

LEARNING RESOURCE MATERIAL
COURSE CODE- (TH-1)

EMST

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CHAPTER-1: ENTREPRENEURSHIP

CONCEPT /MEANING OF ENTREPRENEURSHIP:

(Who is the father of entrepreneurship?)

Joseph Alois Schumpeter is regarded as the father of entrepreneurship. He introduced the concept of entrepreneurship.)

- Entrepreneurship refers to the concept of developing and managing a business venture in order to gain profit by taking several risks in the corporate world.
- Entrepreneurship is the willingness to start a new business. It has played a vital role in the economic development of the expanding global marketplace.
- The entrepreneur is defined as someone who has the ability and desire to establish, administer and succeed in a startup venture along with risk entitled to it, to make profits. The best example of entrepreneurship is the starting of a new business venture. The entrepreneurs are often known as a source of new ideas or innovators, and bring new ideas in the market by replacing old with a new invention.
- An entrepreneur is someone who is willing to work for himself and by himself. There are several different meanings of the term entrepreneurship.....

- (i) Entrepreneurship involves decision making, innovation, implementation, forecasting of the future, independency, and success.
- (ii) Entrepreneurship is a discipline with a knowledge base theory and is an outcome of complex socio-economic, psychological, technological, legal and other factors.
- (iii) It is a dynamic and risky process. It involves a fusion of capital, technology and human talent.
- (iv) Entrepreneurship is equally applicable to big and small businesses, to economic and non-economic activities.
- (v) Different entrepreneurs might have some common traits but all of them will have some different and unique qualities.
- (vii) Entrepreneurship is a process. It is not a combination of some stray incidents. It is the purposeful and organized search for change, conducted after systematic analysis of opportunities in the environment.
- (viii) Entrepreneurship is a philosophy and is the way one thinks, one acts and therefore it can exist in any situation, be it business or government or in the field of education, science & technology.
- (ix) Entrepreneurship is a creative activity. It is the ability to create and build something from practically nothing.
- (x) Entrepreneurship is the attitude of mind to seek opportunities, take calculated risks and derive benefits by setting up a venture.

Briefly “Entrepreneurship is a dynamic process of vision, change and creation. It requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions. Essential ingredients include the willingness to take calculated risks-in terms of time, equity or career, ability to formulate an effective venture team, creative skill to organize needed

resources, the fundamental skill of building a solid business plan and, above all, the vision to recognize opportunity where others see chaos, contradiction, and confusion.’’

ENTREPRENEURSHIP AND ITS SCOPE

The scope of entrepreneurship is far reaching.

- Entrepreneurship moves even beyond from the closed system of an enterprise.
- Entrepreneurship in its capacity stimulates the economy which enables societal change not only for fulfilling a need but also to generate revenue for the entrepreneur, entrepreneurship thus provides jobs for the society and this develops communities.
- Entrepreneurship instigates a lot more than mere creation of business.
- Entrepreneurship promotes the new business and provides opportunities to improve the new business sectors.

NEED OF ENTREPRENEURSHIP

Entrepreneurship plays a vital role in the economy and encourages people to bring new and innovative ideas to market. Here are several factors that highlight the need for entrepreneurship in today’s fast-paced world.

1. Passion, Perseverance & Persistence

Passion is a strong and uncontrollable emotion which is based into something that is higher to achieve than what the person is carrying within himself. Perseverance is a mature emotion which comes through experiences gathered and analyzed.

2. Big Dreamer

Dreaming big further strengthens an entrepreneur with his ability to dream and see the wide picture. This is actually the very first step which sets the path to self-discovery.

3. Learning

Learning is never to stop irrespective of age and thus arming oneself with education does play a vital role in forming leadership qualities when needed.

4. Good Listener

The ability to contribute will only come once we have abundance in ourselves, and this comes by absorbing the words by others. The ability to truly listen to the customers and employees is actually what makes a difference. This very skill leads a successful venture.

5. Financing Partner

Choosing a financing partner who understands the business needs is very much essential. This is as critical as choosing the business which the entrepreneur wants to pursue. Also, a business loan from a right lender will for sure play a pivotal role in realizing the dreams of becoming a successful entrepreneur.

6. Encourages Innovation

A majority of entrepreneurs solve challenges in society through technological innovations. For example, TartanSense—a Bangalore-based startup provides an AI-based Robot vehicle to be used in farms for weed management. It reduces chemical usage and helps farmers avoid unnecessary costs.

7. Creates Jobs

Entrepreneurship generates employment. Once a new business gets launched, it requires people who can drive that mission and vision forward. Entrepreneurs take the risk of employing even themselves. As the business continues to grow, the need to hire more people also increases. Take any leading education technology startup for example. Some of them have become unicorns (reached a valuation of \$ 1 Million) and opened branches across the globe.

8. Improves Standard Of Living

Entrepreneurship increases income levels, therefore improving standards of living. Entrepreneurs identify challenges in the lives of customers and provide appropriate business solutions. Additionally, they hire new employees who receive remuneration and this income gets circulated in the economy. All of the spending and salaries generate incremental wealth, therefore improving standards of living.

9. Introduces Visible Change

You need to dream big and take risks if you want to be a successful entrepreneur. As you progress to solving existing challenges and gaps in society, you take responsibility for impacting various sections of society. A majority of businesses strive to make the world a better place by contributing to socio-economic development through their products and services.

10. Contributes To Research And Development

New products and services need to be tested before they can be launched. In the process, entrepreneurs are encouraged to invest their resources into effective research and development. Even after businesses get funding, entrepreneurs continue to prioritize research and development by creating educational institutes. This further encourages the next generation of entrepreneurs to take risks and pursue their dreams.

CHARACTERISTICS, QUALITIES AND TYPES OF ENTREPRENEUR, FUNCTIONS

Characteristics of an Entrepreneur:-

Not all entrepreneurs are successful; there are definite characteristics that make entrepreneurship successful. A few of them are mentioned below:

- **Ability to take a risk-** Starting any new venture involves a considerable amount of failure risk. Therefore, an entrepreneur needs to be courageous and able to evaluate and take risks, which is an essential part of being an entrepreneur.
- **Innovation-** It should be highly innovative to generate new ideas, start a company and earn profits out of it. Change can be the launching of a new product that is new to the market or a process that does the same thing but in a more efficient and economical way.
- **Visionary and Leadership quality-** To be successful, the entrepreneur should have a clear vision of his new venture. However, to turn the idea into reality, a lot of resources and employees are required. Here, leadership quality is paramount because leaders impart and guide their employees towards the right path of success.

- **Open-Minded-** In a business, every circumstance can be an opportunity and used for the benefit of a company. For example, Paytm recognized the gravity of demonetization and acknowledged the need for online transactions would be more, so it utilized the situation and expanded massively during this time.
- **Flexible-** An entrepreneur should be flexible and open to change according to the situation. To be on the top, a businessperson should be equipped to embrace change in a product and service, as and when needed.
- **Know your Product-**A company owner should know the product offerings and also be aware of the latest trend in the market. It is essential to know if the available product or service meets the demands of the current market, or whether it is time to tweak it a little. Being able to be accountable and then alter as needed is a vital part of entrepreneurship.
- **Economic and dynamic activity-**Entrepreneurship is an economic activity because it involves the creation and operation of an enterprise with a view to creating value or wealth by ensuring optimum utilization of scarce resources. Since this value creation activity is performed continuously in the midst of uncertain business environment, therefore, entrepreneurship is regarded as a dynamic force.
- **Self confidence:** An individual should have a self confidence because they work on complete demanding tasks. Self confidence is an outcome of an entrepreneurship an entrepreneur demonstrates a higher degree of self confidence when compared to others.
- **Profit potential-**“Profit potential is the likely level of return or compensation to the entrepreneur for taking on the risk of developing an idea into an actual business venture.” Without profit potential, the efforts of entrepreneurs would remain only an abstract and a theoretical leisure activity.
- **Risk bearing-**The essence of entrepreneurship is the ‘willingness to assume risk’ arising out of the creation and implementation of new ideas. New ideas are always tentative and their results may not be instantaneous and positive.
- **Tolerance for ambiguity:** Uncertainty occurs when there is an insufficient data. An individual should respond positively to ambiguous situations. People with low level of tolerance for ambiguity find uncertain and unstructured situation more complicated. Entrepreneurial managers are believed to tolerate ambiguity better than the conservative managers in the organizations because entrepreneurial managers face a less structured, more uncertain set of possibilities and bear the whole responsibilities for decision making.
- **Positive motions:** The feelings and activeness of personality are motive forces for all human creations. The positive motions affect the variables called feelings and emotions which is a link between them and they are analyzed in different environments. The positive motion indicates the positive feeling which promotes creativity.

Qualities of an Entrepreneur:-

1) Creativity:-Creativity gives birth to something new. For without creativity, there is no innovation possible. Entrepreneurs usually have the knack to pin down a lot of ideas and act on them. Not necessarily every idea might be a hit. But the experience obtained is gold. Creativity helps in coming up with new solutions for the problems at hand and allows one to think of solutions that are out of the box. It also gives an entrepreneur the ability to devise new products for similar markets to the ones

he's currently playing in.

2) **Professionalism:-**Professionalism is a quality which all good entrepreneurs must possess. An entrepreneur's mannerisms and behavior with their employees and clientele goes a long way in developing the culture of the organization. Along with professionalism comes reliability and discipline. Self-discipline enables an entrepreneur to achieve their targets, be organized and set an example for everyone. Reliability results in trust and for most ventures, trust in the entrepreneur is what keeps the people in the organization motivated and willing to put in their best. Professionalism is one of the most important **characteristics of an entrepreneur**

3) **Risk-taking:-** Risk-taking ability is essential for an entrepreneur. Without the will to explore the unknown, one cannot discover something unique. And this uniqueness might make all the difference. Risk-taking involves a lot of things. Using unorthodox methods is also a risk. Investing in ideas, nobody else believes in but you are a risk too. Entrepreneurs have a differentiated approach towards risks. For exploring in the unknown, one must be bestowed with a trump card; a good entrepreneur has one, always. Also, evaluation of the risk to be undertaken is also essential. Without knowing the consequences, a good entrepreneur wouldn't risk it all.

4) **Passion:-**Your work should be your passion. So when you work, you enjoy what you're doing and stay highly motivated.

Passion acts as a driving force, with which, you are motivated to strive for better.

5) **Planning:-**Perhaps, this is the most important of all steps required to run a show. Without planning, everything would be a loose string as they say, "If you fail to plan, you plan to fail." Planning is strategizing the whole game ahead of time. It basically sums up all the resources at hand and enables you to come up with a structure and a thought process for how to reach your goal.

6) **Knowledge:-**Knowledge is the key to success. An entrepreneur should possess complete knowledge of his niche or industry. For only with knowledge can a difficulty be solved or a crisis is tackled.

It enables him to keep track of the developments and the constantly changing requirements of the market that he is in. May it is a new trend in the market or advancement in technology or even a new advertiser's entry, an entrepreneur should keep himself abreast of it. Knowledge is the guiding force when it comes leaving the competition behind. A good entrepreneur will always try to increase his knowledge, which is why he is always a learner. The better an entrepreneur knows his playground, the easier he can play in it.

7) **Social Skills:-**A skill set is an arsenal with which an entrepreneur makes his business work. Social Skills are also needed to be a good entrepreneur. Overall, these make up the qualities required for an entrepreneur to function. Social Skills involve the following-

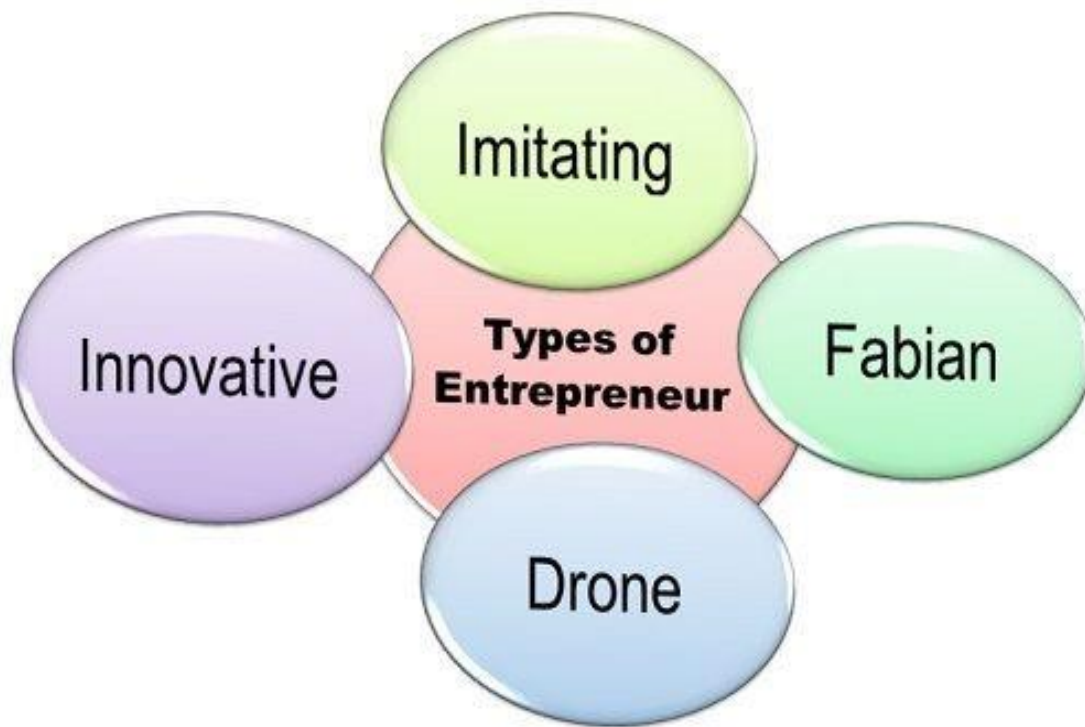
- Relationship Building
- Hiring and Talent Sourcing
- Team Strategy Formulation

8) Open-mindedness towards learning, people, and even failure:-An entrepreneur should be determined. He should face his losses with a positive attitude and his wins, humbly. Any good businessman will know not to frown on a defeat. Try till you succeed is the right mentality. Failure is a step or a way which didn't work according to the plan. A good entrepreneur takes the experience of this setback and works even hard with the next goal in line. Learning with an open mind lets you look at your faults humbly. New information always makes an entrepreneur question his current resolve. It also provides a new perspective towards a particular aspect. Open-mindedness also enables you to know and learn from your competition

9) **Empathy:** - Empathy is the understanding of what goes on in someone's mind. A good entrepreneur should know the strengths and weaknesses of every employee who works under him. Unhappy employees are not determined and as an entrepreneur, it is up to you to create a working environment where people are happy to come. To look after their well-being, an entrepreneur should try to understand the situation of employees. What can be a motivational factor? How can I make my employees want to give their best? All this is understood through empathy. Keeping a workplace light and happy is essential. For without empathy, an entrepreneur cannot reach the hearts of employees nor the success he desires.

10) **And lastly, the customer is everything:-**A good entrepreneur will always know this; a business is all about the customer. How you grab a customer's attention is the first step. This can be done through various mediums such as marketing and advertising. It is also important that you know the needs of your customers. The product or service which is being created by your organization needs to cater to the needs of your consumers.

TYPES OF ENTREPRENEURS:-



1. **Innovative Entrepreneur:** These are the ones who invent the new ideas, new products, new production methods or processes, discover potential markets and reorganize the company's structure. These are the industry leaders and contributes significantly towards the economic development of the country. The innovative entrepreneurs have an unusual foresight to recognize the demand for goods

and services. They are always ready to take a risk because they enjoy the excitement of a challenge, and every challenge has some risk associated with it. Ratan Tata is said to be an innovative entrepreneur, who launched the Tata Nano car at a considerably low cost.

2. **Imitating Entrepreneurs:** The imitating entrepreneurs are those who immediately copy the new inventions made by the innovative entrepreneurs. These do not make any innovations by themselves; they just imitate the technology, processes, methods pioneered by others. These entrepreneurs are found in the places where there is a lack of resources or industrial base due to which no new innovations could be made. Thus, they are suitable for the underdeveloped regions where they can imitate the combinations of inventions already well established in the developed regions, in order to bring a boom in their industry.
3. **Fabian Entrepreneurs:** These types of entrepreneurs are skeptical about the changes to be made in the organization. They do not initiate any inventions but follow only after they are satisfied with its success rate. They wait for some time before the innovation becomes well tested by others and do not result in a huge loss due to its failure.
4. **Drone Entrepreneurs:** These entrepreneurs are reluctant to change since they are very conservative and do not want to make any changes in the organization. They are happy with their present mode of business and do not want to change even if they are suffering the losses.

FUNCTIONS OF ENTREPRENEURS:-

1. Taking Initiative:-This unique function of entrepreneurship provides our civilization with a wide variety of products, ways of actions, production techniques, etc. Therefore, taking initiative with such end and qualification is the prime function of entrepreneurship in every economy.

2. Organizing Resources:-Organizing entails identifying those resources that are required to transform a particular idea into reality. The resources include human and nonhuman resources.

Organizing in entrepreneurship will increase productivity, promote new ventures, distribute and supervise work and responsibility, and will remove barriers to work.

Entrepreneurship, thus, is the tapping tool for assuming indigenous skills and resources for the productive purpose.

3. Identifying Opportunities and Prospects:-Entrepreneurship searches those activities of value that have an economic and social contribution. It identifies new opportunities in the socio-economic arena which have got profitable prospects therefore, entrepreneurs are called searchers of hopes into blind spots and this function enormously indebted our society to entrepreneurship.

4. Risk-Taking:-Entrepreneurship takes the risk for the new venture. For innovative actions in the field of production technology for new products in a volatile market and new raw materials used in production. It also takes the risk for theft, robbery, snatching market fall and hooliganism that may be involved with new entrepreneurship This is a major function of entrepreneurship in developing countries.

5. Decision Making:-Entrepreneurship is a new initiative therefore; it has to decide multivariate issues that affect new ventures. Entrepreneurship has to decide upon equipment to be used quality, price and its variation, deficiency, capital structure, the feasibility of the project, organizational structure, philosophy of management, etc. that will guide, run and prosper the new venture or distinct attempt for entrepreneurship.

6. Technology Transfer and Adaptation:-Entrepreneurship throughout the world brings invented technology from different comers of the world and makes it appropriate by making required adjustments for local conditions. This function of entrepreneurship involves identifying appropriate technology with market potentials and adapts it into the local environment.

7. Innovation:-Entrepreneurship innovates a new production process or technology, market, sources of new materials, management, strategy or technique, investment opportunity, etc. Innovation is a creative means to add new utilities to existing situations or products. Entrepreneurship through innovation creates innovative products or operations for human society.

8. Fostering Autonomy:-Entrepreneurship is an exposure of creative faculty that provides personal satisfaction and independence. The unique freedom to think differently is the impetus for entrepreneurship. Thus, entrepreneurship Fosters autonomy to advent something new of value by the application of devoted efforts and time.

9. Social Responsibility:-Entrepreneurship with its innovative technology somehow promotes human efforts. It restarts closed industries with innovative managerial strategies and techniques. It also motivates new entrepreneurs and attracts them to engage into an entrepreneurial venture. Entrepreneurship provides new products or ideas that give momentum and diversity into society.

10. Public Relations:-Entrepreneurship is a new venture that requires social acceptance by the regulatory bodies and the public at large. The government, as well as the persons' who will be subject to entrepreneurship, would be convinced through public relations to accept and to allow the entrepreneur to execute an entrepreneurial venture.

11. Experience Sharing:-Entrepreneurship may spread in society through publishing and sharing its success stories. Thus, entrepreneurship holds workshops, industrial visits through which the entrepreneurial experience in different counties may be shared with a widespread adaptation of success. This function will benefit the economies of the countries as well as the world bodies,

12. Managerial Roles:- Entrepreneurs perform several managerial roles to keep their venture functioning with success. The roles are interpersonal roles that consist of a figurehead role, leadership role, and liaison role; informational roles that include recipient role, disseminator role, and the spokesperson role; decisional roles that consist of an entrepreneurial role, disturbance-handler role, resource allocator role, and the negotiator role. The entrepreneur also does the associated managerial functions such as planning, organizing, leading and controlling.

13. Balanced Economic Development:-Sustainable economic development requires a balanced development among various regions and sectors of a country. Every country tries to ensure such a situation that makes industrialization throughout the country “possible. Entrepreneurs make it possible by establishing business ventures in various parts of the country in various sectors of the industry.

BARRIERS IN ENTREPRENEURSHIP:-

1. Environmental barriers:

Raw material: Non-availability of raw materials required for production during the peak season. This leads to an increase in the price of raw materials due to competition.

Labor:

1. Shortage of skilled labor
2. Lack of committed and loyal employees.
3. Quality and quantity of labor.

Machinery: Machines are necessary but they are also expensive and due to top change in technology they become obsolete and require replacement which requires cash in hand. It becomes very difficult for the small business organization to keep its production process updated.

Land and buildings: The acquisition of land and construction of a building at a prominent place requires huge expenditure. If the land is rented, it becomes a fixed cost and a constant concern for the entrepreneur.

Infrastructure support: Adequacy of electricity, proper road, water and drainage facilities, etc. Development authorities have little support due to red-tapism and corruption.

2. Financial constraints:

The availability of funds is a major concern. Delay in starting or running business results in a delay in the source of finance. A great block while beginning the startup is to manage the finances that make things difficult. There are lots of ideas that come to mind while starting a business. No matter what kind of idea you have, there is a need for stable finances and funding for making sure the process stays smoother.

3. Personal barrier:

These are due to the emotional block of a person. They cause a mental blockage. They are: –
Lack of confidence: They feel that they will never get a successful business idea and will be unable to attract the necessary resources. Therefore, they reject the idea of being self-employed.

Lack of dependence on others: The entrepreneur's aim is to gain their additional expertise through trial and error and experience rather than seeking further development or personal help from others.

Motivation: Loss interest and lack of motivation when thoughts do not work.

Lack of patience: When entrepreneurs faced with business challenges/problems in the first attempt, the desire to achieve success or to become rich immediately, in which they lose interest. They give up during the initial loss

Inability to dream: Sometimes entrepreneurs are short of vision or satisfied with what they have achieved till now and lose interest in further expansion of their business enterprise.

4. Society barrier:

1. Socio-cultural norms and values.
2. The degree of approval or disapproval of entrepreneurial behavior.
3. Financial stability and family background
4. Caste and religious affiliation

5. Political barrier:

1. Government incentives and concessions.
2. Facilitating socio-economic settings
3. Interest in the economic development of society.

ENTREPRENEURS VRS. MANAGER:-

No.	Features	Managers	Entrepreneur
1.	Meaning	By the term ‘manager’ we mean a person who gets the things done through his assistants, with the purpose of achieving business goals efficiently.	An entrepreneur is a person who builds a new organisation by gathering data (i.e. land, labour and capital) for manufacturing purposes.
2.	Focuses on	Running the daily operations	Setting up a business
3.	Static in organization	Employee	Owner
4.	Primary Motives	Want promotion and traditional corporate rewards. Power-motivated.	Wants freedom, goal oriented Self-reliant, and self-motivated.
5.	Role	Administrating controlling, operating a business	Executing ideas & Setting up a business
6.	Continuity	Managerial activities are mainly continuous involving an on-going coordination of business operations.	Entrepreneurial activities are discontinuous appearing to initiate change in the production process and then disappearing until another change is initiated.

7.	Skills	Professional training. Often business school trained. Abstract analytical tools, people-management, and political skills. trained if in technical business.	Knows business intimately. More business acumen than managerial or political skill. Often technically.
8.	Courage and Destiny	Sees others in charge of his or her destiny. Can be forceful and ambitious, but may be fearful of others' ability in case of optimism.	Self-confident, optimistic, courageous.
9.	Attention	Primly on events inside corporation.	Primarily on technology and market place.
10.	Market Research	Has market studies done to discover needs and guide product conceptualization.	Creates needs. Creates products that often can't be tested with market research-potential customers don't yet understand them. Talks to customers and forms own opinions.
11.	Innovation	On the contrary, a manager simply keeps running the enterprise on already established lines on a routine basis. That is why a manager is called the product of change brought about by the entrepreneur.	In order to maximise the profits, the entrepreneur applies innovation from time to time in the enterprise. Therefore, an entrepreneur is also called a change agent.
12.	Failure and Mistakes	Strives to avoid mistakes and surprises. Postpones recognising failure.	Deals with mistakes and failures as learning experiences.
13.	Decisions	Agrees with those in power. Delays decision until he gets a feel of hat bosses want.	Follows private vision. Decisive and action-oriented.

14.	Who they Serve	Please others.	Pleases self and customers.
15.	Problem-solving Style	Works out problems within the system.	Escapes problems in large and formal structures by leaving and starting over his own.
16.	Family History	Family members worked for large organizations.	Entrepreneurial small-business, professional, or agricultural background.
17.	Risk-bearing	A manager does not assume or share any risk involved in the enterprise he is serving.	An entrepreneur assumes risk of economic uncertainty involved in the enterprise.

FORMS OF BUSINESS OWNERSHIP:-

Business is also classified according to ownership, and deciding the type of ownership is one of the most important business decisions. The ownership decisions have long lasting decisions on the future of the business so it is important that this decision is to be taken after consulting with a lawyer or chartered accountant.

Factors like nature of the business, vision, the mission of the business, levels of the business, nature of operations, geographic and political factors etc. have to be taken into consideration before proceeding with ownership decisions of the business from different types of Business Ownerships.

1) Sole Proprietorship:-

Almost every business starts as Sole Proprietorship owing to the convenience of business transactions and the relatively small nature of the business. The ownership of the firm lies with a single person, usually who is the whole and sole of the business decision making authority. The proprietors are the ones who usually own the assets of the business and profits generated by them entirely.

The downside of it is they also have to take responsibilities of liabilities and debts if any. In the eyes of the public, the proprietor and business are one. The advantage of these types of business ownership is that the businesses are easy to set up under one authority.

The proprietors are in complete control of all the decision-making process which makes it easier for public and other stakeholders while dealing with the company. The owners of sole proprietorship

receive all the profits of the business which they can reinvest or retain for own use. In the case of the worst-case scenario, the business is easy to liquidate since the authority lies with a single person and reduces multiple decision makings thereby reducing time.

2) General Partnerships

Unlike Sole proprietorship, general partnerships involve two or more people as owners of the business. These people are termed as business partners and a legal agreement is made between the partners regarding the legalities of the business including the business aspects, profit division, work and duty division including way out if either or both partners would want to end the partnership and the settlements after that.

It is a well-known fact that every partnership ends at some point in time or at the time of crisis if well-outlined processes are not defined. This is classified as one of the successful types of business ownerships if everything works out well.

The *advantages* of General partnership are they are relatively easy to initiate except for the fact that a lot of time has to be invested in developing a partnership agreement. Since all the owners contribute funds for the business, the capital for the business increases substantially. Since diverse people are involved in ownership, it utilizes their talent and skills set to develop various aspects of the business.

There are two types of partners which can be present in Partnership business

1. **Active Partner** – one who takes an active part in the business management
2. **Sleeping Partner** – who takes little or no part in business activities

3) Limited Partnership

Limited partnership business ownership involves a combination of the above types of sole proprietorship and General Partnership. There are multiple people listed as owners in limited partnership but the business decision making authority lies with either one or few of the partners and rest all only contribute the funds and share the profits.

These are called limited partners and they have liability to the funds invested by them. A limited partnership is relatively easy to form and people with available finances and investors who know nothing about business can invest in it since they will be concerned only with sharing the profits of the business.

This ensures that there is less interference of other partners in the day to day activities of the business and this itself is the disadvantage of the limited partnership types of business that even though the investors invest money, he would have no say in the management activities.

4) Joint Stock Company

Coming together of a group of individuals, for the purpose of sharing profits by supplying the capital required to start the business in the form of shares is called Joint Stock Company. Joint Stock types of business overcome most of the disadvantages of partnership types of business. Usually, these types of business consist of more than 20 people.

The company is registered by giving it an appropriate name, outlining its vision and mission and registering it with the Registrar of Companies. The shareholders then elect a board of directors who are responsible for making policies, taking decisions and are imbibed with running of the company efficiently. There are two types of Joint Stock companies:

a) Private Limited Companies

A Private Limited is very common among all types of companies. The capital for a business is collected from business partners who may be active or sleeping. The Pvt. Ltd. company does not allow sharing or transfer of stocks and restricts public from taking up of shares.

There is no need for filing a consent of directors in a Pvt. Ltd. company and it does not need a certificate from the registrar of companies for initiation of business and neither is it required to share Balance sheet or Profit and loss statements or hold an annual general meeting like a public limited company.

The only thing a Pvt Ltd company has to do is send a certificate along with returns saying that it does not have more than 50 shareholders. This report is to be sent to the registrar of the companies. The Pvt Ltd company resembles any partnership types of business with the advantage of raising large capital investment.

b) Public Limited Company

In this type of business, the capital is collected from the public in the form of small amounts of shares having low face value. The requirement is to have a minimum of 7 Shareholders while having no capping on a maximum number of shareholders. Unlike Pvt. Ltd. company, Public Ltd company has to register with the registrar of the companies, have a board of directors for approvals, generate and share balance sheets, profit, and loss statements and conduct Annual general meetings.

Public limited types of companies do not have a limit on the transfer of shares but they have to get their accounts audited every year. The biggest challenge in public limited company is to get investors or shareholders and its formalities in initiating of its business. Also owing to the large sum involved, there is a very high possibility of frauds within the organization.

5) Cooperative Societies

Cooperative societies are private ownership which is an amalgamation of large partnerships as well as features of a corporation. The members of cooperative societies pay for buying shares and the profits are then distributed amongst its members. Each member in Cooperative societies has only one vote which prevents the concentration of power in few hands.

Just like Public limited company, cooperative society has a board of directors and conduct periodic meetings of shareholders. The principle behind the formation of cooperative societies is to form cooperation and self-help and to obtain necessities of everyday life at subsidized costs. The advantages of cooperative enterprises are that it is a democratic form of ownership and overheads are lowered as the members of cooperative may provide honorary services and the common man is benefited by cooperative societies.

6) Public Sectors

Public sectors come under the types of business ownerships which are entirely owned and managed by the state. They are also companies that are either owned or managed by the state. These types of business ownerships are either fully or partially in the hands of the government and they are the ones who supply goods and services to society.

The ultimate control of the public sector remains with the state and it prevents unbalanced growth of industries bringing a regulation. Capital is not an issue with the public sector and expansion of *business* poses no problem owing to government involvement. Public sectors are accountable to the State legislature and parliament about their results.

