production is intermittent (irregular). In other words, the flow of production is not continuous. In this system, large varieties of products are produced. These products are of different sizes.

The types of intermittent production system include:

1. Job Production
2. Batch Production

(i) Job Production:

Under this method peculiar, special or non-standardized products are produced in accordance with the orders received from the customers. As each product is non-standardized varying in size and nature, it requires separate job for production. The machines and equipment's are adjusted in such a manner so as to suit the requirements of a particular job. It is also popularly known as 'job-shop or Unit' production.

Some of the **examples** include manufacturing of aircrafts, ships, space vehicle, bridge and dam construction, ship building, boilers, turbines, machine tools, things of artistic nature, die work, etc. Some of the features of this system are as follows**:**

Characteristics (Advantages):

The job production possesses the following characteristics.

1. A large number of workers conversant with different jobs will have to be employed.
2. This system has a lot of flexibility of operation, and hence general purpose machines are required.
3. It deals with 'low volume and large variety' production. It can cater to specific customer order or job of one kind at a time.
4. The movement of materials through the process is intermittent.
5. Low risk of loss to the factory adopting this type of production. Due to flexibility, there is no chance of failure of factory due to reduction in demand. It can always get one or the other job orders to keep it going.

Limitations:

Job production has the following limitations:

1. The economies of large scale production may not be attained because production is done in short-runs.
2. The demand is irregular for some products.
3. For handling different types of jobs, only workers with multiple skills are needed. This increases the labor cost.

(ii) Batch production: The *batch production system* is generally adopted in medium size enterprises. Batch production is a stage in between **mass production** and **job-shop** production. It is that form of production where identical products are produced in lots or batches at regular interval, on the basis of demand of customers' or of expected demand for products.

This method is generally similar to job production except the quantity of production. This method is generally adopted in case of biscuit and confectionery

and motor manufacturing, medicines, tinned food and hardware's like nuts and bolts etc.

The batch production method possesses the following **characteristics** (**Advantages**):

1. A batch production turns into flow production when the rest period vanishes. In flow production, the processing of materials is continuous and progressive.
2. Batch production is bigger in scale than job production, but smaller than that of mass production.
3. Material handling may be automated by robots as in case of CNC machining centers.
4. Plant capacity generally is higher than demand.
5. The work is of repetitive nature.

Disadvantages

1. As the raw materials to be purchased are in smaller quantity than in case of mass production, the benefits of discount due to large lot purchasing are not possible.
2. It needs specially designed jigs and fixtures.

1.8 INDUSTRIAL OWNERSHIP

To start a business enterprise the most important thing required is the capital if the capital is provided by single individual, it is known as individual ownership, if it is supplied by two or more persons, if refers to partnership organisation. If it is provided by many persons in the form of show to an institute with a legal entity, it is called a joint stock company.

Types of ownership

1.8.1 Single ownership (Sole proprietorship)

1.8.2 Partnership

1.8.3 Joint Hindu Undivided Family

1.8.4 Joint Stock Company:

1.8.5 Public Sector

1.8.6 Co-operative societies:

1.8.7 Joint Sector

1.8.1 Single ownership (Sole proprietorship)

Business owned by one man is called single ownership. It is called single ownership when an individual exercises and enjoys these rights in his owner interest. eg: Printing pears, auto repair shop, wood working plant etc.

Advantages:

1. Simple in nature and easy to manage.
2. Beginning a business need no legal formalities.
3. Owner is free to take quick decision and speedy action.
4. It is easy to maintain secrets of business.
5. Better employee relationship is possible.
6. The owner takes all the projects-no need to share.
7. More the owner works, more benefit he reaps.
8. It is easy to liquidate this company.

Disadvantages:

1. Due to limited capital, it is not possible to expand the business, even if it is profitable.
2. Life of single ownership is limited.
3. Employees get no extra benefit from higher benefits small time business men cannot compute with big time business men.

1.8.2 Partnership

When the capital required financing the business become too big or when the size of the enterprises grows, a single person may wish to associate himself with more persons either for male capital or for some skills and knowledge to run the business. A partnership business is owned by two or more person (up to 20) who shares the powers, responsibilities and profit according to an agreement reached among them.