It is a well-known fact that compared to private businesses, public sectors are not efficient. The public sector is perfect for those industries which require heavy funding and are difficult to manage under the private sector and the availability of capital and raw material is made available easily for them.

The disadvantages of the public sector include inefficiency compared to their private counterparts and they usually run in losses due to improper management. Also, there is too much interference from the government in the internal affairs of the company at management levels.

7) Private Sector companies

It is exactly opposite to that of public sector companies are entirely non-governmental organizations. Private sectors do not undertake businesses where profit margins are low or where the business is risky. They are more often than not, run by businessmen from various sector who have an in-depth knowledge of running the business.

The profit possibility is very high along with the efficiency while wastage of resources is minimized. The decisions and the approvals, if any, are provided quickly compared to the public sector companies. Another advantage of the Private sector is there is no interference from the Government or politicians in day-to-day business decisions.

However, the disadvantages of private sector include overexploitation of workers by the companies and often starting of private sector companies requires huge capital investment, bringing which is very challenging. These types of business owners also lead to the accumulation of profits in selected few hands.

8) Limited Liability Partnership

Although it is a form of partnership, it is classified separately in types of business ownership owing to its popularity and recent interest of many upcoming companies in forming the same. Abbreviated as LLP, these companies are for a limited time on a contractual basis.

Usually, two partners are involved in limited liability partnership one of which is an investor and other provides brand name and products but the later does not have any contractual obligations towards liabilities and only first partner would be responsible for liability. This kind of business structure is used by most of the lawyers and accountants, along with few businesses.

The above were all the Types of Business Ownerships commonly found in a business company. Hope the article helped you define the types of business ownerships and classify them and chose the right kind that you want.

******The different types of business ownership are:- 1. Single Ownership or Sole-Proprietorship (Private Undertaking). 2. Partnership. 3. Joint Stock Company 4. Cooperative Organization (Or Societies) 5. Public Sector 6. Private Sector******

1. 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.

Examples of enterprises run by single owner are printing press, auto repair shop, wood working plant, a small fabrication shop, etc., Le., retail trades, service industries and small engineering firms. In single ownership, one person contributes the original assets to start the business, maintains and controls business operations, reaps full benefit in terms of profit and is fully liable for all debts associated with the business.

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.

Applications of Single Ownership:

Single ownership is suitable:

1. For retail trades, service concerns and small engineering firms which require relatively small capital to start with and to run.
2. For those businesses which do not involve high risks of failure.
3. When the business can be taken care by one person.

2. 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.

Kinds of Partners:

- (i) Active Partners who take active part in the management of the business enterprise.

(ii) Sleeping Partners who do not take any active part in the conduct of the business. Both Active and Sleeping partners are responsible for the debts of the Partnership.

General Duties of Partners:

Partners should:

- (i) Be just and faithful to one another.
- (ii) Render true accounts and full information about everything that affects any partner.
- iii) Cooperate and accommodate each other.
- (iv) Have confidence in each other and better mutual understanding.
- (v) Respect the views of one-another.

Types of Partnership:

(i) General Partnership:

Whatever has been discussed above so far pertains to General Partnership; besides that in a general partnership, each partner has full agency powers and may bind the partnership by any act, i.e., each partner may act as though he were an individual proprietor.

General partnership differs from single ownership in that the actions of any partner not only affect himself but they affect other partners also. As the partnership grows or personnel changes occur, additional partners can be had with the consent of all old partners.

Advantages of General Partnership:

- (i) Large capital is available to the firm.
- (a) The firm possesses much better talents, judgment and skills.
- (iii) General partnership is easy to form and is relatively inexpensive in terms of organization cost.
- (iv) Incentive for success is high.
- (v) There is a definite legal status of the firm.
- (vi) Partners have full control of the business and possess full rights to all profits.

- (vii) Partnership associates tax advantages with it.
- (viii) Partnership firms can borrow money quite easily from the banks.
- (ix) For all losses, there is more than one person to share them.

Applications of General Partnership:

General Partnership does very well in

Law firms,

Retail trade organization,

Medical clinics,

Small engineering firms, etc.

Disadvantages of General Partnership:

- (i) Each partner has unlimited liability for the debts of the firm,
- (ii) Danger of disagreement and distrust among the partners,
- (iii) Authority being divided among the partners,
- (iv) Partnership lacks permanence and stability; it has limited life. Partnership may dissolve if a partner dies,
- (v) Investors and lenders hesitate to provide money because of the lack of stability of a partnership firm, and
- (vi) All partners suffer because of the wrong steps taken by one partner.

(ii) Limited Partnership:

Limited partnership type of ownership overcomes the two main disadvantages of general partnership. Limited partnership is an association of one or more general partners who manage the business and one or more limited partners whose liability is limited to the capital they have invested in the business.

Limited partners share the profit but they do not participate or interfere with the control or management of the firm. Moreover limited partners have their liabilities limited to the amount of their investment.

Thus, those investors and lenders who used to hesitate investing in the venture can do so without much risk. Limited partnership type of ownership is easy and less costly to form, and personal incentive to succeed is retained. A disadvantage associated with limited partnership is that the limited partner, though he invests in the business, has no voice in the management.

3. 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 centralized 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 shareholders.
- (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) Fertilizer factories, and
- (iii) Engineering concerns, etc.

4. Cooperative Organization (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 organization 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 fewer 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.

5. 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 state 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., petroleum 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 industries 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 additional 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 phenomenon in public enterprises.

(5) Incompetent persons may occupy high levels.

(6) Workers (unlike in private concerns) shirk work.

6. 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.

TYPES OF INDUSTRIES:-

1) Aerospace Industry

The aerospace industry is one of the highest technology industries. The aviation industry deals with manufacturing aircraft which take flights within and beyond the earth's atmospheric area. The

process of manufacturing consists of various parts such as designing, building, testing, selling and maintaining. An aviation company also produces aircraft's parts to maintain the existing aircraft.

There are about 50 countries which own one or more than one aerospace company. These types of industry show the economic strength of a particular country. The United States of America is the leading country in these **types of industry**. The USA has many large and small companies dedicated to aviation business.

2) Transport Industry

The transport industry is one of the largest types of business industries. This industry deals with the movement of humans, things and animals by various modes of transportation. The main modes of transportation are air, land (Road and Rail) and water. The transportation industry makes the largest part of any country's economy.

3) Computer Industry

The computer industry has boomed drastically in the 21st century. Computer Industry has taken over almost every other industry. Computer industry or also known as Information Technology (IT) Industry. It includes businesses of computer hardware, developing and maintaining computer software and computer networking. One major area which has been growing proliferative is service sector.

The service sector has gone online in almost every sector such as health, education, retail, bank, beauty. There are hundreds of websites and apps for every single service. For example, Airbnb is a leading online service company which helps travelers to find places to stay while traveling and also help people to earn extra money by putting their extra space on rent.

4) Telecommunication industry

Telecommunication industry consists of companies which makes communication possible worldwide through mobile phones, internet, cable or wirelessly. It allows people to communicate using words, audio or video from any part of the world to any part of the world. Smartphones can send information thousands of miles away within seconds. The leading companies in the telecommunication industry are satellite companies, internet service providers, wireless operator. Wireless internet has helped other industries to generate great revenue.

This industry includes various sub-sectors such as communication equipment, wireless communication, ad-hoc network, mobile ad-hoc network, domestic telecommunication services, foreign telecommunication services, processing products, and systems. Mobile Ad-hoc network is the fastest growing sector in the telecommunication industry.

5) Agriculture industry

The agriculture industry is one of the oldest types of business industry. Agriculture industry consists of cultivating land, plants and breeding animals to produce foods and other survival things. This industry is an integral part of every country's economy. The modernization in the agriculture industry took place in the late 20th century, which is known as "Green Revolution".

After that, the agriculture industry has been growing exponentially. The agriculture industry is an important industry of countries like India, Africa and other countries having a good ecosystem. This industry consists of producing, providing, selling and exporting agricultural goods. This industry provides employment to researchers, scientists, biotechnicians, veterinarians, farm labors and development technicians.

6) Construction Industry

The construction sector is indulged in designing, building, constructing and maintaining the infrastructure. The construction industry can be sub-divided into three categories such as heavy construction, general construction, and specialized construction. Heavy construction includes the construction of bridges and roads etc. General construction includes the building of residential places and commercial real estate. Specialized construction includes making electric and wood things required to construct a building.

This era has witnessed the modernization in the way of constructing building and houses. Construction and related types of business industries have benefitted from the advancement of technology. It has given us skyscrapers, which provides a place for everyone even with population growth. Recently, one technology named Building Information Modeling (BIM) has revolutionized the construction industry.

7) Education Industry

Education industry or education system is a group of school, colleges, universities, institutes to provide learning, knowledge, skills, and a degree in various fields. Educational institutes can broadly be divided into two categories public and private. Public institutes are funded by government whereas private institutes run by a single person or by a group of people.

Online courses are most preferred by working people or people above the age of 30 years, whereas regular students prefer to enroll in traditional courses. Every country keeps a large portion of the annual budget for this sector to update the education system to provide better skills to students.

8) Pharmaceutical Industry

The pharmaceutical company is a licensed firm to research, discover, develop, market and sell the drugs. It is an important industry worldwide. It is clearly research and development (R&D) based industry. Constant research is an important aspect of the pharmaceutical industry. These companies research and produce drugs to cure diseases of humans and animals. There are some drugs that also treat symptoms.

Pharmaceutical companies are highly regularized companies. The United States' pharmaceutical industry comprises 45% of the Global Pharmaceutical Market. Johnson & Johnson and Pfizer and Merck &co. are the world's leading pharmaceutical companies. The United States pharmaceutical industry together with Canada and Mexico make the world's largest pharmaceutical market.

9) Food Industry

Food Industry comprises processing, preservation, conversion, and preservation of eatable items. The raw material for the food industry is obtained from the agriculture industry. Therefore, the food industry is dependent on the agriculture industry. After processing food various chemicals and color are added to food items to preserve them for a long time with maintaining their taste. The food industry has grown exponentially in the past decade because in the fast-paced life people demand "ready – to – go" food.

The high demand for processed and packed food gave birth to many companies and almost every kind of food from instant noodles to curry is available in packets. Other than that food service, as known as catering and food technology are also an integral part of this enormous food industry.

10) Health care Industry

Health care industry provides remedial, diagnostic, curative, preventive, rehabilitative, therapeutic services to patients and to people in their old age. The main goal of this industry is to revive and maintain the health of peoples. It is one of the fastest growing industry. This type of business industry has great potential for investors and entrepreneurs. Every country's government spends a handsome amount of money to this sector.

11) Hospitality Industry

The hospitality industry is vast types of business industries. It provides uncountable services to customers, so this industry is highly customer- oriented industry. Customer satisfaction is the main objective of this industry. This industry is exceptional, because the hospitality industry solely survives on "the want" of people, not need like health care industry.

12) Entertainment Industry

The entertainment industry is a huge business industry. It includes innumerable sub-sectors of entertainment. This industry runs on both entertainer and viewers. Entertainment has been an integral part of human society since ages, but recently it has become commercialized. This industry has grown by leaps and bounds in the past century. These types of business industries such as entertainment and hospitality industries make a great part of the Gross Domestic Product (GDP) of any country.

13) News Media Industry

News Media industry is an important industry. The target of this industry is to provide news to the people. It makes people aware of the happenings in the world. There are various media platform for example newspaper, Television, Radio, online blogs, websites, and podcasts. Printed NEWS letters were first circulated in Europe during World War, since then NEWS media has developed drastically.

14) Energy Industry

These types of business industries are important because of their wide applications in various sectors. Energy industry can be sub-divided into two categories renewable energy industry and non-renewable business industry. One important source of the renewable energy industry is petroleum. There are different operations take places such as extraction, refining, manufacturing, and sales.

15) Manufacturing Industry

Manufacturing is the process of converting raw material and components into the final product to sell in the marketplace for public consumption. Manufacture industry has many categories, for example, food industry, petroleum industry, paper industry, wood industry, leather industry, textile mill industry, apparel industry, transportation equipment industry, electrical equipment industry etc.

Goods can be prepared in the mill, factories or plants for example fabric and goods can also be prepared by hands to sell in the market. Manufacturing industries provide employment to educated as well as labor class population of any country. In America, approximately 12 billion people are employed in the manufacturing industry.

16) Music Industry

Music industry one among the many types of business industries that run on the passion of people who works in it. This industry is made of Musicians, Composers, Lyrics writers, singers, instrument players. This industry is highly affected by technology. Old are the days when people used to buy CDs and DVDs. The United States of America observed the notable downfall in the CD sales.

17) Mining Industry

The mining industry is dedicated to locating and extracting metals from the surface of the earth all around the world. These metals are used for commercial purposes and jewelry making. This industry also deals with production and trading of metals also.

Every country spends a lot for the exploration of a feasible place to extract metals. These types of business industries cause environmental problems, which is a matter of concern globally. This industry requires strict regulations for environmental protection reasons.

18) Worldwide web

Worldwide web also is known as web, is a network designed using Hypertext Markup Language (HTML) and can be accessed using Hyper Text Transfer Protocol (HTTP). Worldwide web is invented in 1991 by Tim Berners-Lee. It was the revolutionary invention of that time. However, it became popular a decade later. A web page contains text, images, videos, audio, and links. Similar kinds of websites have the same domain name.

19) Electronics Industry

The electronics industry is one of the huge industries. This is the type of industry that produces electronics devices for commercial as well as domestic use, for example, smart phones, switches, circuit board, refrigerators, washing machines, and other AI-based goods. Electronic companies produce market and sell electronic units. Global electronic industry has observed growth by average 5% from the year 2016 to 2018.

CONCEPT OF Start-ups:-

A startup is a company that is in the first stage of its operations. These companies are often initially bankrolled by their entrepreneurial founders as they attempt to capitalize on developing a product or service for which they believe there is a demand.

The following set of features that all startups have-

1. **Innovation:-**A business this type needs to have a differentiator competition in order to gain competitive advantage in the market. It is innovation may be present in their products or in the business model associated with company. **An innovation plays an essential role in the success of a startup, so all entrepreneurs should seriously consider this aspect.**

2. **Age:-**A startup is new company which is still in early stages brand management, sales and hiring employees. Too often the allocation of this concept to Business who has been on the market for less than 3 years, however, this is not true. That is, one company you can have 7 years and is still a startup. Stop being a startup it depends not only on your age but on a specific set of features.
3. **Growth:-**A startup is company whose goal is growing and expand rapidly, taking up to sometimes drastic proportions. This is one of the points **that distinguished** startup a Small business.
4. **Risk:-** Once a startup **It has** shed innovative **strongly present, there are always several associated uncertainties about ensuring the success of the** business. **For this reason, these Business are considered risk investments with a high failure rate.**
5. **Flexibility:-**An startup is very dynamic and ready to adapt to the adversities that may arise. Due to the need for validation of your business idea, these Business need to be ready to tailor their product to meet customer requirements.

This feature It is also present in the business model as there is a need to find a sustainable business model.

6. Solving a problem

Associated with your shed innovative, this Type of company focuses on solving any existing problem in the market. So they focus on making a difference not only in the marketplace but also in people's lives through your product or service.

7. Scalability

An startup is company in constant search of a business model that is scalable and repeatable, that is, it can grow without the need to increase human or financial resources.

8. Work team

These Business they are usually made up of very few people. Although not the only determining factor for the designation of startupIt is quite common to define it in your working team there less than 100 people.

In short, we can consider that a startup is a company that is in the early stages of development in order to solve real-life problems through a product or innovative service.

In our modern world, where everyone strives to bring innovation, a good idea isn't enough to create a startup. To understand the features of different startups better, you need to review the following six types.

- **Scalable startups.** Companies in a tech niche often belong to this group. Since technology companies often have great potential, they can easily access the global market. Tech businesses can receive financial support from investors and grow into international companies. Examples of such startups include Google, Uber, Facebook, and Twitter. These startups hire the best workers and search for investors to boost the development of their ideas and scale.
- **Small business startups.** These businesses are created by regular people and are self-funded. They grow at their own pace and usually have a good site but don't have an app. Grocery stores, hairdressers, bakers, and travel agents are the perfect examples.
- **Lifestyle startups.** People who have hobbies and are eager to work on their passion can create a lifestyle startup. They can make a living by doing what they love. We can see a lot of examples of lifestyle startups. Let's take dancers, for instance. They actively open online dance schools to teach children and adults to dance and earn money this way.
- **Buyable startups.** In the technology and software industry, some people design a startup from scratch to sell it to a bigger company later. Giants like Amazon and Uber buy small startups to develop them over time and receive benefits.
- **Big business startups.** Large companies have a finite lifespan since customers' preferences, technologies, and competitors change over time. That's why businesses should be ready to adapt to new conditions. As a result, they design innovative products that can satisfy the needs of modern customers.
- **Social startups.** These startups exist despite the general belief that the main aim of all startups is to earn money. There are still companies designed to do good for other people, and they are called social startups. Examples include charities and non-profit organizations that exist thanks to donations. For instance, Code.org, a non-profit organization, encourages school students in the US to learn computer science.

ENTREPRENEURIAL SUPPORT AGENCIES AT NATIONAL, STATE, DISTRICT LEVEL (SOURCES):-

DIC (DISTRICT INDUSTRIES CENTERS):-

The District Industries Center (DIC) Programme was started in 1978 as a centrally sponsored scheme with an object of providing all the services and support to village and small scale enterprises under a single roof for the effective development of small scale industry in the widely dispersed rural areas and small towns of the country.

The main thrust of the DIC Programme is on the development of such industrial units, which can create large employment opportunities in rural and semi-urban areas.

A District Industries Center is an institution established at the district level so as to provide them to set up small and village industries there.

Before the setting up of DIC, a prospective entrepreneur has to go to several agencies, many of them far from his district, in order to get the necessary assistance and facilities. This caused considerable delay, waste of time and money.

Now suitable powers have been delegated by several departments of the State Government to the District Industries Center. Thus an entrepreneur can get all the assistance he needs from a single agency itself i.e. DIC.

FUNCTIONS OF THE DISTRICT INDUSTRIES CENTER

1. SURVEY AND INVESTIGATION

The District Industries Center conducts survey of the existing traditional and new industries and raw materials and human resources. It makes market forecasts of various products. It also prepares techno-economic feasibility reports so as to give investment advice to the entrepreneurs.

2. TRAINING COURSES

The District Industries Center also conducts training courses for the entrepreneurs of small and tiny units. It acts as an intermediary between the entrepreneurs and the small industries service institutes in order to introduce new and improved product lines and quality developed by the latter to the former.

3. MACHINERY AND EQUIPMENT

The District Industries Center indicates the locations where from machinery and equipment can be acquired and also arrange for supply of machinery on hire purchase basis.

4. RAW MATERIALS

The District Industries Center obtains the details regarding the materials required by various units and arrange for purchase of the same in bulk. Thereby it enables the small units to get their raw materials at reasonable prices.

5. ARRANGEMENTS FOR LOANS

It makes the necessary arrangements with Lead Banks and other Financial Institutions in order to provide financial assistance to the entrepreneurs. It also appraises the application and monitors the flow of industrial credit in the district.

6. MARKETING

The District Industries Center conducts market surveys and market development programmes. It also organizes marketing outlets, contact with Government procurement agencies and make the entrepreneurs well informed of the market intelligence.

7. KHADI AND VILLAGE INDUSTRIES

District Industries Centers gives special attention to the development of khadi and village industries and other cottage industries. It also keeps close contact with the State Khadi Board and organize training programmes for rural artisans.

Eligibility criteria for district industry centre

The eligibility criteria for various schemes under DIC have different eligibility criteria. You can check the criteria for the schemes individually to know whether you are eligible or not for the loan for MSME. The requirements for a DIC loan for MSME are:

- Applicants must be above 18 years of age.
- Applicants must have passed the 8th standard.
- The manufacturing project must be above INR 10 lakh, and the cost of service or business sector must be more than INR 5 lakhs.

However, the common documents required to get a District Industry Centre certificate are Aadhar Card, name and address of your business, bank account details, date of initiating the business, the main activity for the business, type of business, number of employees (if any), investment of business, and the account number.

National Schedules Caste Finance & Development Corporation (NSCFDC):

Schedule Caste Professionals with his/her annual income for Rural area Rs. 40,000 and Annual Income for Urban areas Rs. 55,000 are eligible to avail this loan:

Loan Details:

Interest Rate	Depends on the loan amount (6%-10% per annum)
Unit amount	Up to Rs. 30 lakh
Loan amount	Up to 90%
Subsidy	BPL beneficiary Rs. 10,000
Repayment tenure	Up to 10 years
Promoter's contribution	2% – 10%

National Safai karamcharis Finance & Development Corporation

Loan Details:

Interest Rate	6% per year
Unit amount	Up to Rs. 10 lakh
Loan amount	Up to 90%
Repayment tenure	Up to 10 years
Promoter's contribution	Up to 10%

National Backward Caste Finance & Development Corporation

Loan Details:

Interest Rate	5%-6% per annum
Loan amount	Up to Rs. 5 lakh
Repayment tenure	Up to 10 years
Promoter's contribution	Up to 5%

National Physically Challenged Finance & Development Corporation

Loan Details:

Interest Rate	Depends on the loan amount – Usually between 4% – 8% per year
Loan amount	Up to Rs. 25 lakh
Repayment tenure	Up to 10 years
Promoter's contribution	Up to 10%

Note: All above-mentioned interest rates are subject to change and depend on the sole discretion of the ministry and RBI.

NSIC (NATIONAL SMALL INDUSTRIES CORPORATION):-

NSIC (National Small Industries Corporation) is an ISO 9000 certified Indian Government Enterprise under Micro, Small and Medium Enterprises. National Small Industries Corporation is working to aid, foster and promote the growth of MSMEs (micro, small and medium enterprises) all across the country. NSIC operates all across the nation through a network of Technical Centre and offices.

The main NSIC functions are to promote the budding small businesses of India and provide help to Small Scale Industries (SSI). The National Small Industries Corporation objectives include:

- To enhance the corporation reach which will ultimately result in business growth.
- To achieve efficiency in operations and productivity and attain better profitability.
- To help manpower in upgrading their skills.
- To provide a safe and clean work environment.
- To provide training to the trainees and help them in self-employment.

Role of NSIC

- To provide machinery on hire-purchase scheme to small scale industries;
- To provide equipment leasing facility;
- Assist in export marketing of the products of small scale industries;
- Participate in bulk purchasing programme of the government;
- To develop prototype of machines and equipments to pass it to the small scale industries for commercial production;
- To distribute raw material among small scale industries via raw materials depots;
- Assist in the development and growth of technology and implementation of modernization programmes of small scale industries;
- Impart training in different industrial trades;
- To set up small scale industries in other developing nations on a turnkey basis;
- To provide advisory and mentoring services;
- To serve as technology business incubators;
- To undertake the construction of industrial estates.

NSIC also provides small enterprises the following support services through its technical services centres and extension centres:

- Advises on application of new techniques;
- Material testing facilities through accredited laboratories;
- Product design including CAD;
- Provide energy and environment services at selected centres;
- Classroom and practical training for skill enhancement;
- Common facility support in machining, EDM, CNC, DNC etc.

The National Small Industries Corporation has a significant position among the institutions set up to assist small scale industries, and it has been working to complete its mission of helping, promoting and fostering the growth of Micro, Small and Medium Enterprises in the country. Therefore the role of NSIC is critical for the development of small industries.

OSIC (ODISHA SMALL INDUSTRIES CORPORATION LTD.):-

OSIC was established on 3rd April, 1972 as a wholly owned Corporation of Government of Odisha. The basic objective of the Corporation is to aid ,assist and promote the MSMEs in the State for their sustained growth and development to gear up the industrialization process in the State.

OSIC is working with the following points-

- i. To provide quality raw material to MSMEs of the State.
- ii. To provide quality building material to MSME Sector.
- iii. To assist in marketing the products of the MSME Sector.
- iv. To act as syndicate leader of MSMEs as per the IPR of the Govt. of Odisha.
- v. To act as a Nodal Agency for Sub-contract exchange for MSME Sector and Large Industries.

SIDBI (SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA)

Small Industries Development Bank of India (SIDBI) was established under an Act of the Parliament in 1990. SIDBI is the Principal Financial Institution engaged in promotion, financing & development of the Micro, Small and Medium Enterprises (MSMEs) sector and coordination of the functions of the various institutions engaged in similar activities.

The main objective of SIDBI is to offer loans to MSMEs to help in addressing the development and financial gaps in the ecosystem of MSMEs. The company aims to ensure that the MSME sector is globally competitive, vibrant, and strong.

Functions of SIDBI

- Small Industries Development Bank of India refinances loans that are extended by the PLIs to the small-scale industrial units and also offers resources assistance to them.
- It discounts and rediscounts bills.
- It also helps in expanding marketing channels for the products of SSI (Small Scale Industries) sector both in the domestic as well as international markets.
- It offers services like factoring, leasing etc. to the industrial concerns in the small-scale sector.
- It promotes employment-oriented industries particularly in semi-urban areas for creating employment opportunities and thus checking the relocation of people to the urban areas.
- It also initiates steps for modernization and technological up-gradation of current units.

- It also enables the timely flow of credit for working capital as well as term loans to Small Scale Industries in cooperation with commercial banks.
- It also co-promotes state-level venture funds.

NABARD (NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT):-

National Bank for Agriculture and Rural Development (NABARD) is an apex regulatory body for overall regulation of regional rural banks and apex cooperative banks in India. The main objects of NABARD are as follows:

1. NABARD provides refinance assistance for agriculture, promoting rural development activities. It also provides all necessary finance and assistance to small scale industries.
2. NABARD in coordination with the State Governments provides agriculture.
3. It improves small and minor irrigation by way of promoting agricultural activities.
4. It undertakes R&D in agriculture, rural industries.
5. NABARD promotes various organizations involved in agricultural production by contributing to their capital.

Thus, the objects of NABARD can be brought under three major heads:

- Credit function.
- Development function.
- Promotional function.

Main functions of NABARD:

1. NABARD provides refinancing facilities to Commercial banks, State co-operative banks, Central Co-operative banks, Regional rural banks and Land Development banks.
2. It provides refinancing to agriculture, small scale industries and other village and cottage industries by lending to commercial banks.
3. It promotes rural industries, small scale and cottage industries including tiny sectors by providing loans to commercial and co-operative banks.
4. Special assistance is given by the bank for the promotion of small scale, cottage and village industries under service area approach.
5. The bills of commercial and co-operative banks are discounted to enable them to finance for agricultural operations.
6. The bank provides funds to State governments for undertaking developmental and promotional activities in rural areas. In order to promote rural development and to help the weaker sections, the bank refinances especially regional rural banks which are set up in backward areas in most of the States.
7. Towards long-term loan, the bank is providing loans to institutions involved in long-term agricultural loan against guarantee of State government.

8. The bank is also financing research and development of agricultural and rural industries.
9. The bank implements the policy of the Central Government and the RBI with regard to agricultural credit.
10. Provides finance for promoting non-farm activities and employment in non-farm sectors for the purpose of reducing rural unemployment.
11. It strengthens the co-operative structure in the States by providing loans to both State co-operative banks and also to Land Development Banks.
12. It promotes minor irrigation projects by financing State Government's sponsored irrigation projects.
13. The bank is undertaking inspection work of Co-operative banks and Regional rural banks.
14. The bank has opened branches at all District headquarters by which it co-ordinates the District development programmes along with the district officials.
15. The bank also helps in the annual credit plan of the commercial banks and co-ordinates the activities of commercial and co-operative banks at the district level.
16. During natural calamities, such as droughts, crop failure and floods, the bank helps by refinancing commercial and cooperative banks so that the farmers tide over their difficult period.

Thus, the bank is providing short-term, medium term and long-term loans for agriculture and rural development.

COMMERCIAL BANKS:-

A commercial bank is a financial institution which performs the functions of accepting deposits from the general public and giving loans for investment with the aim of earning profit. The Commercial Bank of India, also known as Exchange Bank was a bank which was established in Bombay Presidency (now Mumbai), in **1845** of the British Raj period. The functions of commercial banks are classified into two main divisions.

(a) Primary functions

Accepts deposit: The bank takes deposits in the form of saving, current, and fixed deposits. The surplus balances collected from the firm and individuals are lent to the temporary requirements of the commercial transactions.

Provides loan and advances: Another critical function of this bank is to offer loans and advances to the entrepreneurs and business people, and collect interest. For every bank, it is the primary source of making profits. In this process, a bank retains a small number of deposits as a reserve and offers (lends) the remaining amount to the borrowers in demand loans, overdraft, cash credit, short-run loans, and more such banks.

Credit cash: When a customer is provided with credit or loan, they are not provided with liquid cash. First, a bank account is opened for the customer and then the money is transferred to the account. This process allows the bank to create money.

(b) Secondary functions

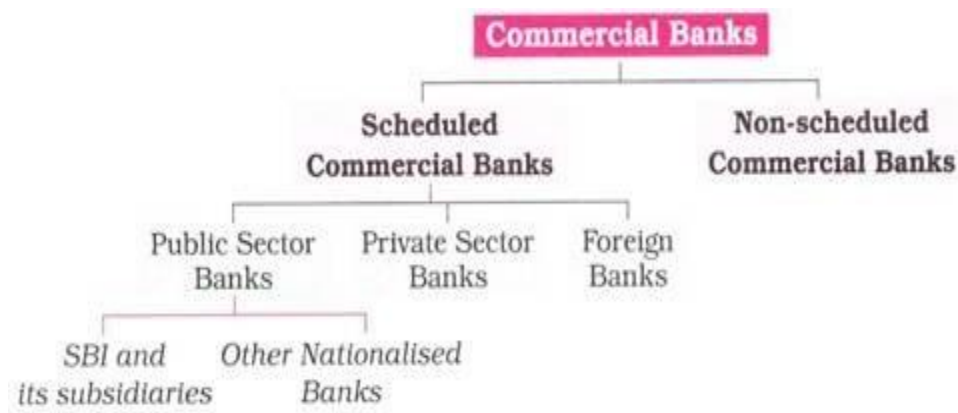
Discounting bills of exchange: It is a written agreement acknowledging the amount of money to be paid against the goods purchased at a given point of time in the future. The amount can also be cleared before the quoted time through a discounting method of a commercial bank.

Overdraft facility: It is an advance given to a customer by keeping the current account to overdraw up to the given limit.

Purchasing and selling of the securities: The bank offers you with the facility of selling and buying the securities.

Locker facilities: A bank provides locker facilities to the customers to keep their valuables or documents safely. The banks charge a minimum of an annual fee for this service.

Types of Commercial Banks:



There are three different types of scheduled commercial banks.