Partnership can be formed there verbally or written agreement, but to avoid any problems at a later stage, it is better to have a written agreement. The written agreement in called partnership deed, end has to be registered under the Indian partnership Act, 1932. Thus a partnership deed enjoys legal status and helps is setting day disputes in future between the partners.

General duties of partners

(i) be faithful to each other

(ii) Give true accounts and full information

(iii) Co-operate and accommodate each other

Types of partners:

(i) Active or managing partners:

They take part in the management of activities and formulation of policies. Some tines they get salaries in addition to the normal profits as partakers.

(ii) Sleeping or silent partners:

They do not take active part in the business. They simply get their share of profit from the firm according to their investment. But they are liable fare all the company debts.

(iii) Nominal Partners:

They lend their name to enhance company's repetition. They do not invest money and do not take any active part in the management but enjoy a small predefined share of the profit. They are not liable for company debts.

Advantages:

1. Formation is easy. Registration is not compulsory.
2. Adequate capital is available for investment and expansion programs.
3. Work is divided and responsibility is reduced among partners.
4. There is less possibility of errors in decisions.
5. Persons having different abilities and skills may come together as partners giving specialization.

Disadvantages:

1. Each partner has unlimited liability.
2. It is difficult to maintain the secrets of the company.
3. Possibility of misunderstanding between partners is high.

Applications: For small and medium size business, e.g., small scale industries, warehousing, transport services, more production trading in stock market etc.

1.8.3 JOINT HINDU FAMILY or HINDU UNDIVIDED FAMILY

An **HUF** is a separate entity that can be created by members of a **family**, wherein the members are lineal ascendants or descendants. **Hindus**, Buddhists, Jains and Sikhs can open HUFs. A single person cannot create an **HUF**.

Family structure

Historically, for generations India had a prevailing tradition of the *joint family system* or *undivided family*. Joint family system is an extended family arrangement prevalent throughout the Indian subcontinent, particularly in India, consisting of many generations living in the same home, all bound by the common relationship. A patrilineal joint family consists of an older man and his wife, his sons and daughters and his grandchildren from his sons and daughters.

FEATURES OF THE JOINT HINDU FAMILY BUSINESS

(i). **Membership by birth:** It is not created by an agreement among family members.

(ii). **Management:** The management vests in the *Karta*.

(iii). **Liability:** The *Karta* has unlimited liability, i.e. even his personal assets can be used for payment of business dues.

(iv). **No Maximum limit:** There is no restriction on the number of coparceners of the HUF business.

(v). **Minor members:** A male child at the time of birth becomes a coparcener.

(vi). **Unaffected by death:**The HUF business continues even after the death of a coparcener including the *Karta*.

MERIT OF JOINT HINDU FAMILY BUSINESS

(i). Economic security and status to the members

(ii). Continuity of business

(iii). Family pride

LIMITATIONS OF JOINT HINDU FAMILY BUSINESS

(i). Unlimited liability

(ii). Limited access to capital

(iii). Karta too powerful

1.8.4 JOINT STOCK COMPANY:

With the advent of factory system and consequent mass production, the individual ownership and partnership firms with their limited capital, short life span and limited managerial skill could not meet the demand of the industry. This resulted in the evolution of joint stock Company in England in 1855.

The person who purchase the shares are called shareholders and the highest managing body known as Board of directors is elected by the shareholders.

The companies so forced have to be registered under the Indian **Companies Act, 2013**. (Earlier it was called **Companies Act, 1956**)

Types of joint stock companies:

(i) Private Limited Company

(ii) Public Limited Company

(i) Private Limited Company:

A private limited company is a bigger and improved version of partnership. But here the member of shareholders may be upto 200 excluding the employees. The

registration of the company is also compulsory according to the Indian Companies Act, 2013.

A private limited company need not obtain a business commencement certificate from the Registrar of the joint stock companies. If also need not circulate the Balance sheet, profit and loss account etc., among its members. But it has to hold an annual general meeting and place the financial statements in such a meeting.