Private bank –: It is a type of commercial banks where private individuals and businesses own a majority of the share capital. All private banks are recorded as companies with limited liability. Such as Housing Development Finance Corporation (HDFC) Bank, Industrial Credit and Investment Corporation of India (ICICI) Bank, Yes Bank, and more such banks.

Public bank –: It is a type of bank that is nationalised, and the government holds a significant stake. For example, Bank of Baroda, State Bank of India (SBI), Dena Bank, Corporation Bank, and Punjab National Bank.

Foreign bank –: These banks are established in foreign countries and have branches in other countries. For instance, American Express Bank, Hong Kong and Shanghai Banking Corporation (HSBC), Standard & Chartered Bank, Citibank, and more such banks.

Examples of Commercial Banks

Few examples of commercial banks in India are as follows:

1. State Bank of India (SBI)

2. Housing Development Finance Corporation (HDFC) Bank
3. Industrial Credit and Investment Corporation of India (ICICI) Bank
4. Dena Bank
5. Corporation Bank

KVIC (KHADI AND VILLAGE INDUSTRIES COMMISSION):-

Khadi and Village Industries Commission (KVIC) plans, promotes, organizes, and implements programs for the development of Khadi and other village industries in the rural areas, nationwide. KVIC also helps in building up the reserve of raw materials for supply to producers. The commission focuses on the creation of common service facilities for the processing of raw materials, such as semi-finished goods. KVIC has also helped in the creation of employment in the Khadi industry.

Functions of KVIC

- Building up of a reserve of raw materials and implementation for supply to producers
- Formation of common service facilities for processing of raw materials that include semi-finished goods
- Promoting the sale and marketing of Khadi and Village Industries products, as well as handicrafts
- Promoting research in the village industries sector-related production techniques and equipment
- Providing financial assistance to individuals and institutions for the development and operation of Khadi and Village industries

Objectives of KVIC

- To promote Khadi in rural areas
- To provide employment
- To produce saleable articles
- To create self-reliance amongst the poor
- To build up a strong rural community

Features of KVIC

- Interest Rate: Depends on the applicant's profile and business requirements
- Loans offered are directed and governed by PMEGP under which is below-mentioned criteria for specific MSMEs:

- Loan Amount for Manufacturing Sector: Maximum Rs. 25 lakh
- Loan Amount for Business and Service Sector: Maximum Rs. 10 lakh
 - Funding Pattern: Mentioned below in PMEGP Scheme
 - Repayment Tenure: From 3 years – 7 years, including 6 months of the moratorium period
 - Income Capping: No criteria
 - Margin: Lock-in for 3 years in separate account later adjusted with KVIC loan

Interest Rate Subsidy Scheme

The interest subsidy scheme offered by KVIC shall be applicable to specific loans offered by financial agencies. Loans raised by KVIC for disbursement as capital investment and working capital loans are offered by:

- Institutions: Registered under Societies Registration Act 1860
- Co-operative Society: Registered under Co-operative Societies Act 1912
- Charitable Trusts for public welfare and religious purposes
- Financial Institutions: Scheduled and Non-scheduled banks, Nationalized Banks, Co-operative Banks, State Financial Corporations and Industrial Development Banks

Eligibility Criteria for Khadi and Village Industries Commission (KVIC)

KVIC loan can be availed by the following entities:

- Individuals of minimum 18 years of age with 8th class pass certificate
- Self Help Groups (SHGs)
- Registered and Co-operative Societies
- Charitable Trusts and many more entities

TECHNOLOGY BUSINESS INCUBATORS (TBI):-

Technology Business incubator (TBI) is an entity, which helps technology-based start-up businesses with all the necessary resources/support that the start-up needs to evolve and grow into a mature business. Typically, TBIs provide budding entrepreneurs all necessary infrastructure support, technology/prototype development support, research assistance, help in getting funding, business consulting assistance, marketing assistance and do whatever is necessary to make the start-up a

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success.

The primary goal of a business incubator is to facilitate economic development by improving survival and growth of new entrepreneurial units. Incubators accelerate the development of young entrepreneurial units from 'idea stage' to independent self-sustaining successful business. The phenomenal growth of the incubators has taken place world over in last two decades. The concept has benefited many countries in utilizing technology as a means for their economic development.

In the form of a business centre, the TBI provides incubates an initial place of operation equipped with supportive environment in which services such as assistance in technology, hands-on management, mentoring, business plan development, exposure to Venture Capital and Institutional Capital and all other operational business/finance related needs involved in starting and growing a technology company.

TBIs are promoted to achieve the following objectives:

- Creation of technology based new enterprises
- Creating value added jobs & services
- Facilitating transfer of technology
- Fostering the entrepreneurial spirit
- Speedy commercialization of R&D output
- Specialized services to existing SMEs

Criteria for selection of location:

Ideally a TBI should be located near a source of technology and knowledge i.e. around R&D Institutions/Academic Institutions or it should have strong links with such institutions to ensure optimal use of the already existing expertise and facilities thus keeping the cost of the TBI on lower side. Locating TBIs in such location could also reduce time lag between technology development and its commercialization. Further, as the success of a TBI largely depends on its location and management besides quality of tenant enterprises, following aspects relating to the Host Institution (HI) need to be kept in view while selecting location of the TBI:

- R&D track record and subsequent commercialization of R&D output
- Dedicated team of R&D persons
- Industrial milieu in the region
- Proximity to other R&D/academic institutions
- Infrastructure, facilities and expertise available
- Strong commitment and willingness of the HI

SCIENCE AND TECHNOLOGY ENTREPRENEUR PARKS:-

Research and Development: through the use of technology, businesses can research the market through the use of secondary data. This is extremely useful as it provides businesses with in-depth knowledge about markets before penetrating them.

The Science & Technology Entrepreneurs Park (STEP) programme was initiated to provide a re-orientation in the approach to innovation and entrepreneurship involving education, training, research, finance, management and the government. A STEP creates the necessary climate for innovation, information exchange, sharing of experience and facilities and opening new avenues for students, teachers, researchers and industrial managers to grow in a trans-disciplinary culture, each understanding and depending on the other's inputs for starting a successful economic venture. STEPs are hardware intensive with emphasis on common facilities, services and relevant equipments.

The major objectives of STEP are to forge linkages among academic and R&D institutions on one hand and the industry on the other and also promote innovative enterprise through S&T persons.

Objectives

- To forge a close linkage between universities, academic and R&D institutions on one hand and industry on the other.
- To promote entrepreneurship among Science and Technology persons, many of whom were otherwise seeking jobs soon after their graduation.
- To provide R&D support to the small-scale industry mostly through interaction with research institutions.
- To promote innovation based enterprises.



Facilities and Services Provided by STEPs

- It offers facilities such as nursery sheds, testing and calibration facilities, precision tool room/central workshop, prototype development, business facilitation, computing, data bank, library and documentation, communication, seminar hall/conference room, common facilities such as phone, telex, fax, photocopying. It offers services like testing and calibration, consultancy.
- Training, technical support services, business facilitation services, database and documentation services, quality assurance services and common utility services.

CHAPTER 2: MARKET SURVEY AND OPPORTUNITY IDENTIFICATION (BUSINESS PLANNING)

INTRODUCTION:-

A business plan is a fundamental document that any startup business needs to have in place prior to beginning operations. Banks and venture capital firms indeed often make writing a viable business plan a prerequisite before considering providing capital to new businesses.

A business plan is a summary document that outlines how and why a new business is being created. New entrepreneurial ventures must prepare formal written documents to outline their long-term objectives and the means to be employed to reach said objectives. The business plan underlines the strategies that need to be adopted in order to reach organizational goals, identify potential problems, and devise custom solutions for them.

So in essence business planning comprises of setting objectives for the organization and developing a plan of action to achieve these objectives. Once the objectives are set, the managers and workers can have a clear vision of what to work towards.

Managers are a very important part of the function of business planning. Planning requires innovation, creativity and multi-tasking from the managers. And planning is a function that managers of all levels must perform, i.e upper, middle and lower management.

Importance of Business Planning

Planning is an important function of management, it tells the manager where the organization should be headed. It also helps the organization reduce uncertainty. Let us take a look at some important functions of planning.

1] Planning provides a sense of Direction

Planning means coming up with a predetermined action plan for the organization. It actually states in advance what and how the work is to be done. This helps provide the workers and the managers with a sense of direction, a guidance in a way. Without planning their actions would be uncoordinated and unorganized.

2] Planning reduces Uncertainty

Planning not only sets objectives but also anticipates any future changes in the industry or the organization. So it allows the managers to prepare for these changes, and allow them to deal with the uncertainties. Planning takes into consideration past events and trends and prepares the managers to deal with any uncertain events.

3] Planning reduces Wastefulness

The detailed plans made keep in mind the needs of all the departments. This ensures that all the departments are on the same page about the plan and that all their activities are coordinated. There is clarity in thought which leads to clarity in action. All work is carried out without interruptions or waste of time or resources.

4] Planning invokes Innovation

Planning actually involves a lot of innovation on the part of the managers. Being the first function of management it is a very difficult activity. It encourages the manager to broaden their

horizons and forces them to think differently. So the managers have to be creative, perceptive and innovative.

5] Makes Decision Making Easier

In business planning the goals of the organization have been set, an action plan developed and even predictions have been made for future events. This makes it easier for all managers across all levels to make decisions with some ease. The decision-making process also becomes faster.

6] Establishes Standards

Once the business planning is done, the managers now have set goals and standards. This provides the manager's standards against which they can measure actual performances. This will help the organization measure if the goals have been met or not. So planning is a prerequisite to controlling.

Limitations of Planning

While business planning is important and a requisite for every organization, it does have some limitations. Let us take a look at some limitations of business planning.

1] Rigidity

Once the planning function is complete and the action plan is set, then the manager tends to only follow the plan. The manager may not be in a position to change the plan according to circumstances. Or the manager may be unwilling to change the plan. This sort of rigidity is not ideal for an organization.

2] Not ideal in Dynamic Conditions

In an economic environment rarely anything is stagnant or static. Economic, political, environmental, legal conditions keep changing. In such a dynamic environment it becomes challenging to predict future changes. And if a manager cannot forecast accurately, the plan may fail.

3] Planning can also reduce creativity

While making a plan takes creativity after that managers blindly follow the plan. They do not change the plan according to the dynamic nature of the business. Sometimes they do not even make the appropriate suggestions to upper management. The work becomes routine.

4] Planning is Expensive

Planning is a cost-consuming process. Since it is an intellectual and creative process, specialized professionals must be hired for the job. Also, it involves a lot of research and facts collection and number crunching. At certain times the cost of the planning process can outweigh its benefits.

5] Not Completely Accurate

When planning we have to forecast the future and predict certain upcoming events in the organization and the industry. So, of course, there cannot be hundred per cent certainty in such cases. So it can be said that business planning lacks accuracy

SSI:-

Small Scale Industries (SSI) are those industries in which the manufacturing, production and rendering of services are done on a small or micro scale. These industries make a one-time investment in machinery, plant, and equipment, but it does not exceed Rs.10 crore and annual turnover does not exceed Rs.50 crore. Essentially the small scale industries are generally comprised of those industries which manufacture, produce and render services with the help of small machines and less manpower. These enterprises must fall under the guidelines, set by the Government of India.

Examples and Ideas of Small Scale Industries:

- Bakeries
- School stationeries
- Water bottles
- Leather belt
- Small toys
- Paper Bags
- Photography
- Beauty parlours

Characteristics of SSI

Ownership- SSI's generally are under single ownership. So it can either be a sole proprietorship or sometimes a partnership.

Management- Generally, both the management and the control is with the owner/owners. Hence the owner is actively involved in the day-to-day activities of the business.

Labor Intensive- SSI's dependence on technology is pretty limited. Hence they tend to use labour and manpower for their production activities.

Flexibility- SSI's are more adaptable to their changing business environment. So in case of amendments or unexpected developments, they are flexible enough to adapt and carry on, unlike large industries.

Limited Reach- Small scale industries have a restricted zone of operations. Hence, they can meet their local and regional demand.

Resources utilization- They use local and readily available resources which helps the economy fully utilise natural resources with minimum wastage.

Role in the Indian Economy

1. Employment

SSI's are a major source of employment for developing countries like India. Because of the limited technology and resource availability, they tend to use labour and manpower for their production activities.

2. Total Production

These enterprises account for almost 40% of the total production of goods and services in India. They are one of the main reasons for the growth and strengthening of the economy.

3. Make in India

SSI's are the best examples for the Make in India initiative. They focus on the mission to manufacture in India and sell the products worldwide. This also helps create more demands from all over the world.

4. Export contribution

India's export industry majorly relies on these small industries for their growth and development. Nearly half of the goods that are exported from India are manufactured or produced by these industries.

5. Public Welfare

These industries have an opportunity to earn wealth and create employment. SSI's are also important for the social growth and development of our country.

Objectives of SSI

The objectives of the small scale industries are:

- To create more employment opportunities.
- To help develop the rural and less developed regions of the economy.
- To reduce regional imbalances.
- To ensure optimum utilisation of unexploited resources of the country.
- To improve the standard of living of people.
- To ensure equal distribution of income and wealth.
- To solve the unemployment problem.
- To attain self-reliance.
- To adopt the latest technology aimed at producing better quality products at lower costs.

ANCILLARY UNIT:-

Ancillary units are small Firms that manufacture and supply intermediate goods to large Firms or master units. An ancillary unit is the unit which supplies not less than 50% of its production to the parent unit. An ancillary unit is defined as an Industrial undertakings having investment in fixed assets, in plant & machinery whether held on ownership or on hire purchase not exceeding Rs. 1 crore & engaged in ;

1. manufacturer of parts & components, sub-assemblies, tooling or intermediates &
2. Rendering of service or proposing to supply or render not less than 50 % of his production or service to one or more other industrial undertaking for production.

Major difference between SSI & ancillary is that unit setup which can be recognised as a full fledged large company can be a part of ancillary but under SSI such unit can get transformed into medium or large scale sectors. Parent unit assists the ancillary unit by providing technical and financial help.

Characteristics of Ancillary industries are:

- It is engaged in the manufacture or production of parts, components, sub-assemblies, tooling or intermediates.
- It proposes to supply 50 percent of its production or services to one or more other industrial undertakings.
- They have fixed investment in plant and machinery not exceeding Rs. 1 crore.

TINY UNIT:-

A tiny unit is defined as an industrial or business enterprise whose investment in plant and machinery is not more than Rs. 25 lakhs. Government of India has taken a number of steps to promote them. However, with the recent measures, small-scale and cottage industries facing both internal competition as well as external competition.

There is no clear distinction between small-scale and cottage industries. However it is generally believed that cottage industry is one which is carried on wholly or primarily with the help of the members of the family. As against this, small-scale industry employs hired labour.

Moreover industries are generally associated with agriculture and provide subsidiary employment in rural areas. As against this, small scale units are mainly located in urban areas as separate establishments.

Some examples of small scale industries are: Agarbatti making, Chalk making, Biodiesel production, Sugar candy manufacturing, Wood making, Rice mill, Potato chips making, Toys making, Microbrewery, Liquid soap making, Honey processing, Slippers making, Detergent powder making, Fruit juice production plant, Spices .

SERVICE SECTOR UNIT:-

The **Service Sector**, also called tertiary sector, is the third of the three traditional economic sectors. The other two are the primary sector, which covers areas such as farming, mining and fishing; and the secondary sector which covers manufacturing and making things. The service sector provides services, rather than producing material commodities. Activities in the service sector include retail, banks, hotels, real estate, education, health, socialwork, computer services, recreation, media, Communications, electricity, gas and water supply.

The service sector consists of the production of services instead of end products. Services (also known as "intangible goods") include attention, advice, access, experience, and affective labor. The production of information has been long regarded as a service, but some economists now attribute it to a fourth sector, the quaternary sector.

The tertiary sector of industry involves the provision of services to other businesses as well as final consumers. Services may involve the transport, distribution and sale of goods from

producer to a consumer, as may happen in wholesaling and retailing, pest control or entertainment. The goods may be transformed in the process of providing the service, as happens in the restaurant industry. However, the focus is on people by interacting with people and serving the customer rather than transforming the physical goods.

The service sector, also known as the tertiary sector, is the third tier in the three sector economy. Instead of the product production, this sector produces services maintenance and repairs, training, or consulting. Examples of service sector jobs include housekeeping, tours, nursing, and teaching. By contrast, individuals employed in the industrial or manufacturing sectors produce tangible goods, such as cars, clothes, or equipment.

TIME SCHEDULE PLAN:-

The time schedule is a contractual document between the client and the contractor which defines the forecast sequence and progress of the work and the contractual start, finish and milestones dates. The time schedule could contain the budget cost of the project which creates the project cash flow and could contain the manpower as well which creates manpower histograms.

There are few types of time schedule depend on the stage of the project:

1- Tender schedule:

This is a schedule prepared by the contractor to the client in the very beginning stages of the project, even before the project awarded to the contractor and usually it is a summary schedule clarifying how the contractor intend to execute the project (sequence and duration). This time schedule does not contains lot of details and issued as a part of the tender documents for future reference.

2- Master Time Schedule:

The master time schedule is the first schedule to be issued by the contractor after project is awarded from the client and most contracts allow for a short duration (2 weeks approximate) to submit this schedule after the letter of award, However the master schedule should contains more details to the project rather than the tender schedule and could include budget cost, project cash flow and resources histograms.

3- Detailed Time Schedule:

The detailed time schedule is very important document and should be created carefully as per the client requirements, detailed schedule should have the budget cost, resources and equipment assigned to each activity. after issuing the master schedule, the planning engineer should proceed with the detailed schedule which contains more details and breakdown such as (floor , area , zone , discipline of works etc). Once the detailed time schedule approved from the client or the client representative (Project or Program Manager) then it called BASELINE SCHEDULE.

4- Baseline Time Schedule:

The baseline schedule is the client approved version of the detailed schedule (or sometimes the master time schedule) which the progress of works will be monitored against it. The dates and the values in this schedule are fixed and can not be changed.

5- Updated Time schedule:

The updated time schedule is a copy of the baseline schedule with actual dates and percentage which represent the progress of work at certain date (Data Date). Once actual values applied to a baseline schedule it became an updated schedule with forecast completion dates for each activity could be earlier than the baseline schedule which mean (Ahead of schedule) or after the baseline schedule dates which mean (Behind the Schedule).

6- Revised Time Schedule:

The revised time schedule is a recovery schedule to recover schedule delays due to any reason, revised time schedule could recover 100 % of the delays in the project and shorten the durations to complete the project as planned or it could not recover any durations if it is not possible and just represent a new completion date of the project.

AGENCIES TO BE CONTACTED FOR PROJECT IMPLEMENTATION:-

The implementing agency is responsible for the overall management of the actions that will result in delivery of the materials or services set forth in the LOA that was accepted by a foreign country or international organization.

Some of the agencies name given below;

- National Highway Authority of India (NHAI)
- Indian Academy of Highway Engineers (IAHE)
- National Highways and Infrastructure Development Corporation Limited (NHIDCL)
- Indian Institute of Skill Development, B-13, Infocity, Sector -34, Gurgaon - 122002 (Haryana)
- Nilachal Sewa Pratisthan, At: Dayavihar, Post: Gadasahi, PS- Kanas, Distt. Puri – 752017

ASSESSMENT OF DEMAND AND SUPPLY:-

Supply-and-demand analysis may be applied to markets for final goods and services or to markets for labour, capital, and other factors of production. It can be applied at the level of the firm or the industry or at the aggregate level for the entire economy.

Market demand assessments are often undertaken to determine the market appetite for a new product/commodity (individually or as part of a feasibility study) or to determine the effective demand for the development of property (industrial, commercial, or residential).

POTENTIAL AREA OF GROWTH

Growth potential is an organization's future ability to generate larger profits, expand its workforce and increase production. In the business sense, an organization's growth potential depends heavily upon its leadership's expectations for success, and the quantitative and qualitative measures used to determine expansion readiness.

Growth potential can be gauged from an organization's planned movement into new markets, the development of new product lines, the employment of more effective marketing techniques, or other methods that grow a business from a niche market to a more volume operation. Growth potential is often a barometer for investment interest from public and private investors, venture capitalists and other stakeholders.

IDENTIFYING BUSINESS OPPORTUNITY

Spotting market opportunities is essential for business growth and survival. Opportunities are factors that contribute to your growing success. These are typically external and include things like:

- economic trends
- market trends
- shifting or expanding customer base
- changes in government or industry regulations
- changes in partnerships or relationships with suppliers, competitors, etc
- new or changing funding prospects (eg increase in grant funding)

1. Analysis of Internal Demand

- Business opportunities may be identified by assessment of internal demand of the existing and proposed products, as to what will be the possibility of future demand?
- Before it, the entrepreneur will have to keep into consideration, the per capita income, population, and national income.

2. Availability of Raw Materials

Easy availability of raw material also has an important role in selecting the business opportunities, the reason being that the quantity and level of future production are decided only by it.

If the raw material is easily available, then not only the production cost is low, but it also makes the entrepreneur ready to establish the industrial unit.

3. External Assistance

Role of external assistance, like – government, suppliers, investors, and specific institutions is also important, in Identification of business opportunities, the reason being that external assistance, support and cooperation are helpful in Identification of opportunities.

In various areas, governments provide assistance, subsidies, and incentives in the identification of business possibilities and the establishment of industries.

4. Knowledge about Industrial Development

By obtaining detailed knowledge about proposed industrial development from various sources, the entrepreneur may know, the establishment of which type of industry and at which place will be profitable, and which not?

Besides, by such knowledge, he can also know, which specific industry has wide possibilities of development?

5. Internal Sources

The availability of internal sources also has an important role in the identification of business opportunities.

If the sources of production are regularly available to the entrepreneur, he may take positive steps for the establishment of the industrial unit.

6. Risk in Business Opportunities

Every business involves risk. It goes on increasing or decreasing with the environment in such conditions, the entrepreneur has to identify, when, and how much risk involved in the business opportunities?

He has also to ascertain, to what extent, the taking of this may be profitable to him.

7. Performance of Existing Units

The entrepreneur main objectively analyzes the performance of existing units to identify business opportunities.

For that, he will have to analyze products, and product expansion, capital, profits, employment, assets, export possibilities, etc.

8. Promote Entrepreneurial Activity

The entrepreneur may promote entrepreneurial activity for the establishment of industries having good potential for exports, by identifying suitable business opportunities

It is clear that decisions regarding the profitability or otherwise from the promotion of particular entrepreneur activity, or in which specific areas are Industries, opportunities for promotion are available may be taken on the basis of study and analysis of the aforesaid factors.

Thus, the following are the objectives of the Identification of business opportunities:

1. Identification of opportunities by an entrepreneur, in the context of probable industries and to decide his own role, the scope of work, and relationships, in accordance with the opportunities.
2. To keep watch over the possible market of the commodity or service to be produced.
3. To decide a high-level group of managers, so that entrepreneurial ventures may be started.
4. To make an assessment of financial resources by making financial forecasts, in the context of the process if industrial development.
5. To explore the opportunities for possible entry in other areas.
6. To assess the requirements of labor, capital, and materials for the industries.
7. To find out the possibilities of short term and long term development in various areas of the economy.
8. To have the desire for technical knowledge, awareness towards new opportunities, and acceptance of the changes.
9. To see the possibilities of diverting the available resources towards achieving the **business objectives**.
10. To identify those industries, which are not based on local sources, but which may be economically considered, in view of future requirements.

FINAL PRODUCT SELECTION:-

Product Selection and Development Process are very complex process, which begins with idea generation and continues till commercialization. The process requires coordination between various departments. The process can be broken up into the following stages:

1. Exploration:

New ideas are sought from the sales force, since that is the department which is in constant direct contact with customers.

The analysis of customer needs also takes into account competitors' products and services. New ideas are also generated from the consultants, shareholders, management employees, report on foreign markets and products, trade journals, R&D laboratories, other research, etc. However, technical feasibilities and market potential have to be kept in mind while examining new ideas.

2. Screening:

While choosing the most effective ideas, guesswork or hunches are not reliable. To ensure a more scientific and less risky selection process, it is necessary to keep in mind all possible quantitative, as well as, qualitative information. Keeping in mind the organizational objectives and available facilities, the following must points be considered while selecting an idea—

- i. Market potentiality
- ii. Technical feasibility of the idea

ADVERTISEMENTS:

- iii. Does the idea fall under any intellectual property rights or patent regulations?
- iv. Raw material supply position—at present and in the future
- v. Do existing production facilities and resource availability remain suitable for commercialization of the new idea?
- vi. The level of investment required

3. Business Analysis:

At this stage, technical and economic factors, like manhours, cash flow, inventory holding, etc., are analysed to evaluate commercial feasibility. This will ultimately facilitate the budgeting process.

4. Development:

A working model is developed at this stage to evaluate the practicability of the new idea, by studying the acceptability of customers to the working model. Most companies use product life cycle model at this stage.

5. Testing:

Redesigning of the working model into a production prototype and testing the market before bulk production.

6. Commercialization:

At the final stage of a new product planning, decisions have to be made whether to make or buy components; production methods have to be developed; distribution networks activated and the new product has to integrate with the organization's normal activity, and satisfactory sales volume and profitability have to be achieved.

CHAPTER- 3: PROJECT REPORT PREPARATION

PRELIMINARY PROJECT REPORT:

convince others regarding its viability. It is a short description of the project by the entrepreneur. Readymade project reports are also available in the form of book which may act as a ready reckoner for the entrepreneur to prepare his preliminary project report. The entrepreneur has to submit copies of his PPR to various government agencies and banks and obtain provisional registration and approval with an assurance for license permission, loans, etc.

A proforma of a Preliminary Project Report is given in the form of a few pages along with the guidelines to fill up it as a reference for the students.

PRELIMINARY PROJECT REPORT

1. Introduction

A. Information about the entrepreneur :

Name _____ Date of Birth _____
Address _____ Age _____
_____ Sex _____

Present monthly income : Rs. _____
Educational qualification : _____
Special Training, if any : _____
Work experience : _____
Category : SC/ST/Ex-military/NRI/Physically handicapped
General/ : _____

B. Information about the proposed product/project :

Product : _____
Location of the project : _____
Type of organisation : _____
Name of the firm : _____

General information about the product :
(Under the entrepreneur has to write the details of the product like its uses, its quality, size, specification and other details including its application, advantages over other similar products etc.)

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2. Market Potential

(Under this section the entrepreneur has to mention the area over which his product may be sold. He has to mention the present demand of the product in the area division-wise with quantity and value in a tabular manner. He has also to mention the supply position in quantity and their sources of supply into the areas with quantities in tabular form. If there is any source of supply within the specified area it may be specifically mentioned with their quantities. Supply of the product from outside the market area and their quantities may also be mentioned. At the end, the entrepreneur has to make a conclusion in favour of the product showing a good market scope in that area.)

3. Basis of Presumption

(Under this section, the entrepreneur has to mention the following details :

- (a) The average working hour per day, per month and per year have to be mentioned.
- (b) When the plant will operate in its full capacity has to be mentioned.
- (c) What will be the pay back period of the term loan may be mentioned.
- (d) How much percentage of margin money shall be provided by the promotor may be stated. Usually the entrepreneur invests 30% to 35% of the entire fund from his own pocket and the rest may be obtained on loans from banks and the financial institutions.
- (e) The rate of interest for the long term loan as well as working capital loans may be stated.
- (f) The cost of land and building has to be mentioned as per the prevailing rates. The cost of land differs depending on the area but the cost of building is usually fixed on the basis of square feet area. If the factory shall be placed in a rented shed, it may also be mentioned here.)

4. Implementation Schedule

Under this the entrepreneur has to mention the time to be taken for the completion of the project. The detail calculation of time to be taken for each activity may be mentioned.

For example :

- (a) Preparation of Project report,
selection of site, registration 1 month

(b) Section of loans	3 months
(c) Construction of building, procurement of machinery, equipments & installation	6 months
(d) Arrangement of utilities, like, electricity, water, etc.	3 months
(e) Procurement of raw materials, recruitment of labour & staff	1½ month
(f) Commissioning of plant and trial production	½ month
Total time required	15 months

5. Production Target

(The entrepreneur has to mention the production programme of the unit per annum. The information may be furnished in the form of the following table.)

<i>Items</i>	<i>Total quantity per year</i>	<i>Sales volume per year (Rs.)</i>	<i>Capacity Utilisation</i>
A	45 tonne	9,00,000	100%
B	68 tonne	6,12,000	95%
C	10,000 units	5,00,000	100%
D	25,000 litres	2,00,000	100%
E	15,000 metres	3,50,000	100%

6. Technical details

(The entrepreneurs has to mention all the technical details of his project including the details of manufacturing process, quality and standard, power requirement, pollution control measures, affluent disposal energy conservation measures, etc.)

7. Financial details

(Under this the entrepreneur has to mention the amount of investment needed on various items to arrive at the total capital required for the project. The items to be shown are given as under ;)

Fixed Capital

A. Land and building

	<i>Area</i>	<i>Value</i>
(i) Land
(ii) Building

(For building Rs. 250 per square feet for ACC roof and Rs. 250 per square feet for RCC roof is the present standard of valuation.)

B. Machinery and Equipments

(Under this the entrepreneur has to mention the name of the machineries and equipments, their qualities, quantity, price, total value and the name and address of the supplier, etc. The following proforma may be prepared :)

Sl. No.	Description of machinery equipments	No. required	Price Rate	Total value	Name and addresses of the suppliers
1.
2.
3.
4.
5.
6.

Total value in Rs.

Add installation and electrification charges i.e. 10% of the value of plant & machinery Rs. = Rs.

C. Miscellaneous Fixed Assets :

- 1. Tools and Tackles Rs.
 - 2. Furniture Rs.
 - 3. Office equipments Rs.
- Total Rs.

Total fixed Assets = A + B + C

D. Preliminary & Preparative Expenses

(This includes the amount to be spent by the entrepreneur to get registration, licence, permission, security deposits, travelling and allied expenses to get licence, permission, registration, etc. This also includes the charges payable to consultants, architect, etc. The entrepreneur has to mention the details of expenses on each items and arrive at the total figure.)

Working Capital :

(a) Raw Materials

(Under this different raw materials to be used for production per month may be mentioned with their respective values in the following proforma :

Sl. No.	Items	Total monthly requirement in quantity	Value in Rs.	Sources
1.
2.
3.
4.

Total raw materials Required per month Rs.

(b) Salaries & wages of labour/staff per month :

(The entrepreneur has to mention the name of the post, number of persons needed and salary payable per month in the following proforma :

Sl. No.	Name of the post	No. of person	Rate per month	Total expenses
1.	Manager	01	—	—
2.	Supervisor	02	—	—
3.	Skilled workers	18	—	—
4.	Unskilled workers	36	—	—
5.	Clerk/Accountant	04	—	—
6.	Sales representatives	06	—	—
7.	Store-keeper	01	—	—
8.	Peons	02	—	—
9.	Watchman	03	—	—
Total Rs.				

(An additional expenses of 20% on the total salary & wages shall be added for house rent allowance, education allowance, Employees State Insurance, Provident fund, etc.)

Total salary & wages p.m. Rs.
 Add 20% of the total Rs.
 Grand total Rs.

(c) Utilities : (per month).

Sl. No.	Particulars	Monthly requirement in Qnty.	Monthly expenses in rupees.
1.	Electricity
2.	Water
3.	Coal
4.	Oil
5.	LPG

PREPARATION OF PROJECT REPORT

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The electricity charges are calculated as under :
 Total horse power of machineries $\times .75 = \text{kW per hour}$,
 Per day = 8 hours
 Per month = 25 days \times 8 hours = 200 hours
 Total electricity consumption = 200 \times kW of electricity

The total electricity charges shall be based on that.
 per hour \times rate per kW.

(d) Other contingent expenses :

1. Repair & maintenance @ 1% of the cost of machineries & equipments
 2. Transportation expenses
 3. Consumable stores
 4. Postage & stationary
 5. Telephone
 6. Advertising & publicity
 7. Insurance charges
 8. Rent
- | | |
|-------|----------|
| | Rs. |
| | Rs. |
| | Rs. |
| | Rs. |
| | Rs. |
| | Rs. |
| | Rs. |
| | Rs. |
| Total | Rs. |

The total working capital per month shall be $a + b + c + d$.
 If the time taken by the operating cycle to convert cash into cash once again is three months, then, the enterprise needs working capital for three months. So the total working capital per month shall be multiplied by three.

8. Total Capital Investment/Cost of the Project.

- | | |
|-------------------------------------|------------|
| (a) Working capital p.m. \times 3 | = Rs. |
| (b) Fixed capital | = Rs. |
| (c) Preliminary expenses | = Rs. |
| Total cost of the project | = Rs. |

9. Cost of production per annum :

- | | |
|---|------------|
| (a) Working capital p.m. \times 12 | = Rs. |
| (b) Depreciation : | = Rs. |
| (i) Plant & machinery @ 10% | = Rs. |
| (ii) Building @ 5% | = Rs. |
| (iii) Miscellaneous fixed assets @ 20% | = Rs. |
| Total | = Rs. |
| (c) Interest per annum on the total investment, say @ 15% | = Rs. |
| Total cost | = Rs. |

10. Turnover per annum :

Sl. No.	Items	Quantity	Value in rupees
1.	A	45 tonnes
2.	B	68 tonnes
3.	C	1 lakh units
4.	D	25000 litres
		Total	Rs.

11. Profits before Tax :

Turnover per annum in rupees – Cost of production per annum
= Profits before tax.

[i.e. Sl. No. 10 – Sl. No.9 = 11 (Profit before taxes)].

12. Break even point (BEP) :

$$BEP = \frac{\text{Total Fixed Cost}}{\text{Total Fixed Cost} + \text{Profit}} \times 100$$

where the total fixed cost shall be calculated as follows :

Total depreciation + Total interest + 40% of salary and other contingent expenses and of utilities = Total fixed cost.

13. Profitability ratio :

$$\text{Profitability} = \frac{\text{Profit}}{\text{Turnover}} \times 100$$

If the turnover is say Rs. 24,00,000 and profit is Rs. 7,50,000, then profitability ratio shall be :

$$\frac{7,50,000}{24,00,000} \times 100 = 31.25\%$$

So, profitability ratio in the example is 31.25%.

14. Rate of return on investment :

$$R = \frac{\text{Profit}}{\text{Total investment}} \times 100$$

(If the profit is say, Rs. 7,50,000 and the total investment is Rs. 16,00,000, then the rate of return is

$$\frac{7,50,000}{16,00,000} \times 100 = 46.8\%.$$

15. (A) List of Suppliers of Plants and Machineries

- (i) _____
- (ii) _____

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PREPARATION OF PROJECT REPORT

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(iii) _____

(iv) _____

(B) List of Suppliers of Raw Materials

(i) _____

(ii) _____

(iii) _____

(iv) _____

(C) Bank and Branches having financial operation

(i) _____

(ii) _____

(iii) _____

Date :

Signature of the entrepreneur

In addition to the above proforma of preliminary project report, the entrepreneur has to mention the list of organisations or persons with whom agreements have been made for purchase, sale, supply, technology tie-up, etc. The entrepreneur has also to mention the names and addresses of some prominent persons, as referees. After the preliminary project report is found to be acceptable, the entrepreneur has to prepare a DPR (i.e., a detailed project report).

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DETAILED PROJECT REPORT:

After the planning and the designing part of a project are completed, a **detailed project report** is prepared. A **detailed project report** is a very extensive and elaborative outline of a project, which includes essential information such as the resources and tasks to be carried out in order to make the project turn into a success. It can also be said that it is the final blueprint of a project after which the implementation and operational process can occur. In this comprehensive project report, the roles and responsibilities are highlighted along with the safety measures if any issue arises while carrying out the plan.

The following points play an essential role in deciding whether a project turns into success:

- Completion of the project within the stipulated period
- Priority to client satisfaction by delivering quality product after the completion of the project
- Completion of the project within the set limits of escalation of cost

The blueprint design's focus has to be to convert the corporate investment into a project idea that gives good monetary returns. A **detailed project report** depicts a practical viewpoint for the implementation of the project. The requirements and risks should also be highlighted in a detailed manner to prevent any troubles that can delay or halt the execution of the project. Hence effective measures must also be stated so that the execution of the project can be carried out hassle-free.

Contents of a detailed project report

A **detailed project report** must include the following information:

- Brief information about the project
- Experience and skills of the people involved in the promotion of the project
- Details and practical results of the industrial concerns of the promoters of the project
- Project finance and sources of financing
- Government approvals
- Raw material requirement
- Details of the requisite securities to be given to various financial organizations
- Other important details of the proffered project idea include information about management teams for the project, details about the building, plant, machinery, etc.

TECHNO ECONOMIC FEASIBILITY:

Introduction:

Objective of Techno-Economic Feasibility Studies/ Detailed Project Reports is to determine the technical feasibility and financial viability of the project, assess the risks associated with the project and enumerate imminent actions that are required to be taken. It helps a client get a detailed evaluation of a project.

Coverage:

Techno-Economic Feasibility Studies/ Detailed Project Reports cover the following based on the clients requirement:

- **Markets:** It covers estimated future sales revenue of the project based on estimated sales volumes and price.
- **Raw Materials & Fuel:** It estimates the adequacy of the quality and quantity of the raw materials and fuel for the project, make an estimate of its cost.
- **Plant Siting, Location & Infrastructure:** It assesses the existing infrastructure and actions required to develop the infrastructure necessary to set up the project.
- **Project Technical Concept:** This is core deliverable of the project and covers plant capacity, equipment sizing, storages, plant auxiliaries, system engineering, electrical engineering, civil engineering, Control & Automation engineering, Quality Control & Assurance, Captive Power Plant and Waste Heat recovery system (WHR) based on the project requirement.
- **Logistics:** Inbound and outbound logistics and logistics planning.
- **Environment:** Applicable Regulatory Framework and Environmental Impact of Project.
- **Implementation Planning.**
- **Human Resources:** Requirement and cost.
- **Investment Cost:** Fund requirement.
- **Operating Cost:** It covers cost of raw material, utilities, overheads, etc.
- **Financial Appraisal:** It covers project profitability, IRR, NPV, payback, etc.
- **Risks & Mitigation.**

Methodology:

Broad methodology of execution involves:

- Data collection
- Data analysis
- Report and Project formulation

Benefits:

It helps a client make an investment decision based on:

- Technical feasibility of the project.
- Financial viability of the project.
- The risks associated with the project.
- Actions required for risk mitigation.

PROJECT VIABILITY: Project Viability means the likelihood that the Project can be successfully developed and provide the Product and services required for the period stated in the Offer. This assessment is based on a review of the status and plans for key Project activities (e.g. financing, permitting, engineering, procurement, construction, interconnection, start-up and testing, operations, fuel supply, water supply, wastewater discharge, labor agreements, site control, etc.).

CHAPTER 4: MANAGEMENT PRINCIPLES

Definitions of management:

Management is the process of planning, organizing, leading, and controlling an organization's human, financial, physical, and information resources to achieve organizational goals in an efficient and effective manner.

The principles of management are the activities that plan, organize, and control the operations of the basic elements of [people], materials, machines, methods, money and markets, providing direction and coordination, and giving leadership to human efforts, so as to achieve the sought objectives of the enterprise.

Thus Management is the art of getting things done through others. It is an activity which coordinates the human and non-human resources (men, material, machines etc.) for achieving the desired results. Although different views are given on the functions of management, the most commonly accepted functions are planning; organising; staffing; leading and controlling.

Principles of management:

Henry Fayol, also known as the 'father of modern management theory' gave a new perception of the concept of management. He introduced a general theory that can be applied to all levels of management and every department. The Fayol theory is practised by the managers to organize and regulate the internal activities of an organization. He concentrated on accomplishing managerial efficiency.

The fourteen principles of management created by Henri Fayol are explained below.

1. Division of Work-

Henri believed that segregating work in the workforce amongst the worker will enhance the quality of the product. Similarly, he also concluded that the division of work improves the productivity, efficiency, accuracy and speed of the workers. This principle is appropriate for both the managerial as well as a technical work level.

2. Authority and Responsibility-

These are the two key aspects of management. Authority facilitates the management to work efficiently, and responsibility makes them responsible for the work done under their guidance or leadership.

3. Discipline-

Without discipline, nothing can be accomplished. It is the core value for any project or any management. Good performance and sensible interrelation make the management job easy and comprehensive. Employees good behaviour also helps them smoothly build and progress in their professional careers.

4. Unity of Command-

This means an employee should have only one boss and follow his command. If an employee has to follow more than one boss, there begins a conflict of interest and can create confusion.

5. Unity of Direction-

Whoever is engaged in the same activity should have a unified goal. This means all the person working in a company should have one goal and motive which will make the work easier and achieve the set goal easily.

6. Subordination of Individual Interest-

This indicates a company should work unitedly towards the interest of a company rather than personal interest. Be subordinate to the purposes of an organization. This refers to the whole chain of command in a company.

7. Remuneration-

This plays an important role in motivating the workers of a company. Remuneration can be monetary or non-monetary. However, it should be according to an individual's efforts they have made.

8. Centralization-

In any company, the management or any authority responsible for the decision-making process should be neutral. However, this depends on the size of an organization. Henri Fayol stressed on the point that there should be a balance between the hierarchy and division of power.

9. Scalar Chain-

Fayol on this principle highlights that the hierarchy steps should be from the top to the lowest. This is necessary so that every employee knows their immediate senior also they should be able to contact any, if needed.

10. Order-

A company should maintain a well-defined work order to have a favourable work culture. The positive atmosphere in the workplace will boost more positive productivity.

11. Equity-

All employees should be treated equally and respectfully. It's the responsibility of a manager that no employees face discrimination.

12. Stability-

An employee delivers the best if they feel secure in their job. It is the duty of the management to offer job security to their employees.

13. Initiative-

The management should support and encourage the employees to take initiatives in an organization. It will help them to increase their interest and make them worth.

14. Esprit de Corps-

It is the responsibility of the management to motivate their employees and be supportive of each other regularly. Developing trust and mutual understanding will lead to a positive outcome and work environment.

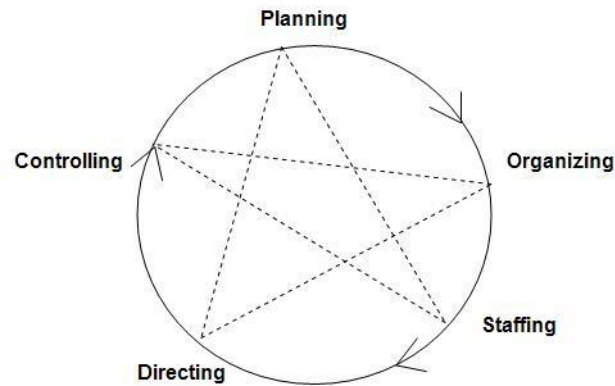
This 14 principles of management are used to manage an organization and are beneficial for prediction, planning, decision-making, organization and process management, control and coordination.

Functions of management:

Management is essential for an organized life and necessary to run all types of organizations. Managing life means getting things done to achieve life's objectives and managing an organization means getting things done with and through other people to achieve its objectives.

There are basically five primary functions of management. These are:

1. Planning
2. Organizing
3. Staffing
4. Directing
5. Controlling



1. Planning

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

2. Organizing

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

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

3. Staffing

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

- Manpower Planning (estimating man power in terms of searching, choose the person and giving the right place).

- Recruitment, Selection & Placement.
- Training & Development.
- Remuneration.
- Performance Appraisal.
- Promotions & Transfer.

4. Directing

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

- Supervision
- Motivation
- Leadership
- Communication

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

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

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

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

5. Controlling

It implies measurement of accomplishment against the standards and correction of deviation if any to ensure achievement of organizational goals. The purpose of controlling is to ensure that everything occurs in conformities with the standards. An efficient system of control helps to predict deviations before they actually occur. According to *Theo Haimann*, “Controlling is the process of checking whether or not proper progress is being made towards the objectives and goals and acting if necessary, to correct any deviation”. According to Koontz & O’Donell “Controlling is the measurement & correction of performance activities of subordinates in order to make sure that the enterprise objectives and plans desired to obtain them as being accomplished”. Therefore controlling has following steps:

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

Level of Management in an Organisation:

The term **Levels of Management** refers to the line of division that exists between various managerial positions in an organization. As the size of the company and workforce increases,

the number of levels in management increases along with it, and vice versa. The different Levels of Management can determine the chain of command within an organization, as well as the amount of authority and typically decision-making influence accrued by all managerial positions.

Levels of Management can be generally classified into three principal categories, all of which direct managers to perform different functions.

The levels of management can be classified in three broad categories:

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



1. Top Level of Management

It consists of board of directors, chief executive or managing director. The top management is the ultimate source of authority and it manages goals and policies for an enterprise. It devotes more time on planning and coordinating functions.

The role of the top management can be summarized as follows -

- a. Top management lays down the objectives and broad policies of the enterprise.
- b. It issues necessary instructions for preparation of department budgets, procedures, schedules etc.
- c. It prepares strategic plans & policies for the enterprise.
- d. It appoints the executive for middle level i.e. departmental managers.
- e. It controls & coordinates the activities of all the departments.
- f. It is also responsible for maintaining a contact with the outside world.
- g. It provides guidance and direction.
- h. The top management is also responsible towards the shareholders for the performance of the enterprise.

2. Middle Level of Management

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

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

3. Lower Level of Management

Lower level is also known as supervisory / operative level of management. It consists of supervisors, foreman, section officers, superintendent etc. According to *R.C. Davis*, "Supervisory management refers to those executives whose work has to be largely with personal oversight and direction of operative employees". In other words, they are concerned with direction and controlling function of management. Their activities include -

- a. Assigning of jobs and tasks to various workers.
- b. They guide and instruct workers for day to day activities.
- c. They are responsible for the quality as well as quantity of production.
- d. They are also entrusted with the responsibility of maintaining good relation in the organization.
- e. They communicate workers problems, suggestions, and recommendatory appeals etc to the higher level and higher level goals and objectives to the workers.
- f. They help to solve the grievances of the workers.
- g. They supervise & guide the sub-ordinates.
- h. They are responsible for providing training to the workers.
- i. They arrange necessary materials, machines, tools etc for getting the things done.
- j. They prepare periodical reports about the performance of the workers.
- k. They ensure discipline in the enterprise.
- l. They motivate workers.
- m. They are the image builders of the enterprise because they are in direct contact with the workers.

FUNCTIONAL AREAS OF MANAGEMENT

A) PRODUCTION MANAGEMENT

Meaning of Production Management:

Production Management refers to the application of management principles to the production function in a factory. In other words, production management involves application of planning, organizing, directing and controlling the production process.

Definition:

Production management involves the planning, organisation, direction and execution of production activities. The ultimate goal of any production management solution is to convert a collection of raw materials into a finished product. Some people refer to production management as the bringing together of the 6 'Ms':

- Men
- Money
- Machines
- Materials
- Methods
- Markets

These constituents come together to provide consumers and businesses with products that they need or want. In general “Production Management is the process of effective planning and regulating the operations of that section of an enterprise which is responsible for the actual transformation of materials into finished products.” It deals with decision-making related to production process. So that the resulting goods and services are produced in accordance with the quantitative specifications and demand schedule with minimum cost.



Functions of Production Management:

Production Management deals with the following functional components —

- Selection of product and designing
- Selection of production process
- Estimation of right production capacity
- Production planning
- Production control
- Quality and cost control
- Inventory Control
- Maintenance and replacement of Machines
- Scheduling

1. Selection of Product and Design —

Selection of product and designing of the same plays a pivotal role in a business venture. It is imperative for the company to approach the market with economical and valuable products from time to time which shall ensure the success and progress of the company.

A product that is to be produced by the company must be selected and designed using value engineering and value analysis. The product should be selected only after overall evaluation and assessment, after selection of the product the selection of the design must follow.

2. Selection of Production Process —

The production process should be planned way before it actually starts. After the selection of product is done and the design has been decided, thereafter comes the selection of the production process. It is one of the important function of production management.

The right production system must be selected, the man power required to produce the same shall be estimated and recruited, the type of technology that shall be used, the amount of capital that shall be required must be decided. The machines that would be put into work, the engineering, the material handling system, all shall be selected and prepared for a smooth and successful work function.

3. Estimation of Right Production Capacity —

The selection of the right production capacity plays a huge role in production management. For this, the right demand for the product shall be estimated, and then it must match with the production capacity.

A wrongful estimation may affect the production of the product, as less or more capacity than actually needed might create problems. The break-even analysis for planning the production capacity may prove to be significant. The production management team must be prepared with a planned layout for both long term and short term production.

4. Production Planning —

One major function in production management is to plan the production process. The production management hereby must decide on the routing and scheduling.

Routing basically decides for the path of the production process, the sequential operation that shall take place, whereas scheduling being the means to plan the whole production process, as to when it shall be started, and when the production activity shall come to an end.

5. Production Control —

Controlling the production process is the next job of paramount importance, that the production manager shall handle. The production planning and the actual process shall be tallied and if any deviations from the actual planning are found, that must be met with necessary steps for its correction.

6. Quality and Cost Control —

Quality and cost control plays a huge role in the company's upliftment, the buyers want the products to be of top-notch quality at fair and low prices. The production manager thus has to try to maintain the quality of the product and should try to lower the production cost, as it shall in turn lower the cost of the product.

7. Inventory Control —

Inventory control is also part of production management. The inventory level must be monitored by the production manager. Overstocking and understocking of inventories are not appropriate.

If there is an overabundance of materials, the working capital will be stifled, and the materials can spoil, be wasted, or be misused. If there is a shortage of inventory, manufacturing will be delayed, and deliveries will be disrupted. Thus, the production manager shall effectively control the inventories.

8. Maintenance and replacement of Machines —

The production management ensures that machinery and equipment are properly maintained and replaced. All the machinery that would be needed for the production shall be checked prior to the actual production process.

The production manager must have a system in place for regular inspections, oiling, washing, replacement, and repair of machines, machinery, and spare parts, among other things. This helps to stop unforeseen technical breakdowns and production halts.

9. Scheduling —

When it comes to taking a manufacturing process to the next stage, production scheduling is crucial. The allocation of raw materials, labour, and processes to manufacture goods for customers is known as the production schedule.

The objective of production scheduling is to make the manufacturing process run as smoothly as possible by matching the production requirements with the available resources in the most cost-effective way possible.

Activities Production management:

The four basic activities in the production cycle are: (1) product design; (2) planning and scheduling; (3) production operations; (4) cost accounting etc.

1. Product Design

The objective of this activity is to design a product that meets customer requirements for quality (durability) and functionality while simultaneously minimizing production costs

2. Planning

The planning component of production scheduling is by far the most important. This component pertains to deciding what will be done in the future. Without a plan, production scheduling cannot even begin or take place. Preparing a plan through charts, production budgets, or various other visual representations can provide a sound basis for steps down the road pertaining to production. There are two types of planning that can be used: static planning and dynamic planning. Static planning assumes that all steps will be completed on time with no changes, while dynamic planning assumes that some process steps will change.

2. Routing

Production routing is the process that is used to determine the route or path that a product must follow. This route entails the path from raw materials until it is transformed into a finished product. The main objective of this component is to locate and perform the most economical and enhanced sequence of operations in the production process.

3. Scheduling

Scheduling coincides with the time and date that the operation must be completed. Scheduling is an essential and crucial portion of production scheduling and lays the foundation and groundwork for all of the steps within the production process. There are three types of scheduling that an operations utilize, such as master scheduling, manufacturing or operation scheduling, and retail operation scheduling. Overall, scheduling is key for a manufacturing operation to proceed.

4. Production operations

It is the process of turning an organization's resources into goods and services. Production management relates to the activities around creating products. Operations management has to do with the production and delivery of products and services.

5. Cost accounting

It aims to report, analyze, and lead to the improvement of internal cost controls and efficiency. In short, cost accounting is a system of operational analysis for management.

6. Dispatching

Dispatching relates to the process of assigning the order of job from the preconceived production plan. Dispatching is concerned with giving a practical shape to an overall production plan. This will also include issuing any orders and instructions and other important information pertaining to production.

7. Execution

The last component of production scheduling is the proper execution of the created schedule. Staff members must work together to ensure that items are produced in the right order and delivered on time. A proper schedule execution would be one that has the fewest amounts of bottlenecks or late orders.

Productivity

Productivity is a **measure of the efficiency of production**. It is a ratio of actual output (production) to what is required to produce it (inputs) i.e.

$$\text{Productivity} = \frac{\text{Quantity of Goods and Services Produced}}{\text{Amount of Resource Used}}$$

Mathematically

$$P = \frac{O}{I}$$

Productivity is measured as a total output per one unit of a total input. Productivity is measure of how much input is required to produce a given output i.e. it is ratio of output to input. It is the ratio between the amount produced and the amount of resources used in the course of production. The resources may be any combination of materials, machines, men and space. Thus

$$\text{Productivity} = \frac{\text{Measure of output}}{\text{Measure of input}}$$

Factors Affecting Productivity

1. Human Factor:

(a) Ability to work – Productivity of an organization depends upon the competence and calibre of its people—both workers and managers. Ability to work is governed by education, training, experience, aptitude, etc. of the employees.

(b) Willingness to work – Motivation and morale of people is the second important group of human factors that determine productivity. Wage incentive schemes, labour participation in management, communication system, informal group relations, promotion policy, union management relations, quality of leadership, etc., are the main factors governing employees' willingness to work. Working conditions like working hours, sanitation, ventilation, schools, clubs, libraries, subsidized canteen, company transport, etc., also influence the motivation and morale of employees.

2. Technological:

Technological factors exercise significant influence on the level of productivity.

The main technological factors are as follows:

- (a) Size and capacity of plant
- (b) Product design and standardization
- (c) Timely supply of materials and fuel
- (d) Rationalization and automation measures
- (e) Repairs and maintenance
- (f) Production planning and control
- (g) Plant layout and location
- (h) Materials handling system
- (i) Inspection and quality control
- (j) Machinery and equipment used
- (k) Research and development
- (l) Inventory control
- (m) Reduction and utilization of waste and scrap, etc.

3. Managerial:

The competence and attitudes of managers have an important bearing on productivity. In many organizations, productivity is low despite latest technology and trained manpower. This is due to inefficient and indifferent management. Competent and dedicated managers can obtain extraordinary results from ordinary people.

4. Natural:

Natural factors such as physical, geological, geographical and climatic conditions exert considerable influence on productivity, particularly in extractive industries. For example,

productivity of labour in extreme climates (too cold or too hot) tends to be comparatively low. Natural resources like water, fuel and minerals influence productivity.

5. Sociological:

Social customs, traditions and institutions influence attitudes towards work and job. For instance, bias on the basis of caste, religion, etc., inhibited the growth of modern industry in some countries. The joint family system affected incentive to work hard in India. Close ties with land and native place hampered stability and discipline among industrial labour.

6. Political:

Law and order, stability of Government, harmony between States, etc. are essential for high productivity in industries. Taxation policies of the Government influence willingness to work, capital formation, modernization and expansion of plants, etc. Industrial policy affects the size, and capacity of plants. Tariff policies influence competition. Elimination of sick and inefficient units helps to improve productivity.

7. Economic:

Size of the market, banking and credit facilities, transport and communication systems, etc. are important factors influencing productivity.

Importance of Productivity:

Higher productivity provides the following importance:

- (i) It helps to reduce the cost of production per unit through more economical or efficient use of resources.
- (ii) Reduction in costs helps to improve the profits of a business. The enterprise can more successfully compete in the market.
- (iii) The gains of higher productivity can be passed on to consumers in the form of lower prices and/or better quality of products.
- (iv) Similarly, gains of higher productivity can be shared with workers in the form of higher wages or salaries and better working conditions.
- (v) Availability of quality goods at reasonably low prices helps to improve the standard of living in the country.
- (vi) Due to higher productivity, a firm can survive and grow better. This helps to generate more employment opportunities.
- (vii) A more productive enterprise can better export goods and earn valuable foreign exchange for the country.
- (viii) Higher productivity means better utilization of the country's resources, which helps to control inflation in the country.

Quality Control:

Quality can be defined as the degree to which a product or service satisfies a customer's requirements or expectations. Quality relates to customer satisfaction, which can have an

effect on future sales and therefore on the future performance of the firm. Customers are more likely to purchase additional products from the same firm if they are satisfied with the quality.

“Quality control may be defined as that industrial management technique or group of techniques by means of which products of uniform acceptable quality are manufactured. It is indeed the mechanism by which products are made to measure up to specifications determined from customer’s demand and transformed into sales, engineering and manufacturing requirements. It is concerned with making things right rather than the discovering and rejecting those made wrong”.

Firms now realize that it is easier to retain existing customers than it is to attract new customers who are unfamiliar with their products or services. Thus, firms are increasingly recognizing the impact that the quality of their products or services can have on their overall performance.

Quality control is a process of determining whether the quality of a product or a service meets the desired quality level and identifying improvements (if any) that need to be made in the production process. Quality can be measured by assessing the various characteristics (such as how long the product lasts) that enhance customer satisfaction.

Objectives of quality control:

Following are the important objectives of quality control:

1. To establish the desired quality standards which are acceptable to the customers
2. To discover flaws or variations in the raw materials and the manufacturing processes in order to ensure smooth and uninterrupted production.
3. To evaluate the methods and processes of production and suggest further improvements in their functioning.
4. To study and determine the extent of quality deviation in a product during the manufacturing process.
5. To analyse in detail the causes responsible for such deviation.
6. To undertake such steps which are helpful in achieving the desired quality of the product.

Types of Quality Control

QC is not a function of any single department or a person. It is the primary responsibility of any supervisor to turn out work of acceptable quality. Quality control can be divided into three main

sub-areas, those are:

1. Off-line quality control,
2. Statistical process control and
3. Acceptance sampling plans.

1. Off-line quality control:

Its procedure deal with measures to select and choose controllable product and process parameters in such a way that the deviation between the product or process output and the standard will be minimized. Much of this task is accomplished through product and process design.

Example: Taguchi method, principles of experimental design etc.

2. Statistical process control:

SPC involves comparing the output of a process or a service with a standard and taking remedial actions in case of a discrepancy between the two. It also involves determining whether a process can produce a product that meets desired specification or requirements. On-line SPC means that information is gathered about the product, process, or service while it is functional. The corrective action is taken in that operational phase. This is real-time basis.

3. Acceptance sampling plans:

A plan that determines the number of items to sample and the acceptance criteria of the lot, based on meeting certain stipulated conditions (such as the risk of rejecting a good lot or accepting a bad lot) is known as an acceptance sampling plan.

Steps in Quality Control

Following are the steps in quality control process:

1. Formulate quality policy.
2. Set the standards or specifications on the basis of customer's preference, cost and profit.
3. Select inspection plan and set up procedure for checking.
4. Detect deviations from set standards of specifications.
5. Take corrective actions or necessary changes to achieve standards.
6. Decide on salvage method *i.e.*, to decide how the defective parts are disposed of, entire scrap or rework.
7. Coordination of quality problems.
8. Developing quality consciousness both within and outside the organization.
9. Developing procedures for good vendor-vendee relations.

Benefits of Quality Control

- Improving the quality of products and services.
- Increasing the productivity of manufacturing processes, commercial business, and corporations.
- Reducing manufacturing and corporate costs.
- Determining and improving the marketability of products and services.
- Reducing consumer prices of products and services.
- Improving and/or assuring on time deliveries and availability.
- Assisting in the management of an enterprise.

Techniques for Improving Productivity

Technique # 1. Work Study:

Scientific analysis and improvement of work in all its aspects is a very useful technique of increasing productivity. Work study results in improvements in plant layout, material handling system, process design and standardization, working conditions, etc. These in turn help to minimize defective works and waste.

Technique # 2. Research and Development:

Continuing research and development (R & D) leads to the discovery of better techniques of production and improvements in existing machinery, equipment, etc. The rate of technological progress is a direct determinant of productivity. That is why companies and countries spend huge sums of money on research and development activities.

Technique # 3. Incentive Schemes:

Wage incentive schemes seek to motivate employees by paying extra remuneration. Profit sharing or bonus, labour welfare measures and good working conditions also help in this objective. All these schemes foster sense of belonging and closer human relationships. As a result, there is reduction in idle time caused by absenteeism, labour turnover, accidents and disputes.

Technique # 4. Production Planning and Control:

Scientific task planning ensures timely supply of inputs, proper maintenance of plant, efficient work scheduling and regulation of day-to-day 'activities in the plant. It facilitates full utilization of plant capacity and achievement of production targets.

Technique # 5. Workers' Participation in Management:

Labour participation in management is considered an effective tool for improving productivity. It helps in developing mutual understanding and cooperation between management and labour. Joint consultation, suggestion schemes, two-way communication, grievance procedure are the main forms of workers' participation in management.

Technique # 6. Automation:

Mechanization, automation and rationalization are major breakthroughs for increasing productivity. These schemes are effective provided the productivity gains are equitably shared with workers. Such measures increase the speed and accuracy of work.