Application

Companies like Bharati Enterprises, Bata Shoe Company etc.

(ii) Public Limited Company: - A private limited Company is formed where the capital is collected from general public by issuing Shares usually having a face value like Rs.10, 20, 50,100. The minimum number of persons required to form a public limited company is 7 but there is no limit. Companies can advertise and attract the general public to buy its shares which are transferable and can be sold to anybody at any price without any price approval. The affairs of the company are managed by a group of members called. Board of directors who are elected by the shareholders. One of the directors usually is selected as the Managing directors who has enormous powers to been the company, but is answerable to the Board of Directors. The board of directors formulates the plans and policies of the company, takes for reaching decision and generally adviser the Managing director on the administrative aspects of the company. The managing director implements these plans and policies and is in charge of the major activities of the company like production, planning and sales. He is responsible for the smooth functioning of the company.

Advantages

1. Large amount of capital can be raised.
2. Shares are transferable.
3. Shareholders liability is limited to the shares they hold.
4. It creates huge employment possibilities.
5. Risks of losses are spread out to many shareholders.
6. Shareholders are protected by Government restriction on the company on the company.
7. Business can be run efficiently by employing professionals.

Application

Companies like Infosys, TISCO, L & T, Hindustan lever, Reliance are all public limited companies.

1.8.5 PUBLIC SECTOR

If public sector organisation is one which is owned and managed by the state or central government. In some cases the public sector enterprises are also controlled and operated in association with private enterprises. But the ultimate control remains with the government.

Types of government owned or public sector organizations

(i) Government departments:

These are wholly owned and managed by the State or Central Governments and generally provide service to the nation in various areas. They come under their respective ministries.

eg: Indian railways, P & T, JSRO, BARC, et.

(ii) Government industries:

These are wholly managed and owned by the State or Central Governments but are in the manufacturing sector. They generally manufacture and supply products to the various government owned organisations like Indian Railways, Indian Navy, KEB, Indian Army etc.

(iii) Public Sector undertakings:

Public sector undertakings are those industries which are jointly owned by the Central Government and State Government. Normally the majority of the holdings rest with Central government, while the State will be a minor partner.

(iv) Public Corporation:

A public Corporation is exactly like a public sector undertaking in its structure but is normally in the service sector instead of in the manufacturing sector.

e.g.: Life insurance corporation, Indian finance corporation, Indian Airlines.

Advantages of Public Sector Organizations:

i. Profit goes to the government and the society at large is benefited.
ii. Government can afford to wait for a long time before profit is realized unlike private sectors.
iii. Consumer interests are better safeguarded.
iv. Service to society is the motto, not a profit.
v. Capital, fuel, raw material, power and transport all easily made available to them.

1.8.6 CO-OPERATIVE SOCIETIES:

Co-operative Society is a form of collective ownership where a number of people associate together for obtaining the necessities of everybody life at a rate less than the market rate.

The members of the Society Supply the capital manage the business and share all profits and losses. Equality, mutual trust, mutual supervision, self-reliance and laid works are the five pillars of a stable and successful co-operative organisation. If continues the features of large partnership as well as some features of joint stock company. This form of ownership was first developed in Germany due to two important reasons.

a. The poor were exploited through long working hour's poor wages, bad working condition etc.; by the capitalists who owned large scale industries.
b. Too many middlemen between the producers and end users increased the prices of the products and reduced the profit of the produces.

Advantages of Co-operative Societies

1. Daily needs of life are available at low rates.
2. It is a democratic form of ownership.
3. Middlemen are avoided and so both produces and consumers are benefited.
4. Holding of stocks and blade marketing are eliminated
5. Once head costs are reduced because of honorary services by the members.

1.8.7 JOINT SECTOR

Joint sector refers to the enterprise owned and managed by the private sector and government / public sector undertakings. According to Duff Committee, joint sector is defined in the following way 'Joint Sector would in one view, include units in which both public and private sector, investments have taken place and where the slates takes an active part in direction and control.

The main objectives and advantages of joint sector are.

i. To stop the concentration of economic power.
ii. Social control of industry
iii. Acceleration of economic development.
iv. Promotion of mixed economy
v. Widening the base of entrepreneurship.