Technique # 7. Management by Objectives (MBO):

MBO is a process whereby the superior and subordinates jointly identify the specific measurable goals, define results expected of each individual and jointly assess the contribution of every individual. It is an approach for integrating the individuals with the organization. The focus of MBO is on participative goal setting, joint evaluation of performance and results to be achieved.

Technique # 8. Job Enrichment:

Job enrichment is the process of redesigning a job in order to enlarge its scope and to give the worker more to do. Its purpose is to improve job satisfaction, motivation and morale of workers. When the job is engineered to workers the dehumanization element is reduced so as

to improve productivity and to reduce cost. It provides an opportunity for the satisfaction of higher level needs.

Technique # 9. Flexitime—an Alternative Work Pattern:

Flexitime is a relatively new work pattern which is a major departure from tradition. It allows the workers to set their own work hours subject to a minimum number of hours per week. During a particular period all workers are required to be present. Such a period is called ‘core hours.’ Subject to these limitations workers are given the freedom to decide when they will work.

Technique # 10. Quality of Work Life (QWL):

QWL is a new technique for improving productivity and quality of work.

Technique # 11. Quality Circles (QC):

A quality circle is a small group of workers which regularly meets to discuss problems, investigate causes, recommend solutions and if authorized, to take corrective action. It usually consists of five to fifteen members who collectively identify, analyze and resolve work-related problems and may even implement solutions.

Production Planning and control:

Production planning and control is a predetermined process which includes the use of human resource, raw materials, machines etc. PPC is the technique to plan each and every step in a long series of separate operation. It helps to take the right decision at the right time and at the right place to achieve maximum efficiency.

Objectives of Production Planning & Control:

1. to ensure safe and economical production process
2. to effectively utilize plant to maximize productivity
3. to maximize efficiency by proper coordination in production process
4. to ensure proper delivery of goods
5. to place the right man for the right job, at right time for right wages.
6. to minimize labor turnover
7. to reduce the waiting time

Main elements of Production Planning & Control:

The following are main elements of Production Planning and Control.

1. Routing
2. Loading
3. Scheduling
4. Dispatching
5. Follow up

6. Inspection

7. Corrective

1. Routing

It is about selection of path or route through which raw materials pass in order to make it into a finished product. The points to be noted while routing process are – full capacity of machines, economical and short route and availability of alternate routing. Setting up time for the process for each stage of route is to be fixed. Once overall sequence are fixed, then the standard time of operations are noted using work measurement technique.

2. Loading and scheduling

Loading and Scheduling are concerned with preparation of workloads and fixing of starting and completing date of each operation. On the basis of the performance of each machine, loading and scheduling tasks are completed.

3. Dispatching

Dispatching is the routine of setting productive activities in motion through the release of orders and instructions, in accordance with previously planned time and sequence, embodied in route sheet and schedule charts. It is here the orders are released.

4. Expediting / Follow-up

It is a control tool which brings an idea on breaking up, delay, rectifying error etc., during the progress of work.

5. Inspection

Inspection is to find out the quality of executed work process.

6. Corrective

At evaluation process, a thorough analysis is done and corrective measures are taken in the weaker spots.

Stages of Production Planning & Control:

Production Planning & Control is done in three stages namely,

1. Pre-planning

2. Planning

3. Control.

Stage 1: Pre-Planning

Under this phase of production planning, basic ground work on the product design, layout design and work flow are prepared. The operations relating to the availability scope and capacity of men, money materials, machines, time are estimated.

Stage 2: Planning

This is a phase where a complete analysis on routing, estimating and scheduling is done. It also tries to find out the areas of concern for short time and long time so that prominent planning can be prepared.

Stage 3: Control

Under this phase, the functions included are dispatching, follow up, inspection and evaluation. It tries to analyze the expedition of work in progress. This is one of the important phases of the Production Planning and Control.

FUNCTIONAL AREA OF MANAGEMENT
(B) INVENTORY MANAGEMENT

What is inventory?

Inventory is the goods that your company handles with the intention of selling. It might be raw materials that you buy and turn into something entirely new, or it might be a bulk product that you break down into its constituent parts and sell separately. It could even be something completely intangible: software, for instance.

What Is Inventory Management?

Inventory management refers to the process of ordering, storing, using, and selling a company's inventory. This includes the management of raw materials, components, and finished products, as well as warehousing and processing of such items.

- Inventory management is the entire process of managing inventories from raw materials to finished products.
- Inventory management tries to efficiently streamline inventories to avoid both gluts and shortages.

The goal of inventory management is to have the right products in the right place at the right time. This requires inventory visibility — knowing when to order, how much to order and where to store stock. The basic steps of inventory management include:

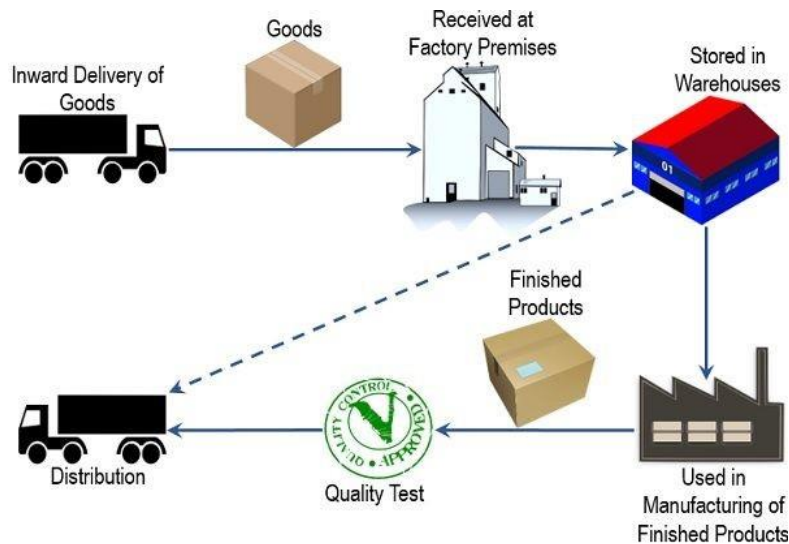
1. Purchasing inventory: Ready-to-sell goods are purchased and delivered to the warehouse or directly to the point of sale.
2. Storing inventory: Inventory is stored until needed. Goods or materials are transferred across your fulfillment network until ready for shipment.
3. Profiting from inventory: The amount of product for sale is controlled. Finished goods are pulled to fulfill orders. Products are shipped to customers.

Definition:

Inventory management is an approach for keeping track of the flow of inventory. It starts right from the procurement of goods and its warehousing and continues to the outflow of the raw material or stock to reach the manufacturing units or to the market, respectively. The process can be carried out manually or by using an automated system.

When the goods arrive at the premises, inventory management ensures receiving, counting, sorting, arrangement, storage and maintenance of these items, i.e. stock, raw material, components, tools, etc., efficiently.

To see how this whole system functions, we should first understand the **flow of inventory** in an organization. The same has been represented in the following diagram:



Inventory Management Objectives

Inventory management is performed to simplify the operational activities. Some of the primary objectives for which it is carried out are as follows:



- **Preventing Dead Stock or Perishability:** With an optimal inventory level, the chances of wastage in the form of goods spoilage or dead stock.
- **Optimizing Storage Cost:** It reduces the chances of maintaining excessive stock, even the requirements are pre-determined, which ultimately cuts down the unnecessary warehousing costs.
- **Maintaining Sufficient Stock:** Now, the production department need not worry about the shortage of raw material or goods because of its constant supply.
- **Enhancing Cash Flow:** Inventory has a significant impact on the cash flow of the company. With effective inventory management, the organization can ensure sufficient liquid cash to enhance its operational efficiency.
- **Reducing the Inventories' Cost Value:** When there is a constant purchase of goods or stock, the organization can ask for discounts and other benefits to decrease the purchase price.

Need for Inventory Management:

1. Tracking Inventory

A good system will help you keep track of your inventory and offer a centralized view of stock across sales channels – how much is in stock, and where. Inventory tracking is the systems and methods a company uses to monitor how raw materials or finished goods move through the supply chain. Fundamental to generating revenue, the goal is to have the right amount of stock to meet customer demand.

2. Control your costs

Keeping reports about your inventory helps you understand what stocks are doing well, versus which are just taking up shelf space. Lack of the right inventory at the right time can mean back orders, excess inventory, etc. These drive up costs.

3. Improve your delivery

Late delivery due to stock-outs is bound to give you a bad reputation. For tracking, it is important for you to know when the vendor is shipping inventory and when it will arrive. This helps you manage customer expectations by delivery as, when and where they want.

4. Manage planning and forecasting

The software can help you improve demand forecasting by analysing data trends from well-performing stocks. This minimizes your holding and handling costs, improves revenues and frees up cash flows. Also, by planning and forecasting – you deliver on customer expectations better.

5. Reduce the time for managing inventory

With a good inventory management solution, you can reduce the time taken to keep track of all the products you have on hand and on order. Additionally, you save the time taken up in inventory recounts if your records are in place.

Techniques of Inventory management:

Types of Inventory Management Techniques

1. ABC Analysis

2. Just In Time (JIT) Method

3. Material Requirements Planning (MRP) Method

4. Economic Order Quantity (EOQ) Model

5. Minimum Safety Stocks

6. VED Analysis

7. Fast, Slow & Non-moving (FSN) Method

There are various **types of inventory management techniques** which can help in efficient inventory management. They are as follows:

ABC Analysis

ABC analysis stands for Always Better Control Analysis. It is an inventory management technique where inventory items are classified into three categories namely: A, B, and C. The items in A category of inventory are closely controlled as it consists of high-priced inventory which may be less in number but are very expensive. The items in B category are relatively lesser expensive inventory as compared to A category and the number of items in B category is moderate so control level is also moderate. The C category consists of a high number of inventory items which require lesser investments so the control level is minimum.

Just In Time (JIT) Method

In Just in Time method of inventory control, the company keeps only as much inventory as it needs during the production process. With no excess inventory in hand, the company saves the cost of storage and insurance. The company orders further inventory when the old stock of inventory is close to replenishment. This is a little risky method of inventory management because a little delay in ordering new inventory can lead to stock out situation. Thus this method requires proper planning so that new orders can be timely placed.

Material Requirements Planning (MRP) Method

Material Requirements Planning is an inventory control method in which the manufacturers order the inventory after considering the sales forecast. MRP system integrates data from various areas of the business where inventory exists. Based on the data and demand in the market, the manager would carefully place the order for new inventory with the material suppliers.

Economic Order Quantity (EOQ) Model

Economic Order Quantity technique focuses on taking a decision regarding how much quantity of inventory should the company order at any point of time and when should they place the order. In this model, the store manager will reorder the inventory when it reaches the minimum level. EOQ model helps to save the ordering cost and carrying costs incurred while placing the order. With the EOQ model, the organization is able to place the right quantity of inventory.

Minimum Safety Stocks

The minimum safety stock is the level of inventory which an organization maintains to avoid the stock-out situation. It is the level when we place the new order before the existing inventory is over. Like for example, if the total inventory in an organization is 18,000 units, they place a new order when the inventory reaches 15,000 units. Therefore, the 3,000 units of inventory shall form part of the minimum safety stock level.

VED Analysis

VED stands for Vital Essential and Desirable. Organizations mainly use this technique for controlling spare parts of inventory. Like, a higher level of inventory is required for vital parts that are very costly and essential for production. Others are essential spare parts, whose absence may slow down the production process, hence it is necessary to maintain such inventory. Similarly, an organization can maintain a low level of inventory for desirable parts, which are not often required for production.

Fast, Slow & Non-moving (FSN) Method

This method of inventory control is very useful for controlling obsolescence. All the items of inventory are not used in the same order; some are required frequently, while some are not required at all. So this method classifies inventory into three categories, fast-moving inventory, slow-moving inventory, and non-moving inventory. The order for new inventory is placed based on the utilization of inventory.

Conclusion

Inventory management is an essential part of every business. With an effective inventory management system in place, the business can significantly reduce its various costs like warehousing cost, inventory carrying cost, ordering cost, cost of obsolescence, etc. It improves the supply chain of the business. Managers are able to forecast the level of production at which they need to place new orders for inventory. Hence, organizations should take all the necessary steps to maintain an effective inventory management and control system.

CHAPTER- 5 (C) FINANCIAL MANAGEMENT

INTRODUCTION:

Financial Management means planning, organizing, directing and controlling the financial activities such as procurement and utilization of funds of the enterprise. It means applying general management principles to financial resources of the enterprise.

Scope/Elements

1. Investment decisions includes investment in fixed assets (called as capital budgeting). Investment in current assets are also a part of investment decisions called as working capital decisions.
2. Financial decisions - They relate to the raising of finance from various resources which will depend upon decision on type of source, period of financing, cost of financing and the returns thereby.
3. Dividend decision - The finance manager has to take decision with regards to the net profit distribution. Net profits are generally divided into two:
 - a. Dividend for shareholders- Dividend and the rate of it has to be decided.
 - b. Retained profits- Amount of retained profits has to be finalized which will depend upon expansion and diversification plans of the enterprise.

Objectives of Financial Management

The financial management is generally concerned with procurement, allocation and control of financial resources of a concern. The objectives can be-

1. To ensure regular and adequate supply of funds to the concern.
2. To ensure adequate returns to the shareholders which will depend upon the earning capacity, market price of the share, expectations of the shareholders.
3. To ensure optimum funds utilization. Once the funds are procured, they should be utilized in maximum possible way at least cost.
4. To ensure safety on investment, i.e, funds should be invested in safe ventures so that adequate rate of return can be achieved.
5. To plan a sound capital structure-There should be sound and fair composition of capital so that a balance is maintained between debt and equity capital.

FUNCTIONS OF FINANCIAL MANAGEMENT:

1. **Estimation of capital requirements:** A finance manager has to make estimation with regards to capital requirements of the company. This will depend upon expected costs and profits and future programmes and policies of a concern. Estimations have to be made in an adequate manner which increases earning capacity of enterprise.
2. **Determination of capital composition:** Once the estimation have been made, the capital structure have to be decided. This involves short- term and long- term debt equity analysis. This will depend upon the proportion of equity capital a company is possessing and additional funds which have to be raised from outside parties.
3. **Choice of sources of funds:** For additional funds to be procured, a company has many choices like-
 - a. Issue of shares and debentures
 - b. Loans to be taken from banks and financial institutions
 - c. Public deposits to be drawn like in form of bonds.

Choice of factor will depend on relative merits and demerits of each source and period of financing.

4. **Investment of funds:** The finance manager has to decide to allocate funds into profitable ventures so that there is safety on investment and regular returns is possible.
5. **Disposal of surplus:** The net profits decision have to be made by the finance manager. This can be done in two ways:
 - a. Dividend declaration - It includes identifying the rate of dividends and other benefits like bonus.
 - b. Retained profits - The volume has to be decided which will depend upon expansional, innovational, diversification plans of the company.
6. **Management of cash:** Finance manager has to make decisions with regards to cash management. Cash is required for many purposes like payment of wages and salaries, payment of electricity and water bills, payment to creditors, meeting current liabilities, maintainance of enough stock, purchase of raw materials, etc.
7. **Financial controls:** The finance manager has not only to plan, procure and utilize the funds but he also has to exercise control over finances. This can be done through many techniques like ratio analysis, financial forecasting, cost and profit control, etc.

MANAGEMENT OF WORKING CAPITAL:

Working capital management – defined as current assets minus current liabilities – is a business tool that helps companies effectively make use of current assets and maintain sufficient cash flow to meet short-term goals and obligations. By effectively managing working capital, companies can free up cash that would otherwise be trapped on their balance sheets.

Meaning of Working Capital

Working capital is defined as ‘the excess of current assets over current liabilities’. All elements of working capital are quick moving in nature and therefore, require constant monitoring for proper management.

For proper management of working capital, it is required that a proper assessment of its requirement is made. Working capital is also known as ‘circulating capital, fluctuating capital and revolving capital’.

Objectives of Working Capital Management

- (1) To minimize the amount of capital employed in financing the current assets. This will also lead to an improvement in the “Return on Capital employed”.
- (2) To manage the current asset in such a way that the marginal return on investment in these assets is not less than the cost of capital acquired to finance them. This will ensure the maximization of the value of the business unit.
- (3) To maintain the proper balance between the amount of current assets and liabilities in such a way that the firm is always able to meet its financial obligations whenever due. This will ensure the smooth working of the unit without any production held ups due to paucity of funds.

Concepts of Working Capital

There are two concepts of working capital i.e. gross working capital and net working capital. Gross working capital is the amount of funds which are invested in current assets. Current assets are those assets which are converted into cash within a short period of time generally in one year. Current liabilities are those liabilities which can be payable within a short period of time generally in one year.

i. Current Assets – Cash in hand, cash at bank, sundry debtors, bills receivables, short term investments, inventories, marketable securities, prepaid expenses, accrued incomes etc.

ii. Current Liabilities – Sundry creditors, bills payable, outstanding expenses, accrued expenses, short term advances and deposits, dividends payable, bank overdraft etc.

Objectives of working capital management

Working capital is an essential metric for businesses to pay attention to, as it represents the amount of capital they have on hand to make payments, cover unexpected costs, and ensure business runs as usual. However, working capital management isn't that simple, and there can be multiple objectives of a working capital management program, including:

- **Meeting obligations.** Working capital management should always ensure that the business has enough liquidity to meet its short-term obligations, often by collecting payment from customers sooner or by extending supplier payment terms. Unexpected costs can also be considered obligations, so these need to be factored into the approach to working capital management, too.
- **Growing the business.** With that said, it's also important to use your short-term assets effectively, whether that means supporting global expansion or investing in R&D. If your company's assets are tied up in inventory or accounts payable, the business may not be as profitable as it could be. In other words, too cautious an approach to working capital management is suboptimal.
- **Optimizing capital performance.** Another working capital management objective is to optimize the efficiency of capital usage – whether by minimizing capital costs or maximizing capital returns. The former can be achieved by reclaiming capital that is currently tied up to reduce the need for borrowing, while the latter involves ensuring the ROI of spare capital outweighs the average cost of financing it.

Working capital formula

Working capital is calculated by subtracting current liabilities from current assets. That means that the working capital formula can be illustrated as:

Working capital = current assets – current liabilities

Current assets include assets such as cash and accounts receivable, and current liabilities include accounts payable.

COSTING (ONLY CONCEPT):

Cost:- It is defined as “ the amount of expenditure incurred on ,or attributable to a given thing.

Costing:- It is the technique and processes of ascertaining costs. These techniques consist of principles and rules which govern the procedure of ascertaining cost of products or services.

Cost Accounting:- It may be regarded as a specialised branch of accounting which involves classification , acculation, assignment and control of costs. The costing terminology of CIMA

London defines cost accounting as “ the establishment of budgets, standard costs and actual costs of operations, processes , activities or products and the analysis of variances, profitability or the social use of funds.”

“Costing is the classifying, recording and appropriate allocation of expenditure for the determination of the costs of products or services, and for presentation of suitably arranged data for the purposes of control, and guidance of management.”

Aims of Costing:

Main aims of costing are:

1. To determine the exact cost of each article.
2. To determine the cost incurred during each operation to keep control over workers’ wages.
3. To provide information to ascertain the selling price of the product.
4. To supply information for detection of wastage.
5. It helps in reducing the total cost of manufacture.
6. It suggests changes in design when the cost is higher.
7. To help in formulating the policies for charging the prices of the product.
8. To facilitate preparation of estimate for submitting the rates in tenders or quotations.
9. To compare the actual cost with the estimated cost of the component.

Costing is used for two purposes:

- *Internal reporting.* Management uses costing to learn about the cost of operations, so that it can work on refining operations to improve profitability. This information can also be used as the basis for developing product prices.
- *External reporting.* The various accounting frameworks require that costs be allocated to the inventory recorded in a company's balance sheet at the end of a reporting period.

This calls for the use of a cost allocation system, consistently applied.

BREAK EVEN ANALYSIS:

A break-even analysis is a financial tool which helps a company to determine the stage at which the company, or a new service or a product, will be profitable. In other words, it is a financial calculation for determining the number of products or services a company should sell or provide to cover its costs (particularly fixed costs). Break-even is a situation where an organisation is neither making money nor losing money, but all the costs have been covered.

Components of Break-Even Analysis

Fixed costs

Fixed costs are also called overhead costs. These overhead costs occur after the decision to start an economic activity is taken and these costs are directly related to the level of production, but not the quantity of production. Fixed costs include (but are not limited to)

interest, taxes, salaries, rent, depreciation costs, labour costs, energy costs etc. These costs are fixed irrespective of the production. In case of no production also the costs must be incurred.

Variable costs

Variable costs are costs that will increase or decrease in direct relation to the production volume. These costs include cost of raw material, packaging cost, fuel and other costs that are directly related to the production.

Formula for Break Even Analysis

The formula for break even analysis is as follows:

$$\text{Break even quantity} = \text{Fixed costs} / (\text{Sales price per unit} - \text{Variable cost per unit})$$

Where:

- **Fixed costs** are costs that do not change with varying output (e.g., salary, rent, building machinery).
- **Sales price per unit** is the selling price (unit selling price) per unit.
- **Variable cost per unit** is the variable costs incurred to create a unit.

Example of Break Even Analysis

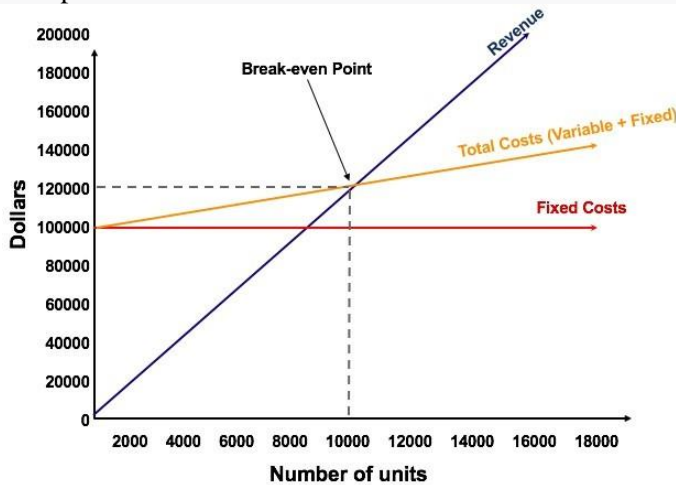
Colin is the managerial accountant in charge of Company A, which sells water bottles. He previously determined that the fixed costs of Company A consist of property taxes, a lease, and executive salaries, which add up to \$100,000. The variable cost associated with producing one water bottle is \$2 per unit. The water bottle is sold at a premium price of \$12. To determine the break even point of Company A's premium water bottle:

$$\text{Break even quantity} = \$100,000 / (\$12 - \$2) = 10,000$$

Therefore, given the fixed costs, variable costs, and selling price of the water bottles, Company A would need to sell 10,000 units of water bottles to break even.

Graphically Representing the Break Even Point

The graphical representation of unit sales and dollar sales needed to break even is referred to as the break even chart or Cost Volume Profit (CVP) graph. Below is the CVP graph of the example above:



Explanation:

1. The number of units is on the X-axis (horizontal) and the dollar amount is on the Y-axis (vertical).
2. The red line represents the total fixed costs of \$100,000.
3. The blue line represents revenue per unit sold. For example, selling 10,000 units would generate $10,000 \times \$12 = \$120,000$ in revenue.
4. The yellow line represents total costs (fixed and variable costs). For example, if the company sells 0 units, then the company would incur \$0 in variable costs but \$100,000 in fixed costs for total costs of \$100,000. If the company sells 10,000 units, the company would incur $10,000 \times \$2 = \$20,000$ in variable costs and \$100,000 in fixed costs for total costs of \$120,000.
5. The break even point is at 10,000 units. At this point, revenue would be $10,000 \times \$12 = \$120,000$ and costs would be $10,000 \times 2 = \$20,000$ in variable costs and \$100,000 in fixed costs.
6. When the number of units exceeds 10,000, the company would be making a profit on the units sold. Note that the blue revenue line is greater than the yellow total costs line after 10,000 units are produced. Likewise, if the number of units is below 10,000, the company would be incurring a loss. From 0-9,999 units, the total costs line is above the revenue line.

ACCOUNTING TERMINOLOGIES:

BOOK KEEPING: Bookkeeping is a process of recording and organizing all the business transactions that have occurred in the course of the business. Bookkeeping is an integral part of accounting and largely focuses on recording day-to-day financial transaction of the business.

All the financial transactions such as sales earned revenue, payment of taxes, earned interest, payroll and other operational expenses, loans investments etc. are recorded in books of accounts.

The way the bookkeeping is managed determines the accuracy of the overall accounting process that is been followed by the business. Thus, bookkeeping ensures that the record of financial transactions are up-to-date and more importantly, accurate

Bookkeeping helps to interpret the accounting information for decision making by both the internal and external users. Bookkeeping is a subset of accounting and clerical in nature which involves the following:

- Recording financial transactions
- Posting credits and debits
- Producing invoices
- Maintaining and balancing current account and general ledgers
- Completing payroll

JOURNAL ENTRY: A journal entry is a record of the business transactions in the accounting books of a business. A properly documented journal entry consists of the correct date, amounts to be debited and credited, description of the transaction and a unique reference number.

A journal entry is the first step in the accounting cycle. A journal details all financial transactions of a business and makes a note of the accounts that are affected. Since most businesses use a double-entry accounting system, every financial transaction impact at least two accounts, while one account is debited, another account is credited. This means that a journal entry has equal debit and credit amounts.

Petty Cash book: Petty Cash Book is an accounting book used for recording expenses which are small and of little value, for example, **stamps, postage and handling, stationery, carriage, daily wages, etc.**

These are expenses which are incurred day after day; usually, petty expenses are large in quantity but insignificant in value. To record such expenses, a different book known as a petty cash book is maintained. It may be maintained by ordinary or by the imprest system.

The difference between the sum of the **debit** items and the sum of the credit items represents the balance of the petty cash in hand.

A petty cash book also refers to the book in which small payments are recorded, which are not convenient to record in the main **cash book**.

P&L ACCOUNT: A profit and loss statement (P&L), or income statement or statement of operations, is a financial report that provides a summary of a company's revenues, expenses, and profits/losses over a given period of time. The P&L statement shows a company's ability to generate sales, manage expenses, and create profits. It is prepared based on accounting principles that include revenue recognition, matching, and accruals, which makes it different from the cash flow statement.

Structure of the Profit and Loss Statement

A company's statement of profit and loss is portrayed over a period of time, typically a month, quarter, or fiscal year.

The main categories that can be found on the P&L include:

- Revenue (or Sales)
- Cost of Goods Sold (or Cost of Sales)
- Selling, General & Administrative (SG&A) Expenses
- Marketing and Advertising
- Technology/Research & Development
- Interest Expense
- Taxes
- Net Income

Example Profit and Loss Statement (P&L)

Below is an example of Amazon's 2015-2017 P&L statement, which they call the Consolidated Statement of Operations. To learn how to analyze these financial statements, check out CFI's Advanced Financial Modeling Course on Amazon.

AMAZON.COM, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share data)

	Year Ended December 31,		
	2015	2016	2017
Net product sales	\$ 79,268	\$ 94,665	\$ 118,573
Net service sales	27,738	41,322	59,293
Total net sales	107,006	135,987	177,866
Operating expenses:			
Cost of sales	71,651	88,265	111,934
Fulfillment	13,410	17,619	25,249
Marketing	5,254	7,233	10,069
Technology and content	12,540	16,085	22,620
General and administrative	1,747	2,432	3,674
Other operating expense, net	171	167	214
Total operating expenses	104,773	131,801	173,760
Operating income	2,233	4,186	4,106
Interest income	50	100	202
Interest expense	(459)	(484)	(848)
Other income (expense), net	(256)	90	346
Total non-operating income (expense)	(665)	(294)	(300)
Income before income taxes	1,568	3,892	3,806
Provision for income taxes	(950)	(1,425)	(769)
Equity-method investment activity, net of tax	(22)	(96)	(4)
Net income	\$ 596	\$ 2,371	\$ 3,033
Basic earnings per share	\$ 1.28	\$ 5.01	\$ 6.32
Diluted earnings per share	\$ 1.25	\$ 4.90	\$ 6.15
Weighted-average shares used in computation of earnings per share:			
Basic	467	474	480
Diluted	477	484	493

BALANCE SHEET: The balance sheet is one of the three fundamental financial statements and is key to both financial modeling and accounting. The balance sheet displays the company's total assets and how the assets are financed, either through either debt or equity. It can also be referred to as a statement of net worth or a statement of financial position. The balance sheet is based on the fundamental equation: **Assets = Liabilities + Equity**.

As such, the balance sheet is divided into two sides (or sections). The left side of the balance sheet outlines all of a company's assets. On the right side, the balance sheet outlines the company's liabilities and shareholders' equity.

The assets and liabilities are separated into two categories: current asset/liabilities and non-current (long-term) assets/liabilities. More liquid accounts, such as Inventory, Cash, and Trades Payables, are placed in the current section before illiquid accounts (or non-current) such as Plant, Property, and Equipment (PP&E) and Long-Term Debt.

Balance Sheet Example

Below is an example of Amazon's 2017 balance sheet taken from CFI's Amazon Case Study Course. As you will see, it starts with current assets, then non-current assets, and total assets. Below that are liabilities and stockholders' equity, which includes current liabilities, non-current liabilities, and finally shareholders' equity.

AMAZON.COM, INC.
CONSOLIDATED BALANCE SHEETS
(in millions, except per share data)

	December 31,	
	2016	2017
<u>ASSETS</u>		
Current assets:		
Cash and cash equivalents	\$ 19,334	\$ 20,522
Marketable securities	6,647	10,464
Inventories	11,461	16,047
Accounts receivable, net and other	8,339	13,164
Total current assets	45,781	60,197
Property and equipment, net	29,114	48,866
Goodwill	3,784	13,350
Other assets	4,723	8,897
Total assets	\$ 83,402	\$ 131,310
<u>LIABILITIES AND STOCKHOLDERS' EQUITY</u>		
Current liabilities:		
Accounts payable	\$ 25,309	\$ 34,616
Accrued expenses and other	13,739	18,170
Unearned revenue	4,768	5,097
Total current liabilities	43,816	57,883
Long-term debt	7,694	24,743
Other long-term liabilities	12,607	20,975
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, \$0.01 par value:		
Authorized shares — 500		
Issued and outstanding shares — none	—	—
Common stock, \$0.01 par value:		
Authorized shares — 5,000		
Issued shares — 500 and 507		
Outstanding shares — 477 and 484	5	5
Treasury stock, at cost	(1,837)	(1,837)
Additional paid-in capital	17,186	21,389
Accumulated other comprehensive loss	(985)	(484)
Retained earnings	4,916	8,636
Total stockholders' equity	19,285	27,709
Total liabilities and stockholders' equity	\$ 83,402	\$ 131,310

See accompanying notes to consolidated financial statements.

CHAPTER-5.d) MARKETING MANAGEMENT

CONCEPT OF MARKETING:-

According to Philip Kotler “The Marketing concept is a customer orientation backed by integrated marketing aimed at generating customer satisfaction as the key to satisfying organizational goals”. The marketing concept rests on four pillars: **target market, customer needs, integrated marketing and profitability**. Marketing is the **process of getting the right goods or services or ideas** to the right people at the right place, time, and price, using the right promotion techniques and utilizing the appropriate people to provide the customer service associated with those goods, services, or ideas.

The marketing concept is the strategy that firms implement to satisfy customers’ needs, increase sales, maximize profit, and beat the competition. There are 5 marketing concepts that organizations adopt and execute. These are; (1) production concept, (2) product concept, (3) selling concept, (4) marketing concept, and (5) societal marketing concept.

MARKETING MANAGEMENT:-

Marketing management is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational goals. It identifies market opportunities and comes out with appropriate strategies for exploring those opportunities profitably.

Marketing management is “planning, organizing, controlling and implementing of marketing programmes, policies, strategies and tactics designed to create and satisfy the demand for the firms’ product offerings or services as a means of generating an acceptable profit.”

According to Philip Kotler, “Marketing Management is the art and science of choosing target markets and building profitable relationship with them. Marketing management is a process involving analysis, planning, implementing and control and it covers goods, services, ideas and the goal is to produce satisfaction to the parties involved”.

Marketing Management Involves:-

1. The setting of marketing goals and objectives,
2. Developing the marketing plan,
3. Organizing the marketing function,
4. Putting the marketing plan into action and
5. Controlling the marketing programme.

IMPORTANCE OF MARKETING MANAGEMENT:-

1. Analyzing Market Opportunities:

Marketing management collects and analyses information related to consumer's needs, wants and demands, competitor's marketing strategies, changing market trends and preferences. This helps to identify market opportunities.

2. Determination of Target Market:

Marketing management helps to identify the target market that the organization wishes to offer its product.

3. Planning and Decision Making:

Marketing management helps to prepare future course of action. Planning relates to product introduction, diversification. Decision making regarding pricing, selection of promotional mix, selection of distribution channel is taken by the marketing management.

4. Creation of Customer:

Consumers determine the future of the market .Therefore providing the best product to the consumer according to their preference is the important task of marketing. Marketing management helps in creation of new customers and retention of current customers.

5. Helps in Increasing Profit:

Marketing caters to the varied and unlimited needs of consumers. Marketing management helps to increase profit and sales volume. This is achieved by expansion of market and increasing customers.

6. Improvement in Quality of Life:

Marketing management aims at providing innovative product and services to the customers. Marketers continuously strive to incorporate new technology and mechanism in their product to provide more satisfaction to customers than before. This improves quality of life and makes life of consumers easier than before.

7. Employment Opportunities:

Marketing process is a combination of different activities like research work to assess the marketing environment, product planning and development, promotion, distribution of product to customers and after sales service. Marketing process requires researcher, production engineer, different distribution intermediaries, sales personnel also creates employment opportunities in advertisement section. Thus marketing management opened up different employment avenues thus creating employment opportunities.

FUNCTIONS:-

Various functions of marketing management are:

1. Assessing the Marketing Opportunities:

Determination of marketing objectives and assessment of the marketing opportunities for the firm, is an important function of marketing management. The constantly changing market conditions and opportunities make it imperative for the marketing management to come out with planned programmes to meet the challenges, and reap the opportunities.

2. Planning the Marketing Activities:

Planning is an important managerial function. Planning of marketing activities is a crucial task and involves numerous steps. It involves planning effective strategies to achieve the desired marketing objectives. It is concerned with formulation of policies relating to product, price, channels of distribution, promotional measures, forecast of target sales etc. Planning provides the basis for an effective marketing for the enterprise.

3. Organizing the Marketing Activities:

Another significant function of marketing is organizing it implies determination of various activities to be performed and assigning these activities to right person, so that marketing objectives are achieved. In the light of the changing concept of marketing, it is necessary that the organization structure is flexible and accommodative. This will help in better interaction between organization and environment.

4. Co-Ordinating Different Activities of Enterprise:

Even the best of planning will not be rewarding if there is improper coordination between different activities of the organization. Marketing involves various activities and these are inter-related and interdependent. Product decisions, pricing strategies, channel structure research activities all require proper coordination. Only then the objectives can be achieved.

5. Directing and Motivating the Employee:

A good direction is a must for effective performance of marketing functions. Direction helps in rightful performance of the work. Different leadership styles are practiced to guide the subordinates. A leader directs his subordinates and ensures through effective supervision, that the performance is as per planned specification. At the same time, it is necessary that employers are properly motivated. Motivation not only helps in better performance by the employee but also holds him back to the organization for longer periods.

6. Evaluating and Controlling Marketing Efforts:

In order to have a profitable venture, marketing manager must on a continuous basis, evaluate the marketing efforts. This will help him in knowing the deficiencies if any, which can be corrected beforehand only and proper adjustments can be made with the changing environment. Controlling is a managerial function concerned with comparison of actual performance with the

standard performance and locating the shortcomings if any, finally corrective measures are taken to overcome the shortcomings.

SCOPE OF MARKETING MANAGEMENT:-

1. Marketing research:

Marketing research involves identification of needs, wants taste and preferences of the targeted customer. Marketing management conducts a continuous analysis of consumer's behaviour towards firm's marketing mix strategies, business environment; competitor's marketing strategies in order to plan effectively the marketing activities of future.

2. Determination of Objectives:

Marketing management performs the task of setting marketing objectives. The marketing objectives are set in accordance with the overall organisational objectives of profit maximization. Marketing objectives relates to attracting new customers, retention of current customer, expansion of customer base, introduction of new product, improvement of old product and so on. Marketing management aims at maximising the customer's value by providing high satisfaction to the customers.

3. Planning Marketing Activities:

Planning involves determining the future course of action. Planning helps in accomplishment of objectives in a systematic manner. Planning of marketing activities relates to determining product line strategies, planning for product diversification, advertisement and promotional activities, planning related to selling and distribution process.

Planning may be conducted on short term, medium term and long term basis depending upon the requirements. Plans should be flexible so as to adjust with the changing business environment.

4. Product Planning and Development:

Product is the basic element of marketing. Products are goods or services that are offered to the customer for satisfying their needs and wants. Products are customer oriented and offered to the customer's as per their requirement and preferences. Product planning involves new product development, product innovation, product diversification plan.

5. Pricing of Product:

Pricing is a complex function of marketing management. In most of the cases prices form the decision making criterion for purchase decision. Pricing decisions are based on cost of the manufacturing and distribution of product, competitor's pricing strategies, customer's willingness to pay for the product, customer's perception about the product.

6. Promotion:

Promotion and advertisement are essential in order to maximise sales. Promotion and advertisement is essential to provide information to the customers about the product, to attract new customers, to provide reminder to customers about the product and to continue purchase, to

provide information about product improvement or introduction of new brand. Marketing management develops new techniques and tools for promotion of their product.

7. Distribution:

Distribution process facilitates easy availability of goods and services to the customers at right time and at right and convenient location. Selection of distribution channel depends upon the nature of the product, price of the product, availability of intermediaries for distribution and cost involved in the distribution process.

8. Evaluation and Controlling of Marketing Activities:

Marketing management performs the task of evaluation and controlling of the marketing activities. Evaluation enables identification of effectiveness of marketing plans and actions.

WHAT ARE MARKETING TECHNIQUES?

Marketing techniques are specific strategies used by businesses to promote products and services. The best marketing techniques are usually low-cost, impactful, and customizable to your target audience. Some were described below.

Storytelling

As a marketer, engaging people and influencing them to make buying decisions is your primary goal. To achieve this mission, you have to tell a good story. Since the dawn of time, people have been telling stories to learn and pass on vital information. Today, stories can be used to help consumers recognize your brand and interact with your content.

As a business, you can engage with your customers by sharing relatable stories about their daily challenges. Acknowledging these problems will immediately create an engaging story that will create a bond between you and your ideal customer. Since you have become relatable, your customers will feel like you know and understand them. Once you are a trusted brand, you have an opportunity to demonstrate how your product or service can solve your customer's problems.

Strategic Content Marketing

Content marketing is an essential aspect of developing relationships with both loyal and prospective customers. Creating informative and engaging content helps your clients to quickly solve their needs and sets you up as an industry expert. Strategic content marketing involves explicitly defining measurable goals, identifying the intended audience, creating a plan for distribution and promotion, and evaluating success in measurable ways.

Strategic content has the potential to generate new leads, increase website traffic, and pull prospective customers into your sales funnel. Setting explicit goals will help you measure your success as you go and focus on strategies that work.

Pillar-Cluster Technique

Google's algorithm wants users to find the most relevant and useful answers to their questions. To accomplish this goal, the Google algorithm is evolving to recognize unifying connections between users' specific searches and other's similar searches. With this method, they boost content they deem to be authoritative. The pillar-cluster technique focuses on topics rather than keywords to reach top rankings on search engines.

Pillar pages are a comprehensive overview of a topic. In contrast, cluster pages drill down on the related topics providing invaluable content-filled posts. The posts are all connected to each other via hyperlinks, making a strong value-based presence. When Google sees these hyperlink

clusters, they automatically consider you to be an authority on the topic. Since you are considered the primary source, your ranking rises. The key is to link pillar content to the cluster content. Linking the pages will increase your pillar page ranking in the event the cluster page ranks highly for a specific keyword.

Email Subscription Service

Email subscriptions give businesses an invite into their customer's inbox. The content in these emails serves many purposes, including generating website traffic, leads, or product subscriptions. Email subscriptions also allow people to keep in touch with the brand, hearing news, and stories. When people are willing to engage with your content voluntarily, you create a network of loyal subscribers who genuinely value the content you offer.

Email marketing has a slow build. Each message adds to the one before it, increasing the value you have to offer your clients. As you increase your email list, you can personalize and optimize the emails to fit your customer's buying stage and needs.

Producing Podcasts

One of the latest marketing techniques that is growing in popularity is creating podcasts. Roughly 90 million Americans surveyed in a 2019 study said they have listened to a podcast in the last month. 22 percent of Americans aged 12 and older are consistently listening to podcasts weekly. On average, those who have made the habit listen to at least seven unique podcasts each week.

With podcasts growing in popularity, your business has the potential to reach those listening with valuable content. What makes podcasting so useful is that it is easy to gain a potential customer's trust. Listening to another person's voice as they speak about various topics is an intimate experience.

Link Building

Link building, also called content syndication, is a marketing strategy in which a business attempts to get other websites to include their website link in the content. Having inbound links from other websites is essential for any SEO strategy and increases your page's domain authority.

Building links to your website does not need to be complicated. Search for mentions of your business in existing content on the Internet. When you find that content, you can contact the website editor and ask them to include a link to your website. This is a simple strategy that doesn't require a lot of work to generate viewers.

Growth Hacking

Growth Hacking is a strategy first employed in 2010 by early-stage startups seeking massive growth within a short timeframe and a limited budget. Since then, growth hacking has gained popularity and is being utilized by larger corporations such as Twitter and Dropbox.

Growth hacking strategies solely focus on acquiring as many customers as possible in the least amount of time. Growth hackers use viral marketing, social media, and targeted advertising instead of traditional media such as newspapers, radio, or television.

Influencer Marketing

More businesses are using a relatively newer marketing trend to reach their customers, influencer marketing. The company or brand partners with an influencer to help them promote their product or services to a larger group of consumers, ones the brand would not usually reach. An influencer can be anyone with a large, devoted audience, including celebrities, authority figures, and social media figures. The influencer promotes the product or service to their followers across various social media networks. Influencer marketing is effective because consumers feel celebrities,

athletes, and other influential figures are trustworthy therefore are more likely to take action on their recommendations.

Search Engine Marketing

Businesses use search engine marketing (SEM) to boost their website traffic through paid online advertising. One of the universally used techniques is pay-per-click (PPC) linking. With PPC, a business will pay to be listed in an ad at the top of a search engine's results. The ad will take consumers directly to the advertiser's page. Currently, the advertisements listed on Google

Social Networking and Viral Marketing

Social media marketing leverages social platforms to provide users with content that is valuable to them. In turn, they share the content across their social networking platforms. As users share your content, it creates traffic for your business and can influence your SEO. More shares also bring recognition from search results within Facebook, LinkedIn, Instagram, Twitter, and YouTube. This recognition leads to higher rankings with Google and Yahoo search results.

WHAT ARE THE 4 P'S OF MARKETING?

The "4 P's of Marketing" refer to the four key elements comprising the process of marketing a product or service. They involve the marketing mix, which is a set of tools that a company uses to influence consumers into buying its product. The marketing mix addresses factors such as:

- Understanding the needs or desires of consumers
- Identifying the cause of the failure of the current product offering
- Finding ways to solve said problems and change public perception of the product/service
- Creating distinguishing characteristics to increase competitive advantage
- Understanding how the product interacts with consumers and vice versa



Marketing Mix

1. Product

A product is any good or service that fulfills consumer needs or desires. It can also be defined as a bundle of utilities that comes with physical aspects such as design, volume, brand name, etc. The type of product impacts its perceived value, which allows companies to price it profitably. It also affects other aspects such as product placement and advertisements.

Companies can change the packaging, after-sales service, warranties, and price range, or expand to new markets to meet their objectives. Marketers must understand the product life cycle and come up with strategies for every stage in the life cycle, i.e., introduction, growth, maturity, and decline.

2. Price

The price of a product directly influences sales volume and, consequently, business profits. Demand, cost, pricing trends among competitors, and government regulations are crucial factors that determine pricing. Price usually reflects the product's perceived value rather than its real value. This means that pricing can be increased to promote exclusivity or reduced to create access.

Thus, pricing involves making decisions in terms of the basic price, discounts, price alteration, credit terms, freight payments, etc. It is also important to analyze when and if techniques like discounting are required or appropriate.

3. Promotion

Promotion involves decisions related to advertising, salesforce, direct marketing, public relations, advertising budgets, etc. The primary aim of promotion is to spread awareness about the product and services offered by a company. It helps in persuading consumers to choose a particular product over others in the market. Promotional efforts include the following:

- **Advertising:** A means of selling a product, service, or idea through communicating a sponsored, non-personal message about the product.
- **Public relations:** Involves management and control of the flow and matter of information from one's organization to the general public or other institutions.
- **Marketing strategy:** Involves identifying the right target market and using tools such as advertising to penetrate the said market. Promotion also includes online factors such as determining the class of search functions on Google that may trigger corresponding or targeted ads for the product, the design and layout of a company's webpage, or the content posted on social media handles such as Twitter and Instagram.

4. Place (or Distribution)

Place involves choosing the place where products are to be made available for sale. The primary motive of managing trade channels is to ensure that the product is readily available to the customer at the right time and place. It also involves decisions regarding the placing and pricing of wholesale and retail outlets.

Distribution channels such as outsourcing or company transport fleets are decided upon after cost-benefit analysis. Small details such as shelf space committed to the product by department stores are also included.

FUNCTIONAL AREAS OF MANAGEMENT

E) HUMAN RESOURCE MANAGEMENT

Introduction:

Human resource management (HRM) is the practice of recruiting, hiring, deploying and managing an organization's employees. HRM is often referred to simply as human resources (HR). A company or organization's HR department is usually responsible for creating, putting into effect and overseeing policies governing workers and the relationship of the organization with its employees.

Human Resource Management deals with the management functions like planning, organizing, directing and controlling

- It deals with procurement of human resource, training & development and maintenance of human resource.
- It helps to achieve individual, organizational and social objectives

Human Resource Management is a multidisciplinary subject.

- It includes the study of management, psychology, communication, economics and sociology.
- It also deals with building team spirit and team work.
- It is a continuous process.

Human resource management is also a strategic and comprehensive approach to managing people and the workplace culture and environment. Done well, it enables employees to contribute effectively and productively to the overall company direction and the accomplishment of the organization's goals and objectives.

HRM is employee management with an emphasis on those employees as assets of the business. In this context, employees are sometimes referred to as human capital.

Human resource management is the organizational function that manages all of the issues related to the people in an organization. That includes but is not limited to compensation, recruitment, and hiring, performance management, organization development, safety, wellness, benefits, employee motivation, communication, policy administration, and training.

Objectives of human resource management:

The objectives of HRM can be broken down into four broad categories:

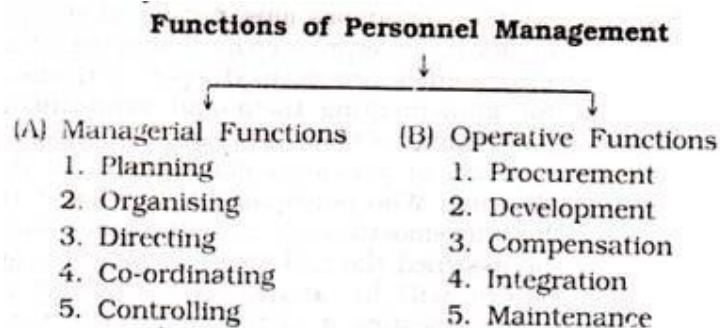
1. **Societal objectives:** Measures put into place that responds to the ethical and social needs or challenges of the company and its employees. This includes legal issues such as equal opportunity and equal pay for equal work.
2. **Organizational objectives:** Actions taken that help to ensure the efficiency of the organization. This includes providing training, hiring the right number of employees for a given task or maintaining high employee retention rates.

3. **Functional objectives:** Guidelines used to keep HR functioning properly within the organization as a whole. This includes making sure that all of HR's resources are being allocated to their full potential.
4. **Personal objectives:** Resources used to support the personal goals of each employee. This includes offering the opportunity for education or career development as well as maintaining employee satisfaction.

Functions of Personnel Management:

Functions of personnel management may be discussed under two broad categories:

- (A) Managerial Functions.
- (B) Operative Functions.



A. Managerial Functions:

Management aims at getting things done by others. Managerial functions deal with planning, organizing, directing, coordinating and controlling the activities of employees in an enterprise.

These functions are discussed as follows:

1. Planning:

Planning involves thinking in advance. It is the determination of strategies, programmes, policies, procedures to accomplish organizational objectives. Planning is a difficult task which involves ability to think, to predict, to analyze, and to come to decisions. In the context of personnel management, it requires the determination of human resource needs.

Planning would involve:

- a. Determining the needs of persons;
 - b. Deciding the sources of procuring them;
 - c. Determining training needs of personnel;
 - d. Selecting motivators for getting good performance from employees.
- The first step in planning is the determination of human resource needs.

2. Organizing:

Organization is a process of allocating the task among its members for achieving organizational objectives. This is done by designing the structure or relationship among jobs, personnel and physical factors. For achieving enterprise goals a number of plans, policies and programmes are decided upon. Organization is a channel for implementing them and achieving good results. The assignment of tasks and fixing of responsibilities will be the function of personnel management.

It decides who should do what. Who is responsible to whom? These decisions will help in smooth working of the organization.

3. Directing:

It is the basic function of managerial personnel. Directing means telling people to do a particular work. It does not mean only issuing orders to employees but also ensures that they perform as per the directions. The employees are also given instructions for carrying out their task. The orders and instructions should be clear and precise so that these are obeyed properly.

4. Coordinating:

Organizational objectives will be achieved only if group activities in the enterprise are co-ordinated effectively. There may be a problem of each group or department trying to pursue its own goals without bothering about overall objectives. A coordinated approach will help in achieving common goals.

5. Controlling:

Controlling is the act of checking, regulating and verifying whether everything occurs as per the standards set and plans adopted. The performance of persons is regularly reviewed to find out whether it is going according to the standards or not. In case, performance is low then steps are taken to improve it in future. Controlling function involves reviewing performance and taking corrective measures.

B. Operative Functions:

These functions are related to the procuring, developing, compensating, integrating and maintaining a work-force for attaining organizational goals. These functions are also known as service functions.

Various operative functions are discussed as follows:

1. Procurement:

This function relates to the procuring of sufficient and appropriate number of persons for carrying out business work. The needs of the organization should be assessed to find out the requirements of persons. Besides number, the procurement of suitable persons is also essential. For this purpose, the requirements of various jobs should be studied for fixing the

educational and technical experience of persons expected to man those jobs. Only the right type of persons will be able to give satisfactory results.

2. Development:

The development function is concerned with the development of employees by increasing their skill and proficiency in work. The persons are given proper training through various methods so that their performance is better in undertaking the jobs. Proper job description will enable the employees to know their weak points in performing various jobs. Training programmes are made suitable to cover up deficiencies in workers' performance.

3. Compensation:

It is concerned with securing adequate and equitable remuneration to persons working in the organization. Job analysis will enable in fixing the remuneration for various jobs. The needs of the jobs and qualifications of persons who will take up those jobs should be taken into consideration while fixing remuneration. If the employees are paid less than they should have got, they may leave the job at an earliest opportunity. So compensation should be fixed in such a way that it is able to attract and retain suitable persons in the organization.

4. Integration:

Integration is concerned with the attempt to effect reconciliation of individual, organization and social interest. It involves infusing among employees a sense of belonging to the enterprise. The employees should identify their personal interest with that of the organization. They should have a feeling that everything good of the enterprise will also be in their interest. This will bring about harmony of interests both of employees and the organization. There should be proper communication channel at all levels. The grievances of employees should be redressed at the earliest. This will help in creating good industrial relations and will integrate them.

5. Maintenance:

This function deals with sustaining and improving conditions that have been established. Better conditions of work should be maintained at all times. The employees will feel happy to work under such conditions. These conditions include establishment of health, sanitation and safety standards. If working conditions deteriorate, then employees will be prompted to leave the enterprise. Personnel department is put in charge of providing and maintaining healthy and conducive working conditions in the enterprise.

Manpower Planning:

Manpower Planning is the development of strategies to match the supply of manpower to the availability of jobs at organizational, regional or national level. Manpower planning involves reviewing current manpower resources, forecasting future requirements and availability, and taking steps to ensure that the supply of people and skills meets demand.

Manpower planning refers to optimal use of human resources. It is a procedure used in organizations to balance future requirements for all levels of employee with the availability of such employees.

Objectives of Manpower Planning:

1. Demonstrate understanding of competency based approach in human resource.
2. Utilise tools in identifying current staff competencies and gaps, vis-a-vis, the organization's goal and targets.
3. Demonstrate skills in conducting training needs analysis.
4. Formulate strategies for addressing identified training needs, prepare and design training modules and develop curriculum for training course and cost estimates.
5. Demonstrate the abilities to have the human resources development plan approved by the appropriate decision making body.
6. Design different training programmes to meet specific needs of particular group.
7. Formulate detailed implementation schedule.
8. Design evaluation tool.
9. Implement training and development activities, programmes and plans.
10. Write a professional report.
11. Demonstrate knowledge on using relevant analytical tools for planning.
12. Explain the relationship between the organization strategic plan and the strategic human resources development planning process.
13. Conduct a comparative study on the current human resources development planning process.

Importance of Manpower Planning

1. **Key to managerial functions-** The four managerial functions, i.e., planning, organizing, directing and controlling are based upon the manpower. Human resources help in the implementation of all these managerial activities. Therefore, staffing becomes a key to all managerial functions.

2. **Efficient utilization-** Efficient management of personnels becomes an important function in the industrialization world of today. Setting of large scale enterprises require management of large scale manpower. It can be effectively done through staffing function.
3. **Motivation-** Staffing function not only includes putting right men on right job, but it also comprises of motivational programmes, i.e., incentive plans to be framed for further participation and employment of employees in a concern. Therefore, all types of incentive plans become an integral part of staffing function.
4. **Better human relations-** A concern can stabilize itself if human relations develop and are strong. Human relations become strong through effective control, clear communication, effective supervision and leadership in a concern. Staffing function also looks after training and development of the work force which leads to co-operation and better human relations.
5. **Higher productivity-** Productivity level increases when resources are utilized in best possible manner. Higher productivity is a result of minimum wastage of time, money, efforts and energies. This is possible through the staffing and it's related activities (Performance appraisal, training and development, remuneration)

Manpower Planning Process

HR department of every company has to constantly keep an eye on the human resources that the company has. With every possible event like change industry dynamics, increase in business requirements, skills required for a particular technology etc, the need for having better resources increases.

The process and steps for manpower planning are as below:

1. Understanding the existing workforce

The HR department has to thoroughly understand the manpower available with the company. They should examine the background, skill set, qualification, location etc. of the entire work force so that they have a good idea regarding the pool of talent which the company has.

2. Forecasting for the future

With constant changes in business requirements, companies must understand the future trend and which type of employees would be best suited for their organization.

Hence, companies must examine, evaluate and forecast the type of employee workforce they want in the future years

3. Recruitment and selection

Depending upon the business requirements, manpower planning leads to a much more well thought out recruitment and selection pattern. This totally depends upon the forecasts made and the business requirements. Hence, candidates with better qualification, skill set, experience etc. are shortlisted as employees to best suit the future needs.

4. Training the employees

Employees who are a part of the organization are trained to have the best skills, knowledge and understanding about the current job as well as the future requirements.

All these above mentioned manpower planning steps help organizations become better prepared to adapt to new technology, future industry developments and even to face off with competitors.

Recruitment:

In human resource management, “recruitment” is the process of finding and hiring the best and most qualified candidate for a job opening, in a timely and cost-effective manner. It can also be defined as the “process of searching for prospective employees and stimulating and encouraging them to apply for jobs in an organization”.

Recruitment is defined as a process of discovering reliable sources of contacting desirable employees which meets the staffing requirements of the organization. Through recruitment process the organization can attract the adequate number of manpower to facilitate the effective selection process and joining of efficient work force.

Importance of Recruitment

The following points will help to understand the importance of Recruiting:

1. The process is important to encourage and attract candidates and get ample amount of application for the job vacancies.
2. It is an effective way to create information pool about the prospective candidates who are suitable for the talent needs of the organization.
3. It is very important step of planning and analysis about the present and future manpower requirement of the organization.
4. It bridges the gap between employers and their future employee.
5. It is a less expensive way of gathering information about the talented manpower in the industry.
6. It helps to improve the selection process by proper sorting of suitable candidate for the job.
7. It reduces the turnover of employees due to correct matching of candidate expectations and the rewards offered by the organization.
8. It also helps the organization to meet the social and legal obligation of maintaining the manpower composition.
9. It determines the appropriate candidates through the different channels of recruitment.
10. It helps the organization to create different sources of attracting the right candidate for the job profile.

Recruitment or Hiring is the process of searching and attracting the right candidates for hiring them for vacant jobs in an organization. There are two sources of recruitment, internal sources and external sources. Recruitment refers to the process of searching for potential employees and influencing them to work for their organization.

The purpose of the recruitment process is to find talented and qualified individuals for the growth and development of their organization. It is part of the human resource management (HRM) department.

Sources of Recruitment:

There are many sources of recruiting potential employees but all of them can be grouped into two categories, namely.

Internal Sources of Recruitment

Internal sources of recruitment consist of employees who are already on the payroll of a firm. It also includes former employees who have returned to work for the organization. Recruitment from internal sources is done to fill up vacancies through promotion, re-hiring and transferring employees within the company.



Characteristics of Internal Sources of Recruitment

- Quick process.
- Cheaper than the external recruitment process.
- Works as a tool of motivation for the staff.
- The company's choice is limited to existing employees of the company.
- Hiring fresh employees is a lost prospect.

External Sources of Recruitment

External sources of recruitment refer to the sources that lie outside or exist external to the organization.

Sources of external recruitment include:

1. People joining an organization, specifically through recommendations.
2. Employment agencies (e.g. naukri.com) or employment exchanges.
3. Advertising
4. Institutes like colleges and vocational schools (e.g. campus selection)
5. Contractors
6. Hiring unskilled labor
7. List of applications
8. Temporary workers.

Characteristics of External Sources

- Long and time-consuming process.
- It is an expensive process.
- When external people are given opportunities over them, then existing workers lose morale
- Hiring new employees can lead to the introduction of new blood and thus the introduction of a new set of skills and ideas.

Recruitment Steps:

The process of recruitment consists of three Major Steps or phases -

- a. Before posting job advertisement
- b. Selection process
- c. Formalities after selection of the candidate.

Here are the common steps of recruiting followed by the HRM department of various organizations:

1) Preparation- It is step in which the HRM department prepare a frame of ideal candidate for the vacant position. The skills and competencies required to perform the job are identified, also a qualification and level of experience required execute the job responsibilities is determined. Once the framework is ready, the HR identifies the proper communication channel through which the information about job vacancy can be conveyed to the suitable candidates.

2) Receive applications- Once the advertisement about the job vacancy is posted through internal and external source of recruitment, the HR department starts receiving the applications for the job opening. Most of the time the HR department confirms the candidate that their application is received by the organization and the further sorting process is going on. Many companies used application tracking system (ATS) which helps to automatically communicate with the applicant that their job application is received and is in process.

3) Selection stage 1: Cancel out unqualified applicants

Here the selection process begins- In this stage the application which are not suitable for the job are cancel out by the HRM department. The application can be weed out based on the un-matching qualification or experience of the candidate.

4) Selection stage 2: Arrangement of candidates

The applicants who are matching to the requirement of the job vacancy are then rated based on their on-paper experience and qualification. The ratings convey how well the applicant is fit of the vacant job profile. It is time consuming process and many times excel sheets are used to sort out the application and rank them based on their suitability to the job profile.

5) Selection stage 3: Interview rounds

The ranked and selected candidates can called for the interview round. There are several interview rounds which can vary from 2-6 based on the selection process adopted by the organization. Mostly the HR round includes the background verification, personality check and behavioral suitability of the candidate. The manager interview round is often used to check the actual work suitability of the candidate.

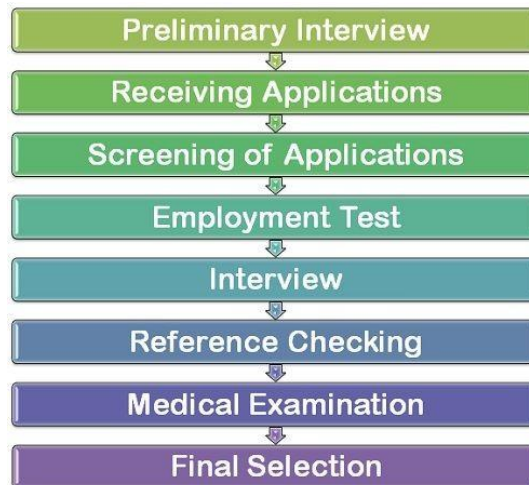
6) Selection stage 4: Future work situation

This is considered as a last round of selection in which a simulated work exercise is given to the candidate. It includes the question or tasks related to the area of expertise of the candidate. It provides actual result about the ability of the candidate to perform as a future employee of the organization.