Sl. No.	Factor	Sole Ownership	Joint Hindu Family	Partnership	Private Ltd. Co.	Public Ltd. Co.	Cooperative Society
1	**Ownership**	Single	Family	2≤ members ≤20	2≤members	Members ≤7; No upper Limit	Members≥10; no upper limit
2.	**Separate Legal Status**	None	none	none	yes	yes	yes
3.	**Capital Required**	Small or Limited	limited	limited	large	Very large	Not substantial
4.	**Management**	By owner quick decisions	By owner	By owner and shared	By hired experts or owner	Separate from owner	Few elected members
5.	**Government Regulation**	no	no	Fairly low	Fairly high	Highly regulative	Moderate regulative
6.	**Owners liability**	Unlimited, full risk	unlimited	unlimited	unlimited	unlimited	Governed by laws
7.	**Profit Sharing**	Completely by owners	Completely by owners	Shared among partners	Proportionate to share being held	Proportionate to share being held	Based on volume of business by members
8.	**Transfer of ownership**	Any time at will	After death of father to son	Relatively difficult, with mutual consent only	Difficult and restricted by article of association	Very easy by transfer of shares	restricted
9.	**Audit**	no	no	no	must	must	must
10.	**Stability**	Life of owner	After the death of owner passed to the son	Depends upon all partners will	continuous	continuous	Comparatively short life

UNIT-II

2.1 Management Function

2.2 Principle of Management

2.3 Time and Motion Study

2.4 Work Simplification

2.5 Process Charts and Flow Diagrams

2.6 Production Planning

2.1 MANAGEMENT FUNCTION

MANAGEMENT

Management is the process of reaching organizational goals by working with and through people and other organizational resources.

Management has the following 3 characteristics:

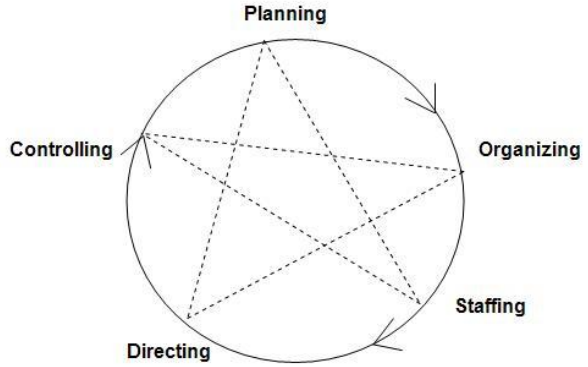
1. It is a process or series of continuing and related activities.
2. It involves and concentrates on reaching organizational goals.
3. It reaches these goals by working with and through people and other organizational resources.

Why Is Management Important?

- All organizations rely upon group efforts to achieve goals. And whenever two or more people are required to work together, management is necessary
- **Accomplish goals** – It is possible to accomplish goals without management, but it would be extremely difficult. With proper management, an organization is allowed to plan and balance their resources in such a way that every task is completed. This does not only relate to businesses, but it also applies to our lives.
- **Be more efficient** – There are only so many hours in a work day, so it beneficial to make the most of it. The last thing a company wants its employees to do is to waste time. With good time management skills, companies are able to get as much work done as possible with the time given to them.
- **Make better decisions** – The choices a business makes can make the difference between being successful to being a complete disaster. Therefore, making rational decisions is vital for a company if they want to do well. With good time management, they will have more time to weigh out the positives from the negatives in their decision making.
- **Earn more profit** – When all of the other benefits mentioned above are met, it will usually equal to an increase of profit for the company. The most successful and profitable businesses in the world attribute a lot of it to their management skills

Five Functions of Management

Management has been described as a social process involving responsibility for economical and effective planning & regulation of operation of an enterprise in the fulfillment of given purposes. It is a dynamic process consisting of various elements and activities.There are more functions of management than the ones listed below, but these are considered the most important.



1. **Planning:** This is the core function of management because it is the foundation of the other four areas. Planning involves mapping out exactly how to achieve a specific goal. As a manager, he or she will need to map