7) Offer and Joining formalities

Generally 2-3 top selected candidates gets joining offer from the organization. The joining formalities include the submission of relevant papers and signing the work contract with the organization. After the documentation formalities the joining date of the employee is decided and a new recruit joins the organization.

Selection process:



1. **Preliminary Interview:** The preliminary interview is also called as a screening interview wherein those candidates are eliminated from the further selection process who do not meet the minimum eligibility criteria as required by the organization. Here, the individuals are checked for their academic qualifications, skill sets, family backgrounds and their interest in working with the firm. The preliminary interview is less formal and is basically done to weed out the unsuitable candidates very much before proceeding with a full-fledged selection process.
2. **Receiving Applications:** Once the individual qualifies the preliminary interview he is required to fill in the application form in the prescribed format. This application contains the candidate data such as age, qualification, experience, etc. This information helps the interviewer to get the fair idea about the candidate and formulate questions to get more information about him.
3. **Screening Applications:** Once the applications are received, these are screened by the screening committee, who then prepare a list of those applicants whom they find suitable for the interviews. The shortlisting criteria could be the age, sex, qualification, experience of an individual. Once the list is prepared, the qualified candidates are called for the interview either through a registered mail or e-mails.
4. **Employment Tests:** In order to check the mental ability and skill set of an individual, several tests are conducted. Such as intelligence tests, aptitude tests, interest tests, psychological tests, personality tests, etc. These tests are conducted to judge the suitability of the candidate for the job.
5. **Employment Interview:** The one on one session with the candidate is conducted to gain more insights about him. Here, the interviewer asks questions from the applicant to discover more about him and to give him the accurate picture of the kind of a job he is required to perform. Also, the briefing of certain organizational policies is done, which is crucial in the performance of the job. Through an interview, it is easier for the employer to understand the candidate's expectations from the job and also his communication skills along with the confidence level can be checked at this stage.
6. **Checking References:** The firms usually ask for the references from the candidate to cross check the authenticity of the information provided by him. These references could be from the education institute from where the candidate has completed his studies or from his previous employment where he was formerly engaged. These references are checked to know the conduct and behavior of an individual and also his potential of learning new jobs.

7. **Medical Examination:** Here the physical and mental fitness of the candidate are checked to ensure that he is capable of performing the job. In some organizations, the medical examination is done at the very beginning of the selection process while in some cases it is done after the final selection.

Thus, this stage is not rigid and can take place anywhere in the process. The medical examination is an important step in the selection process as it helps in ascertaining the applicant's physical ability to fulfill the job requirements.

8. **Final Selection:** Finally, the candidate who qualifies all the rounds of a selection process is given the appointment letter to join the firm.

Thus, the selection is complex and a lengthy process as it involves several stages than an individual has to qualify before getting finally selected for the job.

Method of Testing:

1). Ability tests: Assist in determining how well an individual can perform tasks related to the job. An excellent illustration of this is the typing tests given to a prospective employer for secretarial job. Also called as 'ACHEIVEMENT TESTS'. It is concerned with what one has accomplished. When applicant claims to know something, an achievement test is taken to measure how well they know it.

2). Aptitude test: Aptitude tests measure whether an individuals has the capacity or latent ability to learn a given job if given adequate training. The use of aptitude test is advisable when an applicant has had little or no experience along the line of the job opening. Aptitudes tests help determine a person's potential to learn in a given area.

Forms of aptitude test:

- **Mental or intelligence tests:** They measure the overall intellectual ability of a person and enable to know whether the person has the mental ability to deal with certain problems.
- **Mechanical aptitude tests:** They measure the ability of a person to learn a particular type of mechanical work. These tests helps to measure specialized technical knowledge and problem solving abilities if the candidate. They are useful in selection of mechanics, maintenance workers, etc.
- **Psychomotor or skills tests:** They are those, which measure a person's ability to do a specific job. Such tests are conducted in respect of semi- skilled and repetitive jobs such as packing, testing and inspection, etc.

3). Intelligence test: This test helps to evaluate traits of intelligence. Mental ability, presence of mind (alertness), numerical ability, memory and such other aspects can be measured. The intelligence is probably the most widely administered standardized test in industry. It is taken to judge numerical, skills, reasoning, memory and such other abilities.

4). Interest Test: This is conducted to find out likes and dislikes of candidates towards occupations, hobbies, etc. such tests indicate which occupations are more in line with a person's interest. Such tests also enable the company to provide vocational guidance to the selected candidates and even to the existing employees. These tests are used to measure an individual's activity preferences. These tests are particularly useful for students considering many careers or employees deciding upon career changes.

5). Personality Test: The importance of personality to job success is undeniable. Often an individual who possesses the intelligence, aptitude and experience for certain has failed

because of inability to get along with and motivate other people. It is conducted to judge maturity, social or interpersonal skills, behavior under stress and strain, etc. this test is very much essential on case of selection of sales force, public relation staff, etc. where personality plays an important role. Personality tests are similar to interest tests in that they, also, involve a serious problem of obtaining an honest answer.

6). Projective Test: This test requires interpretation of problems or situations. For example, a photograph or a picture can be shown to the candidates and they are asked to give their views, and opinions about the picture.

7). General knowledge Test: Now days G.K. Tests are very common to find general awareness of the candidates in the field of sports, politics, world affairs, current affairs.

8). Perception Test: At times perception tests can be conducted to find out beliefs, attitudes, and mental sharpness.etc.

9). Graphology Test: It is designed to analyze the handwriting of individual. It has been said that an individual's handwriting can suggest the degree of energy, inhibition and spontaneity, as well as disclose the idiosyncrasies and elements of balance and control. For example, big letters and emphasis on capital letters indicate a tendency towards domination and competitiveness. A slant to the right, moderate pressure and good legibility show leadership potential.

10). Polygraph Test: Polygraph is a lie detector, which is designed to ensure accuracy of the information given in the applications. Department store, banks, treasury offices and jewellery shops, that is, those highly vulnerable to theft or swindling may find polygraph tests useful.

11). Medical Test: It reveals physical fitness of a candidate. With the development of technology, medical tests have become diversified. Medical servicing helps measure and monitor a candidate's physical resilience upon exposure to hazardous chemicals.

Methods of Training & Development:

There are two methods through which managers can improve their knowledge and skills. One is through formal training and other is through on the job experiences. On the job training is very important since real learning takes place only when one practices what they have studied.

But it is also equally important in gaining knowledge through classroom learning. Learning becomes fruitful only when theory is combined with practice. Therefore on the job methods can be balanced with classroom training methods (off-the-job methods).

1. On-the-job Training (OJT) Methods:

This is the most common method of training in which a trainee is placed on a specific job and taught the skills and knowledge necessary to perform it.

The advantages of OJT are as follows:

1. On the job method is a flexible method.
2. It is a less expensive method.
3. The trainee is highly motivated and encouraged to learn.
4. Much arrangement for the training is not required.

On-the-job training methods are as follows:

1. Job rotation: This training method involves movement of trainee from one job to another gain knowledge and experience from different job assignments. This method helps the trainee understand the problems of other employees.

2. Coaching: Under this method, the trainee is placed under a particular supervisor who functions as a coach in training and provides feedback to the trainee. Sometimes the trainee may not get an opportunity to express his ideas.

3. Job instructions: Also known as step-by-step training in which the trainer explains the way of doing the jobs to the trainee and in case of mistakes, corrects the trainee.

4. Committee assignments: A group of trainees are asked to solve a given organizational problem by discussing the problem. This helps to improve team work.

5. Internship training: Under this method, instructions through theoretical and practical aspects are provided to the trainees. Usually, students from the engineering and commerce colleges receive this type of training for a small stipend.

2. Off-the-job Methods:

On the job training methods have their own limitations, and in order to have the overall development of employee's off-the-job training can also be imparted. The methods of training which are adopted for the development of employees away from the field of the job are known as off-the-job methods.

The following are some of the off-the-job techniques:

1. Case study method: Usually case study deals with any problem confronted by a business which can be solved by an employee. The trainee is given an opportunity to analyse the case and come out with all possible solutions. This method can enhance analytic and critical thinking of an employee.

2. Incident method: Incidents are prepared on the basis of actual situations which happened in different organizations and each employee in the training group is asked to make decisions as if it is a real-life situation. Later on, the entire group discusses the incident and takes decisions related to the incident on the basis of individual and group decisions.

3. Role play: In this case also a problem situation is simulated asking the employee to assume the role of a particular person in the situation. The participant interacts with other participants assuming different roles. The whole play will be recorded and trainee gets an opportunity to examine their own performance.

4. In-basket method: The employees are given information about an imaginary company, its activities and products, HR employed and all data related to the firm. The trainee (employee under training) has to make notes, delegate tasks and prepare schedules within a specified time. This can develop situational judgments and quick decision making skills of employees.

5. Business games: According to this method the trainees are divided into groups and each group has to discuss about various activities and functions of an imaginary organization. They will discuss and decide about various subjects like production, promotion, pricing etc. This gives result in co-operative decision making process.

6. Grid training: It is a continuous and phased programme lasting for six years. It includes phases of planning development, implementation and evaluation. The grid takes into consideration parameters like concern for people and concern for people.

7. Lectures: This will be a suitable method when the numbers of trainees are quite large. Lectures can be very much helpful in explaining the concepts and principles very clearly, and face to face interaction is very much possible.

8. Simulation: Under this method an imaginary situation is created and trainees are asked to act on it. For e.g., assuming the role of a marketing manager solving the marketing problems or creating a new strategy etc.

9. Management education: At present universities and management institutes give great emphasis on management education. For e.g., Mumbai University has started bachelors and postgraduate degree in Management. Many management Institutes provide not only degrees but also hands on experience having collaboration with business concerns.

10. Conferences: A meeting of several people to discuss any subject is called conference. Each participant contributes by analyzing and discussing various issues related to the topic. Everyone can express their own view point.

Payment of Wages:

Wages can be defined as a sum of money paid to the staff by the employer for rendering services as per a contract. According to minimum wages act 1948, wages means all remuneration, capable of being expressed in terms of money, which would, if the terms of the contract of employment, were fulfilled, be payable to a person employed in respect of his employment or of work done in such employment.

Some of the factors which influence the wage rates are:

1. Demand and Supply of Labor.
2. Legal Provisions.

3. Ability to Pay.
4. Nature of Job.
5. Working Hours.
6. Comparative Wage Levels.

ADVERTISEMENTS:

7. Cost of Living.
8. Type of Employment.

1. Demand and Supply of Labor:

Demand and supply is one of the important factors which influence the wage rates. If the number of workers required is more than availability of workers, then employees will be paid higher rate of work and vice versa.

2. Legal Provisions:

The government had made certain laws/acts for fixation of minimum wages to the workers such as minimum wages act 1948. According to this act, the employer must pay minimum wages to the worker. If any employers do not follow the rule of this act, an action can be taken against him.

3. Ability to Pay:

Payment of wages also depends on the ability of a company to pay. A company running into losses will not be in a position to pay more than minimum wages, whereas a profit making company can give workers a share in the profit.

4. Nature of Job:

Wages also depends upon the worker's skill and the conditions of work. Some jobs can be done by skilled employees while some jobs can be done by unskilled employees. The work conditions can be safe or hazardous. So wages can be high or low, depending upon the worker's skill and conditions of work.

5. Working Hours:

Wages also depends upon the number of hours worked per day and the number of holidays.

6. Comparative Wage Levels:

Wage rates also depend upon the wages paid in competitive firms for the same type of work. Wages are therefore fixed after conducting wage surveys.

7. Cost of Living:

Cost of living also determines the wage rates. Wages should be such which satisfies the minimum needs of workers.

8. Type of Employment:

Wages depends upon the type of employment i.e. regular employment or contractual employment. A regular and permanent job provides security of service.

Chapter 6. Leadership and Motivation

Leadership

Definition:

Leaders and their leadership skills play an important role in the growth of any organization. Leadership refers to the process of influencing the behaviour of people in a manner that they strive willingly and enthusiastically towards the achievement of group objectives.

A leader should have the ability to maintain good interpersonal relations with the followers or subordinates and motivate them to help in achieving the organizational objectives.

Features of Leadership:

- *Influence the behaviour of others:* Leadership is an ability of an individual to influence the behaviour of other employees in the organization to achieve a common purpose or goal so that they are willingly co-operating with each other for the fulfillment of the same.
- *Inter-personal process:* It is an interpersonal process between the leader and the followers. The relationship between the leader and the followers decides how efficiently and effectively the targets of the organization would be met.
- *Attainment of common organizational goals:* The purpose of leadership is to guide the people in an organization to work towards the attainment of common organizational goals. The leader brings the people and their efforts together to achieve common goals.
- *Continuous process:* Leadership is a continuous process. A leader has to guide his employees every time and also monitor them in order to make sure that their efforts are going in the same direction and that they are not deviating from their goals.
- *Group process:* It is a group process that involves two or more people together interacting with each other. A leader cannot lead without the followers.
- *Dependent on the situation:* It is situation bound as it all depends upon tackling the situations present. Thus, there is no single best style of leadership.

Importance of Leadership:

- *Initiating Action:* Leadership starts from the very beginning, even before the work actually starts. A leader is a person who communicates the policies and plans to the subordinates to start the work.
- *Providing Motivation:* A leader motivates the employees by giving them financial and non-financial incentives and gets the work done efficiently. Motivation is the driving force in an individual's life.
- *Providing guidance:* A leader not only supervises the employees but also guides them in their work. He instructs the subordinates on how to perform their work effectively so that their efforts don't get wasted.
- *Creating confidence:* A leader acknowledges the efforts of the employees, explains to them their role clearly and guides them to achieve their goals. He also resolves the complaints and problems of the employees, thereby building confidence in them regarding the organization.
- *Building work environment:* A good leader should maintain personal contacts with the employees and should hear their problems and solve them. He always listens to the point of view of the employees and in case of disagreement persuades them to agree with him by giving suitable clarifications. In case of conflicts, he handles them carefully and does not allow it to adversely affect the entity. A positive and efficient work environment helps in stable growth of the organization.
- *Co-ordination:* A leader reconciles the personal interests of the employees with the organizational goals and achieves co-ordination in the entity.

- *Creating Successors:* A leader trains his subordinates in such a manner that they can succeed him in future easily in his absence. He creates more leaders.
- *Induces change:* A leader persuades, clarifies and inspires employees to accept any change in the organization without much resistance and discontentment. He makes sure that employees don't feel insecure about the changes.

Qualities of a Leader:

- *Personality:* A pleasing personality always attracts people. A leader should also friendly and yet authoritative so that he inspires people to work hard like him.
- *Knowledge:* A subordinate looks up to his leader for any suggestion that he needs. A good leader should thus possess adequate knowledge and competence in order to influence the subordinates.
- *Integrity:* A leader needs to possess a high level of integrity and honesty. He should have a fair outlook and should base his judgment on the facts and logic. He should be objective and not biased.
- *Initiative:* A good leader takes initiative to grab the opportunities and not wait for them and use them to the advantage of the organization.
- *Communication skills:* A leader needs to be a good communicator so that he can explain his ideas, policies, and procedures clearly to the people. He not only needs to be a good speaker but also a good listener, counsellor, and persuader.
- *Motivation skills:* A leader needs to be an effective motivator who understands the needs of the people and motivates them by satisfying those needs.
- *Self-confidence and Will Power:* A leader needs to have a high level of self-confidence and immense will-power and should not lose it even in the worst situations, else employees will not believe in him.
- *Intelligence:* A leader needs to be intelligent enough to analyze the pros and cons of a situation and take a decision accordingly. He also needs to have a vision and foresightedness so that he can predict the future impact of the decisions taken by him.
- *Decisiveness:* A leader has to be decisive in managing his work and should be firm on the decisions are taken by him.
- *Social skills:* A leader should possess empathy towards others. He should also be a humanist who also helps the people with their personal problems. He also needs to possess a sense of responsibility and accountability because with great authority comes great responsibility.

Why do teams need leaders?

Teams often comprise multi-talented individuals who have the right skills and experience to deliver results. But most organizations still choose a team leader to direct the energy of the members for more effectiveness. Here are the reasons your team needs a leader.

Effective leadership

People have a natural disposition to follow a leader. Regardless of your level of knowledge and experience in a particular field, you can achieve more if there is a higher authority you report to. This is because a leader provides guidance and helps you minimize potential threats that can affect your productivity. A leader doesn't have to be a senior colleague, but they can still improve your chances of success through effective mentorship, accountability and delegation of duties.

Purpose

Leaders have a clearer understanding of the team's purpose and what it must do to make it a reality. Effective leadership not only guides but identifies, understands and communicate the organization's vision to motivate others to support them to achieve objectives. During the

designing and implementation of a project, it is the leader who ensures every team member understands their roles and provide an enabling environment to help them perform at their best.

Promote values

Team leaders can encourage others to take up essential values vital for the organization's success. If you are upright, honest, punctual and serve as a good role model to your team members, they will emulate your behavior. Values such as accountability and taking responsibility when things go wrong can also make the organization a better place for employees and clients.

Promote creativity

Team leaders can also foster an atmosphere of creativity in an organization. While leaders help others see the vision of the business, they can also provide more flexibility on how employees do their work. This can help produce new insights on how to perform tasks, make decisions and deliver on projects, improving efficiency and productivity.

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.

Manager Vs Leader:

BASIS FOR COMPARISON	LEADER	MANAGER
Meaning	A leader is a person who directs, guides and influences the behavior of his followers towards the attainment of specific goals.	A manager is a representative of the organization responsible for the management of the work of a group of employees and takes requisite actions whenever required.

BASIS FOR COMPARISON	LEADER	MANAGER
Work	Providing direction to the employees by creating vision and communicating it and encouraging them to reach effortlessly.	Formulating the structure of the organization and delegating authority and responsibilities to the employees.
Management function	Performs only one function - direction.	Performs all five functions - planning, organizing, staffing, directing, and controlling.
Authority	Informal authority by virtue of his/her personal qualities	Formal authority due to his/her positional role.
Approach	Proactive	Reactive
Exists in	Both formal and informal structure.	Formal structure only.
Qualities Required	Leadership qualities are required.	Both managerial and leadership qualities are required.
Motivation	Intrinsic process	Extrinsic Process
Key Attribute	Foresightedness	Prompt decision making and coordination
Subordinate	Followers	Employees
What does he/she do?	Sets directions	Plans activities
Style	Transformational	Transactional
Aims at	Motivating and inspiring people	Directing and Controlling employees
Focus	People	Process
Change	Promotes change.	Reacts to change.
Conflict	Uses conflict as an asset	Avoid conflict
People	Aligns people	Arranges people
Strives	For effectiveness	For efficiency

Style of Leadership:

The style is the way in which the leader influences followers. Leadership style is the pattern of behaviour that a leader exhibits, in influencing his/her subordinates towards the goals of an organization. A single style of leadership cannot suit different situations. Based on the situation and needs of the employee and organization, a leader can combine one or more leadership styles in influencing people towards the goals of the organization. Thus, choosing the right style, in the right situation, at the right time is the key to the success of a leader.

Broadly there are three different styles of leadership:

- Autocratic Style
- Democratic Style
- Laissez-Faire Style

1. Autocratic Style of Leadership

The autocratic style of leadership is also known as **authoritative style** or **directive style** of leadership, in which the autocratic leader retains most of the authority for himself/herself. An autocratic leader gives orders to his/her subordinates and expects that subordinates should give complete obedience to the orders issued. In this type, the decisions are taken by the leader without consulting others.

Advantages:

- (i) Autocratic leadership style permits quick decision-making.
- (ii) It provides strong motivation and satisfaction to the leaders who dictate terms.

Disadvantages:

- (i) It leads to frustration, low moral and conflict among subordinates,
- (ii) Subordinates tend to shirk responsibility and initiative.

2. Democratic Style of Leadership

This style of leadership is also known as **participative style** of leadership. In this style, the subordinates are also involved in decision making. The democratic style of leadership can be further categorized into three types:

- **Consensus:** A consensus leader makes a decision only after consulting the group members. A decision is not made final until all the members agree with the decisions
- **Consultative:** A consultative leader takes the opinion of the employees before making a decision
- **Democratic:** In the democratic style, the final authority of making decisions rests with the subordinates.

Advantages:

- (i) Exchange of ideas among subordinates and leader improves job satisfaction and morale of the subordinates.

(ii) Human values get their due recognition which develops positive attitude and reduces resistance to change.

(iii) Labour absenteeism and labour turnover are reduced.

(iv) The quality of decision is improved.

Disadvantages:

(i) Democratic style of leadership is time consuming and may result in delays in decision-making.

(ii) It is less effective if participation from the subordinates is for name sake.

(iii) Consulting others while making decisions go against the capability of the leader to take decisions.

3. Laissez-Faire Style of Leadership

The Laissez-Faire leadership is also known as **free-reign** leadership. In this style of leadership, the decision making power is completely left with the subordinates. The leader's involvement in making decision is minimized and the people are allowed to make their own decisions. The group members are given complete freedom in setting their own goals and achieving them, which give them complete autonomy. Employees under this leader, tend to become self-sufficient and guidance is not offered by leaders unless requested.

Advantages:

(i) Positive effect on job satisfaction and moral of subordinates.

(ii) It gives chance to take initiative to the subordinates.

(iii) Maximum possible scope for development of subordinates.

Disadvantages:

(i) Under this style of leadership, there is no leadership at all.

(ii) Subordinates do not get the guidance and support of the leader.

(iii) Subordinates may move in different directions and may work at cross purpose which may create problem for the organisation.

Free rein style of leadership may be appropriate when the subordinates are well trained, highly knowledgeable, self-motivated and ready to assume responsibility.

Chapter 6. Leadership and Motivation

b) Motivation

Meaning:

Motivation is derived from the Latin word *movere*, which means "to move". It is derived from the word "motive". Motive is the inner state of our mind that activates and directs our behavior or implies action to satisfy a need. It makes us move to act. It is always internal to us and is externalized via behavior. Motivation is one's willingness to exert efforts towards the accomplishment of his/ her goal.

Motivation is goal-directed behavior. People are motivated when they expect that a course of action is likely to lead to the attainment of a goal and a valued reward – one that satisfies their needs and wants.

Three Components of Motivation

1. Direction: what a person is trying to do.
2. Effort: how hard a person is trying.
3. Persistence: how long a person keeps on trying.

Definition:

Motivation is the processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal. The main features of motivation are a goal-oriented continuous process and a psychological phenomenon that converts abilities into performance.

Motivation is an inspirational process which impels the members of the team to pull their weight effectively to give their loyalty to the group, to carry out the tasks properly that they have accepted, and generally to play an effective part in the job that the group has undertaken.

Process of Motivation



1. **Unsatisfied need.** Motivation process begins when there is an unsatisfied need in a human being.
2. **Tension.** The presence of unsatisfied need gives him tension.
3. **Drive.** This tension creates an urge of drive in the human being and he starts looking for various alternatives to satisfy the drive.
4. **Search Behavior.** After searching for alternatives the human being starts behaving according to chosen option.
5. **Satisfied need.** After behaving in a particular manner for a long time then he evaluates that whether the need is satisfied or not.
6. **Reduction of tension.** After fulfilling the need the human being gets satisfied and his tension gets reduced.

For example, if an employee develops a need to earn more, this need will make him restless and he will start thinking how to satisfy his need. To satisfy his need he may think of working hard in organization and get promotion so he will start working hard. After sometime he will get incentives or increments or promotion which will satisfy his need.

Characteristics/Features of Motivation:

1. Continuous Process

Motivation is a continuous or never ending process. It is so because human needs, desires, wants or wishes are endless. All of them can never be satisfied simultaneously. Satisfaction of one need, gives size to another need. Therefore, motivation process goes on forever.

2. System-oriented

Motivation is system-oriented. It is the system that contains three main factors:

- Factors operating within an individual i.e. his needs, aspirations, wants, wishes, values etc.
- Factors operating within the organization such as organization structure, technology, physical facilities, work environment etc.
- Factors operating in external environment such as custom, norms of society, culture etc. Motivation is the result of interaction among these factors.

3. Need-satisfying Process

Motivation is a need satisfying process. An unsatisfied need creates tension that stimulates drives within an individual. These drives generate a search behavior to find particular goals that will satisfy the need and reduce tension.

4. Dynamic Process

Motivation is a dynamic and complex process. It is so because it is related to human behavior which is never static but dynamic. It keeps on changing continuously.

5. Motivation is Internal Feeling

Motivation is internal feeling of an individual. It points out the energizing forces within an individual that direct or influence him to behave in a particular way.

6. A Psychological Concept

The concept of motivation is mainly psychological. It relates to those forces operating within the individual employee which impels him to act or not to act in certain ways.

7. Energizing Force

Motivation is the process that energizes or encourages individuals to put in effort to achieve organizational goals and to satisfy their needs.

8. Willingness to Exert Effort

Motivation is the willingness of an individual to exert effort in the pursuit of organizational goals and to satisfy some individual needs.

Importance of motivation:

1. Positive Feeling of Employees

Effective motivation system inspires employees to do work or to take action. It prepares them to do their work with full devotion. It creates willingness among the employee to perform their work with great enthusiasm, zeal and loyalty.

2. Higher Performance

Highly motivated employees perform better and higher as compared to the employees with low level of motivation. Motivation is the mainspring of performance. Without motivation, the other contributors to performance become rather irrelevant.

3. High Productivity

Motivation increases the productivity of the employees. It utilizes the ability, potentiality, efficiency etc. of the employees. Once the employees are motivated, they do the work heartedly. And this ultimately increases the productivity of the employees and organization.

4. Change of Behaviour

It is a research based fact that properly motivated employees are more receptive to new things and ready to accept change. This attitude facilitates to introduce change and keep the organization on the path of progress.

5. Acceptance of Change

Change is the most for organizational and personal development. Through motivation, one can bring change in the resistivity to change behavior of the employees. This helps in accepting the organizational change. Therefore, motivation is important to accept the organizational change.

6. Better Employee Relation

A good motivation system creates congenial work environment and job satisfaction. Employees tend to work with cooperative spirit and in a disciplined manner. Management also offers them better wages and incentives. Hence, chances of conflict are greatly reduced. All this leads to better employee relations.

7. Satisfied Human Resource

A sound motivation system ensures proper supply of motivated human resource. Such a system in an organization can also ensure the satisfaction of needs and aspirations of individuals. Thus, it can attract and retain satisfied human resource in the organization.

8. Effective Utilization of Resources

Motivation helps in utilizing the resources. The motivated employees never let the resources go for wastage. They utilize the resources in an optimum way. They always work hard for the betterment of the organizational development and try to give maximum satisfaction from the minimum resources.

9. Reduction on Absenteeism and Employee Turnover

When the employees are motivated, they are much satisfied with the organization. Because of this, there is low absenteeism and turnover. They stay in the organization for the longer time. When organizations do not do any activities for motivation, then there is high turnover and absenteeism. This high absenteeism and turnover create problems which do not help in realizing the goal of an organization.

10. Boosts Morale

Morale refers to the attitude and feelings of employees about their work and work situation. Through motivation, employee attitudes and feelings towards work can be improved. This in turn boosts employee morale.

Factors affecting motivation:

1. Salary: Receiving regular payment, especially in reference to permanent employees, is considered a basic need that is expected to be satisfied by an employer. However, salary on its own is a short term satisfied. In the longer term salary isn't a factor that increases performance and a promise of getting a pay rise frequently has only a temporary impact.

However, if the salary is lower than an employee would expect, it could cause dissatisfaction and disengagement. While earning an 'equitable' salary might not motivate employees to perform better, it will reduce the risk of them feeling resentful or frustrated by the job.

2. Non-monetary incentives: Non-financial rewards are a way of satisfying employees' ego and self-actualization needs. These are often used to:

- Acknowledge extraordinary performance.
- Recognize achievement.
- Increase morale.
- Create a positive work environment.
- Motivate high performance.

According to research conducted by the Industrial Relations Services, non-monetary rewards help to fulfil organisational objectives at a relatively low cost. What's more, some non-financial incentives can be executed almost immediately as opposed to financial rewards, which can take weeks or months to take effect.

3. Relationship with colleagues

As employees spend one-third of their day at work, relationships and interactions they have with their colleagues can significantly impact their mood and outlook. Negative experiences or attitudes will eventually lead to isolation and loneliness, making it more difficult to find satisfaction from work, which in turn will decrease motivation.

Employee's social needs linked to their desire to be accepted and to belong to a community can be used to build strong and loyal teams that will achieve higher results by cooperating on the basis of common understanding.

4. Relationship with leadership

Each employee has a hierarchy of needs that should be addressed and the responsibility of understanding those needs lays with their line manager. The basis for effective communication between the two parties is two-sided trust. Relationships built on this foundation will help employees to honestly and openly talk about their needs, thoughts and feelings, which in turn will give the line managers clear direction on how to support and motivate their team members.

5. Company's culture

Any lack of belief or understanding of the employer's goals is one of the major causes of low job satisfaction, negative attitude and lower commitment. On the other hand, employees who are aligned with the culture are generally more happy in their roles, achieve better result and fulfillment.

A company's culture comes down to 6 main elements: work environment, company mission, value, ethics, expectations and goals. In practice, the culture is just a set of rules or accepted behaviours that help employees make decisions everyday. While every company would have their own unique set of features, values and beliefs, culture is always about making sure that the employees have a productive and enjoyable working environment.

6. Learning and development opportunities

Self-actualisation is a natural by product of high performance. Most employees naturally want to do a good job to feel they are achieving their full potential. Learning & Development (L&D) is a way of educating and guiding your employees on the areas and aspects that will help them develop and progress.

On the other hand, L&D can stimulate higher performance and improve engagement as long as the company offers development opportunities at every level - from learning on the job, through mentorship, shadowing and specific internal or external training programmes.

7. Processes within the company

While processes on their own aren't a motivational tool, they are closely linked to the areas that impact desire, enthusiasm and willingness of the employees. The workload, division of responsibilities, access to resources and accountability all depends on the structure and efficiency of the processes on which the business runs.

Efficient processes stimulate workers, allowing them to work effectively and efficiently and by reducing the amount of potential blockers. At each stage of the process an individual should be aware of what's expected from them and what resources are available. Making sure that an employee feels responsible for the outcomes of their work is crucial in building work engagement and stimulating higher performance.

8. Personal life

As employees spend $\frac{1}{3}$ of their days at work, there's a lot that an employer and/or a manager can do to support members of their team who are going through a tough time. Being patient and understanding towards them is the first step.

By offering support and understanding, as well as guiding employees through the hard times, it is possible to build trust and loyalty within people who frequently will return stronger and more committed. Making their professional career another challenge to deal with and manage might create the opposite result and as an employer, you may never regain their trust and commitment.

9. Performing meaningful work

As in case of non-monetary incentives, motivation through meaning targets the need of self-actualisation. Finding meaning is an existential question and according to research, including Deloitte's Talent 2020 series, performing meaningful work is one of the top 3 motivational drivers.

Finding the meaning behind work turns out to be linked to being able to make a difference to humanity through the job. By creating a culture of ethics, morals and establishing a CSR strategy, companies can encourage and guide their employees in the search of meaning.

Theories of motivation (Maslow):

Abraham Maslow's motivation theory is based on the human needs. These needs are classified into a sequential hierarchy from the lower to higher order as five need clusters as shown in the following Figure-

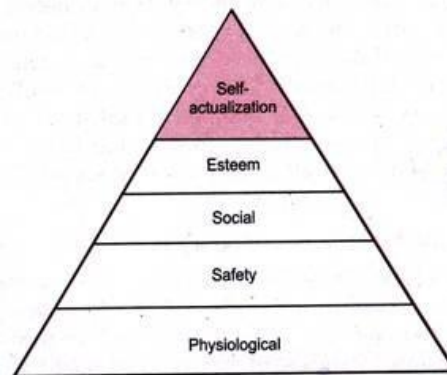


Figure 10.2: Maslow's Need Hierarchy Theory

1. Physiological Needs:

These needs are of the lowest-order and most basic needs of human beings. These involve satisfying fundamental biological drives, such as the need for food, air, water, cloth, and shelter generally expressed in the names of roti, kapada aur makan. These needs exert tremendous influence on human behaviour. Entrepreneur also being a human being has to meet his physiological needs for survival. Hence, he / she is motivated to work in the enterprise to have economic rewards to meet his / her basic needs.

2. Safety and Security Needs:

The second level of need in Maslow's hierarchy is emerged once physiological needs are met. Safety needs involve the need for a secure environment, free from threats of physical and psychological harm. These needs find expression in such desires as economic security and protection from physical dangers. Meeting these needs requires more money and, hence, the entrepreneur is prompted to work more in his/ her entrepreneurial pursuit. Like physical needs, these become inactive once they are also satisfied.

3. Social Needs:

Man is social animal. These needs, therefore, refer to belongingness or affiliation. All individuals want to be recognized and accepted by others. Likewise, an entrepreneur is motivated to interact with fellow entrepreneurs, his employees, and others.

4. Esteem Needs: These needs refer to self-esteem and self-respect. These include such needs that indicate self-confidence, achievement, competence, knowledge, and independence. In

case of entrepreneurs, the ownership and self- control over enterprise satisfies their esteem needs by providing them status, respect, reputation, and independence.

5. Self-Actualization:

The final step under the need hierarchy model is the need for self-actualization. This refers to self- fulfillment. The term ‘self- actualization’ was coined by Kurt Goldstein and means to become actualized in what one is potentially good. An entrepreneur may achieve self-actualization in being a successful entrepreneur.

In Maslow’s above need hierarchy theory, human needs are arranged in a lowest to the highest order. The second need does not dominate unless the first is reasonably satisfied and the third need does not dominate until the first two needs have been reasonably satisfied. This process goes on till the last need.

This is because man is never satisfied. If one need is satisfied, another need arises. Once a need is satisfied, it ceases to be a motivating factor. For entrepreneurs, it is mainly social, esteem, and self-actualization needs which motivate them to work more and more for satisfying them.

Methods of Improving Motivation:

1) Have A Positive Attitude

It’s the old dilemma of the carrot or the stick. Which do you give your employees? Do you focus on the negative (the stick), or do you highlight the positive (the carrot)?

To improve motivation in the workplace, strive for positive reinforcement as much as possible. Yes, there may be a time when bad behaviors or results need to be pointed out, but for the most part, you can attract more flies with honey.

2) Define the Purpose of Your Work

No one likes to do work for no reason. If they did, it wouldn’t be called work; it would be called play. But it would be monotonous play, and eventually, everyone would tire of it.

When you define the purpose of the work your team is doing, it helps them recognize the impact that it has on your clients and your company. This helps them feel like they’re making a difference and goes a long way toward keeping them motivated.

3) Don’t Micromanage

If you really want to improve motivation, don’t micromanage. Instead, give your team an assignment and a deadline, and then turn them loose. This gives your employees the freedom to work when their motivation is at its highest.

For some, early in the workday might be their most productive time. For others, it may be closer to the end of the day. For yet others, it may be overnight or on weekends.

When you allow your employees to decide when and how they will work, you establish a framework for improved efficiency and motivation.

4) Focus On The Big Picture

Regardless of what business you are in, there are always small tasks that may seem insignificant. As a manager, you know that those small tasks play a large role in the productivity and success of your company. Unfortunately, your team members may not be aware of that fact.

You can increase motivation in the workplace by helping your employees focus on the big picture rather than the small job in front of them.

Show them exactly how that seemingly insignificant task can have a huge impact on the success or failure of the project or business as a whole.

5) Be Clear About What You Expect

To improve motivation in the workplace, be very clear about what you want done. A journey of a thousand miles starts with a single step. So focus on that first step, be clear about what it is and how it can be completed, and then set your team to the task. A clear and concise mission can light a fire of motivation under any team.

6) Set Small, Easy-To-Measure Goals

Remember the journey of a thousand miles? Each step along that road should be a measurable goal. That way, your team members can see what needs to be accomplished to get to the end.

Small, measurable goals are often easier to complete than one huge goal. When your team members make visible progress on a project, they'll feel a boost of motivation that can carry them through the next step.

7) Recognize Results

Small goals provide plenty of opportunities to recognize your team's hard work and the results they produce. You don't have to give anything tangible just yet (we'll deal with that in the next section), but do supply specific reasons why they did a good job.

Try something like, "Great job on that article, James. It's already increased traffic to our customer's website tenfold over last month."

When you show your appreciation and give particular reasons why the job they did was good, your employees will be motivated to do it again.

8) Reward Great Work

This method to improve motivation in the workplace is usually reserved for the end of a big project or the end of the year, but you can choose to do it any time. You can certainly reward excellent work with a bonus (i.e., money), but don't limit yourself to that.

Get creative, think about what your team members need, and come up with a reward that fits each employee.

9) Stay Healthy

Your employees' motivation depends, in large part, on their health. That may seem like common sense now, but you'd be surprised how many members of your team neglect to take care of themselves in the middle of a difficult project.

Encourage everyone to sleep eight hours whenever possible and to get regular exercise. When you promote the health of your team, you're also promoting and improving their motivation.

10) Stay Fueled

In order to stay healthy—and in order to keep motivation high—your employee's need to stay fueled. That means eating healthy and drinking plenty of water.

If you're spending long hours in the office hammering out a big project, make sure everyone has healthy snacks. Pass out a bottle of water every hour or two. You can even order in lunch or dinner to keep energy levels, and motivation, as high as possible.

11) Take Regular Breaks

Regular breaks are a great time to relax and refuel. They're also important for motivation. Taking a break every hour gives your team member's time to de-stress and unwind. Not only does this keep them physically healthy, but it also helps keep their creativity firing on all cylinders.

Think about this: how many times have you come up with a great idea while shooting the breeze in the breakroom? You may have to make regular breaks mandatory, but the performance and motivation of your team will benefit because of it.

12) Have Fun

Not every project is going to feel like a game of kickball on a warm spring day. That's to be expected. Some projects are going to feel like getting your wisdom teeth out.

When those difficult projects rear their ugly heads, make it a point to find some way to have fun.

Of course, big things like ping pong or air hockey in the office do work, but there are other, smaller ways to make the workday fun and keep your team members engaged and motivated. Get creative.

13) Create A Sense Of Security

In his 1943 paper entitled "A Theory Of Human Motivation," Abraham Maslow suggested that safety (a.k.a. security) is one of two basic human needs.

In fact, a sense of security is so important for survival that it's second only to the physiological needs (food, water, warmth, and rest) that all humans share.

While Maslow's theory focuses on individual personal development, the concept transfers nicely to the realm of motivation in the workplace.

Once your team members feel secure to be themselves within your business, they'll be motivated to build and improve their potential. That's good news for your business because when your employees strive to reach their full potential, your business benefits.

14) Promote Inclusivity

Another powerful way to improve motivation in the workplace is to build on the sense of security mentioned in the previous section by promoting inclusivity.

Workplace inclusivity includes the practices and attitudes of your business that ensure that everyone:

- Has equal access to the same resources and opportunities
- Is treated fairly and respectfully
- Can (and wants to) contribute fully to their success, the team's success, and the business's success

That may sound like a lot, but it boils down to the fact that all team member's thoughts, ideas, and perspectives matter.

When you develop inclusivity by making everyone feel like a valuable member of the team, you lay the groundwork for their motivation to grow and improve as well.

15) Build Teamwork

At its most basic, teamwork is a feeling of unity that brings your team together and helps them overcome obstacles for the betterment of your business.

Without a strong sense of togetherness, individual team members may feel overwhelmed by the challenges they face day after day.

But as part of a team, those same individuals realize that the group is more powerful and more effective than the one. They'll then be able to move forward, secure in the knowledge that their team members have their back.

For more information on how to build teamwork in your business, check out these articles from the Sling blog:

- Team-Building Games: 4 Games Employees Will Actually Enjoy
- 40 Entrepreneur Quotes To Motivate You And Your Team To Greatness
- 10 Reasons Why Teamwork At The Office Is Important

16) Upgrade Tools And Workspaces

Your team has already proven that they can get the job done with the tools they have. But you can improve their motivation even more by upgrading their tools and their workspace.

This could be something as simple as switching to high-quality office supplies. Or it could be something as extravagant as purchasing a standing desk for everyone on your team.

Other upgrades include:

- Keyboard and mouse set
- Ergonomic chair
- Noise-canceling headphones
- Faster internet

Get creative and we're sure you can come up with plenty of ways to upgrade your employees' tools and workspaces so they can stay motivated longer.

17) Encourage Efficiency

You can improve motivation and help your team get more done during the workday by encouraging efficiency in all their activities.

Even small changes that might not seem like much can result in significant improvements in motivation (not to mention inspiration, creativity, and productivity).

Take the time to examine your team's habits and the processes they employ with an eye toward streamlining the way they work. You can even hire an efficiency expert to audit your business and offer suggestions.

Simple ways to encourage efficiency right now include:

- Minimizing distractions and interruptions
- Making breaks mandatory
- Adding plants to the work environment
- Bringing in natural light
- Adopting an office pet

18) Streamline Communication

Communication is one of the fundamental building blocks of both an effective team and an effective business. As such, motivation in the workplace depends a great deal on how well everyone communicates.

It's important to keep in mind that communication is about more than just an exchange of information. Effective, streamlined communication is also about how well the recipient understands what you're trying to say. It doesn't matter if you speak, draw, or write, if the message isn't clear, your communication will suffer.

- Asking questions to ensure that team members understand
- Making your team communication clearer, more concise, and more effective will dramatically improve not just employee motivation but also the way your business operates.

19) Cultivate Strong Employee/Employer Relationships

Cultivating a strong employee/employer relationship is a great way to improve motivation at work. But the benefits of building bonds in your business extend well beyond motivation to include such things as:

- Increased productivity
- Streamlined conflict resolution
- Stronger employee loyalty

20) Avoid Employee Burnout

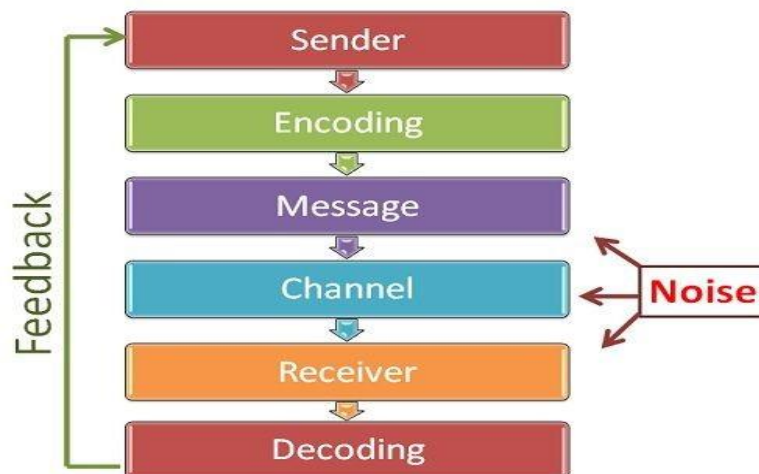
There's no way to improve motivation in the workplace if your employees are burned out. Employee burnout is mental, physical, and emotional exhaustion that leads to:

- Lack of enthusiasm
 - Decreased motivation
 - A general sense of displeasure with the job
- Rather than just the tension of a daily deadline, burnout is the ongoing, chronic stress that persists day after day and week after week.

Communications Process:

Communications is a continuous process which mainly involves three elements viz. sender, message, and receiver. The elements involved in the communication process are explained below in detail:

1. Sender: The sender or the communicator generates the message and conveys it to the receiver. He is the source and the one who starts the communication
2. Message: It is the idea, information, view, fact, feeling, etc. that is generated by the sender and is then intended to be communicated further.
3. Encoding :The message generated by the sender is encoded symbolically such as in the form of words, pictures, gestures, etc. before it is being conveyed.
4. Media: It is the manner in which the encoded message is transmitted. The message may be transmitted orally or in writing. The medium of communication includes telephone, internet, post, fax, e-mail, etc. The choice of medium is decided by the sender.
5. Decoding: It is the process of converting the symbols encoded by the sender. After decoding the message is received by the receiver.
6. Receiver: He is the person who is last in the chain and for whom the message was sent by the sender. Once the receiver receives the message and understands it in proper perspective and acts according to the message, only then the purpose of communication is successful.
7. Feedback: Once the receiver confirms to the sender that he has received the message and understood it, the process of communication is complete.
8. Noise: It refers to any obstruction that is caused by the sender, message or receiver during the process of communication. For example, bad telephone connection, faulty encoding, faulty decoding, inattentive receiver, poor understanding of message due to prejudice or inappropriate gestures, etc.



Importance of Communication:

1. The Basis of Co-ordination

The manager explains to the employees the organizational goals, modes of their achievement and also the interpersonal relationships amongst them. This provides coordination between various employees and also departments. Thus, communications act as a basis for coordination in the organization.

2. Fluent Working

A manager coordinates the human and physical elements of an organization to run it smoothly and efficiently. This coordination is not possible without proper communication.

3. The Basis of Decision Making

Proper communication provides information to the manager that is useful for decision making. No decisions could be taken in the absence of information. Thus, communication is the basis for taking the right decisions.

4. Increases Managerial Efficiency

The manager conveys the targets and issues instructions and allocates jobs to the subordinates. All of these aspects involve communication. Thus, communication is essential for the quick and effective performance of the managers and the entire organization.

5. Increases Cooperation and Organizational Peace

The two-way communication process promotes co-operation and mutual understanding amongst the workers and also between them and the management. This leads to less friction and thus leads to industrial peace in the factory and efficient operations.

6. Boosts Morale of the Employees

Good communication helps the workers to adjust to the physical and social aspect of work. It also improves good human relations in the industry. An efficient system of communication enables the management to motivate, influence and satisfy the subordinates which in turn boosts their morale and keeps them motivated.

Types of Communication:

1. Formal Communication

Formal communications are the one which flows through the official channels designed in the organizational chart. It may take place between a superior and a subordinate, a subordinate and a superior or among the same cadre employees or managers. These communications can be oral or in writing and are generally recorded and filed in the office.

Formal communication may be further classified as Vertical communication and Horizontal communication.

Vertical Communication

Vertical Communications as the name suggests flows vertically upwards or downwards through formal channels. Upward communication refers to the flow of communication from a subordinate to a superior whereas downward communication flows from a superior to a subordinate.

Application for grant of leave, submission of a progress report, request for loans etc. are some of the examples of upward communication. Sending notice to employees to attend a meeting, delegating work to the subordinates, informing them about the company policies, etc. are some examples of downward communication.

Horizontal Communication

Horizontal or lateral communication takes place between one division and another. For example, a production manager may contact the finance manager to discuss the delivery of raw material or its purchase.

Types of communication networks in formal communication:

- **Single chain:** In this type of network communications flows from every superior to his subordinate through a single chain.
- **Wheel:** In this network, all subordinates under one superior communicate through him only. They are not allowed to talk among themselves.
- **Circular:** In this type of network, the communication moves in a circle. Each person is able to communicate with his adjoining two persons only.
- **Free flow:** In this network, each person can communicate with any other person freely. There is no restriction.
- **Inverted V:** In this type of network, a subordinate is allowed to communicate with his immediate superior as well as his superior's superior also. However, in the latter case, only ordained communication takes place.

2. Informal Communication

Any communication that takes place without following the formal channels of communication is said to be informal communication. The Informal communication is often referred to as the 'grapevine' as it spreads throughout the organization and in all directions without any regard to the levels of authority.

The informal communication spreads rapidly, often gets distorted and it is very difficult to detect the source of such communication. It also leads to rumors which are not true. People's behavior is often affected by the rumors and informal discussions which sometimes may hamper the work environment.

However, sometimes these channels may be helpful as they carry information rapidly and, therefore, may be useful to the manager at times. Informal channels are also used by the managers to transmit information in order to know the reactions of his/her subordinates.

Types of Grapevine network:

- **Single strand:** In this network, each person communicates with the other in a sequence.
- **Gossip network:** In this type of network, each person communicates with all other persons on a non-selective basis.
- **Probability network:** In this network, the individual communicates randomly with other individuals.
- **Cluster Network:** In this network, the individual communicates with only those people whom he trusts. Out of these four types of networks, the Cluster network is the most popular in organizations.

Barriers to Communication:

The communication barriers may prevent communication or carry incorrect meaning due to which misunderstandings may be created. Therefore, it is essential for a manager to identify

such barriers and take appropriate measures to overcome them. The barriers to communication in organizations can be broadly grouped as follows:

1. Semantic Barriers

These are concerned with the problems and obstructions in the process of encoding and decoding of a message into words or impressions. Normally, such barriers result due to use of wrong words, faulty translations, different interpretations, etc.

For example, a manager has to communicate with workers who have no knowledge of the English language and on the other side, he is not well conversant with the Hindi language. Here, language is a barrier to communication as the manager may not be able to communicate properly with the workers.

2. Psychological Barriers

Emotional or psychological factors also act as barriers to communication. The state of mind of both sender and receiver of communication reflects in effective communication. A worried person cannot communicate properly and an angry recipient cannot understand the message properly.

Thus, at the time of communication, both the sender and the receiver need to be psychologically sound. Also, they should trust each other. If they do not believe each other, they cannot understand each other's message in its original sense.

3. Organizational Barriers

The factors related to organizational structure, rules and regulations authority relationships, etc. may sometimes act as barriers to effective communication. In an organization with a highly centralized pattern, people may not be encouraged to have free communication. Also, rigid rules and regulations and cumbersome procedures may also become a hurdle to communication.

4. Personal Barriers

The personal factors of both sender and receiver may act as a barrier to effective communication. If a superior thinks that a particular communication may adversely affect his authority, he may suppress such communication.

Chapter 7: Work Culture, TQM & Safety

Work Culture:

Work culture plays an important role in extracting the best out of employees and making them stick to the organization for a longer duration. The organization must offer a positive ambience to the employees for them to concentrate on their work rather than interfering in each other's work.

What is work culture ?

Work culture is a concept which deals in the study of:

- Beliefs, thought processes, attitudes of the employees.
- Ideologies and principles of the organization.

It is the work culture which decides the way employees interact with each other and how an organization functions. An organization is said to have a strong work culture when the employees follow the organization's rules and regulations and adhere to the existing guidelines. However there are certain organizations where employees are reluctant to follow the instructions and are made to work only by strict procedures. Such organizations have a weak culture.

Characteristics of a Healthy work Culture:

- A healthy work culture leads to satisfied employees and an increased productivity.
- Employees must be cordial with each other. One must respect his fellow worker. Backbiting is considered strictly unprofessional and must be avoided for a healthy work culture. One gains nothing out of conflicts and nasty politics at work.
- Each employee should be treated as one. Partiality leads to demotivated employees and eventually an unhealthy work culture. Employees should be judged only by their work and nothing else. Personal relationships should take a backseat at the workplace. Don't favour anyone just because he is your relative.
- Appreciating the top performers is important. Praise the employees to expect good work from them every time. Give them a pat on their back. Let them feel indispensable for their organization. Don't criticize the ones who have not performed well, instead ask them to pull up their socks for the next time. Give them one more opportunity rather than firing them immediately.
- Encourage discussions at the workplace. Employees must discuss issues among themselves to reach to better conclusions. Each one should have the liberty to express his views. The team leaders and managers must interact with the subordinates frequently. Transparency is essential at all levels for better relationships among employees and a healthy work culture. Manipulating information and data tampering is a strict no no at the workplace. Let information flow in its desired form.
- Organization must have employee friendly policies and practical guidelines. Expecting an employee to work till late night on his birthday is simply impractical. Rules and regulations should be made to benefit the employees. Employees must maintain the decorum of the organization. Discipline is important at the workplace.
- The "Hitler approach" does not fit in the current scenario. Bosses should be more like mentors to the employees. The team leaders should be a source of inspiration for the

subordinates. The superiors are expected to provide a sense of direction to the employees and guide them whenever needed. The team members should have an easy access to their boss's cabin.

- Promote team building activities to bind the employees together. Conduct training programs, workshops, seminars and presentations to upgrade the existing skills of the employees. Prepare them for the tough times. They should be ready under any odd circumstances or change in the work culture.

Human relationship and Performance in Organization:

A human relation is the relationship between human resources of the organization. It incorporates management-employees, employees-employees relationship. It also consists of relationship between the organization's human resource & outsiders (such as clients, suppliers).

Human resource is one of the important assets of an organization. Hence, healthy human relations lead to increased productivity and efficiency. It also plays crucial role in growth and success of the organization.

The approach of human relations deals with the psychological variables of organisational functioning in order to increase the efficiency of organisations. It is the process of integration of man-to-man and man-to-organisations.

Human relations can be defined as the cordial atmosphere in an organization in which people practice the art of living in such a way that they communicate, act, interact and transact in a cordial manner, recognizing each other's needs, views, values and temperaments so that every interaction and transaction taking place in an organization would have concern for each other's interests and feelings, leading to better motivation and morale of people at all levels in the organization.

Relations with Peers, Superiors and Subordinates:

It is always an experience to interact with the peer, superior and subordinate groups. All the three groups of people give a different feel and learning, when we interact with them. All the three groups are important and very much existent in all areas of life. Whether it is family, office, friends, mentors, teachers, bosses, acquaintances, etc, all of them are typically divided into three categories.

Peers:

The first category will always be peers because we respond and reciprocate to them very easily and very firstly. They are typically the same level as us either in intelligent quotient or status or family structure or in any other way at par with us. We normally tend to be comfortable with them in terms of talking and interacting. One more reason of a person being comfortable with peers is they have similar problems and they empathize very well with each other. For example colleagues in office, friends, cousins, acquaintances, social circles, etc.

Superiors:

The second category is superiors. The teachers, mentors, bosses, family, etc generally fall in this category. They are the ones who are higher than us as far as the knowledge or experience

or intellect quotient or relationship goes. They expect a certain kind of respectful treatment from us, while we deal with them. We normally tend to take time to interact with them directly; more so, particularly because they also have an expectation barrier to break first with us. They are the ones from whom you learn effortlessly because we know that they know more than us. For example uncles, aunts, bosses, bosses of bosses, mentors, aged consultants, senior positions in any way, etc.

Subordinates:

The third category opens up the scope of being a mentor to others, as well as taking work from them or helping them to cope up. They are lesser either by age, experience, knowledge or relationship and that's why we feel good dealing with them and sometimes even show them off our seniority. They are the ones who need our reciprocation for their growth but still our responses to them are important; if we have to take work from them or they are in our social circles or fall in as a team to achieve targets in professional fronts.

Three golden rules to these three categories are:

- Be a good peer, only then you will be in a position to build up long term relationships for coming days. A good peer is one who values opinion of another peer helps him out when the other one needs and be a good pal who is genuinely interested in other person's growth.
- Be a good superior, only then you will be respected for what you do, by your juniors and appreciated as a team leader. A good superior takes a team to a new height and thereby take the organization and family to highs and achieve targets which are very difficult.
- Be a good subordinate, only then you can enhance the credit of your bosses, mentors which in turn will add to lot of credit to your standing. A good subordinate is one on whom the boss or family can rely on for whatever is given to finish and who gives unbiased opinions and is helpful in decision making with his genuine interest of his superior's progress.

TQM concepts:

Total Quality Management is the organization-wide management of quality. Management consists of planning, organizing, directing, control, and assurance.

Total quality is called total because it consists of two qualities – quality of return to satisfy the needs of the shareholders, or quality of products.

TQM is widely used in manufacturing, education, hospitals, call centers, government, and service industries, as well as space and science programs.

Defined as a tool for effective management, TQM refers to “organization's long- term commitment to the continuous improvement of quality throughout the organisation, and with the active participation of all members at all levels to meet and exceed customers' expectations”.

TQM is not a one-time process; instead, it is a continuous long-term process that involves constant managerial efforts to be recognized and reinforced through continuous data collection, evaluation, feedback and improvement programmes.

The concept of TQM can be understood by understanding the three terms that make the concept. These are:

1. Total – Everyone associated with the company is involved in continuous improvement including customers and suppliers.
2. Quality – Customers' stated and implied requirements are fully met.
3. Management – Executives are fully committed.

Basic aspects of TQM:

1. Quality: The totality of features and characteristics of product or service that bears on its ability to satisfy stated or implied needs of a customer.
2. Quality Policy: The overall quality intentions and directions of an organization as regards quality formally expressed by top management. The quality policy forms an element of the corporate policy and is authorized by top management.
3. Quality Management: The aspect of the overall management function that determines and implements quality policy. Quality management includes strategic planning, allocation of resources and other systematic activities for quality such as operations and evaluations.
4. Quality Assurance: Quality assurance are all those planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy requirements of a customer. Unless the requirements of customer are fully reflected in the product or service, quality assurance will not be complete. Quality assurance serves as a management tool to provide confidence in supplier/manufacture in contractual situation.
5. Quality Control: Quality controls are operational techniques and activities that are used to fulfill requirements for quality. Quality control techniques and activities aim both, at monitoring a process and at eliminating causes of unsatisfactory performance at relevant stages of the production in order to achieve economic effectiveness of an organization.
6. Conformity: An affirmative indication or judgment that the supplier/manufacture of a product or service has met the requirements of the relevant specifications, contract or regulations and also the state of meeting requirements, is the real test of quality.
7. "Quality Circle": QC is a process that stimulates everyone to achieve greater satisfaction in the work environment. It is based on mutual trust and cooperation. It also includes group participation, information sharing and decision making. Its primary aim is to provide a better quality of working life to workmen at all levels in an organization. "QC is a small group of employees in the same work. work area or doing a similar type of work who voluntarily meet regularly for about an hour every week to identify, analyse and resolve work-related problems, leading to improvement in their total performance and enrichment of their work life".

Accidents and Safety, Cause, preventive measures:

Definition of Accident

In the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) there is no definition of an accident but the Health and Safety Executive states that “in relation to RIDDOR, an accident is a separate, identifiable, unintended incident, which causes physical injury”. This specifically includes violence to people at work..

Principles of Accident Prevention:

1. Health and safety at work

There are three aspects to the prevention of accidents at work.

1. The creation of a safe place of work.
2. The development and operation of safe working practices.
3. Ensuring the personal safety of all employees.

A systematic approach should be adopted which takes account of the risk assessment requirements of relevant legislation, in particular Regulation 3 of the Management of Health and Safety at Work Regulations 1999 (MHSWR). Adequate management control should be achieved by putting into practice the required actions identified in any risk assessments undertaken.

2. Safe place of work

A safe place to work is a prime requirement of the Health and Safety at Work, etc Act 1974 (HSWA).

The approach to creating a safe place of work requires consideration of:

- separation of the worker from the hazard
- containment of the hazard
- removal of the hazard, eg by exhaust ventilation for appropriate disposal.

In general, the development and application of the approach to creating a safe place of work is based upon sound engineering principles. This should be the initial approach to be adopted. Engineering strategies can remove much, if not all, of the vagaries of human behaviour as they can ensure only certain actions or conditions are met, eg by provision of interlock switching to prevent access to moving parts of machinery. Good design of the workplace can make it easier for individuals to make the correct choices and actions.

Only where engineering applications by themselves will not sufficiently control risks should other strategies be adopted. Often the nature of the work activities and tasks will prevent engineering solutions being the sole means for risk control.

Workplace (Health, Safety and Welfare) Regulations 1992

The Workplace (Health, Safety and Welfare) Regulations 1992 apply to all workplaces except ships, building and construction sites.

The creation and maintenance of a safe place of work must be achieved by ensuring:

- workplace structures and buildings are safe at all times
- buildings are stable and suitable for the tasks to be carried out
- environmental conditions, eg heating, lighting and ventilation, provide for the comfort and well-being of employees and are suitable for the nature of work being done
- the workplace is free of hazards arising from the use, storage, transport and disposal of materials, substances and waste

- floors, walkways and access arrangements (including roads) do not pose a hazard and space should be adequate to allow risk-free movements of people, materials and moving equipment (eg fork lift trucks)
- areas where it may be possible to fall from a height are guarded; such areas include:
 - roofs where access is required to ventilation equipment and for other maintenance purposes
 - process operations carried out at different heights (eg filling of high level hoppers, split or mezzanine floors in factories)
- protection is provided to guard against falling objects
- the processes of keeping the workplace clean, ordered and tidy are adequate.
- provision for sanitary and washing facilities, storage and changing of clothing rest rooms and arrangements for meals and provision of drinking water are adequate.

3. Organisational factors

The general principles of prevention need to be applied in a systematic and cohesive manner. This will depend on establishing both appropriate management systems and a culture which will support a high level of safety performance. The health and safety culture of the organisation is an important factor which can help to influence the attitudes and actions of those working in the organisation.

Safe Working Practices:

Health and safety at work

Safe working practices take account of the interaction between the:

- people involved in the work
- nature of the tasks and activities to be undertaken
- place where the work is done (including the environment)
- materials and substances involved.

Creating safe working practices

This involves designing the method of working to ensure safety, taking into account the various interactions between people, tasks, workplace and substances.

Working practices should be arranged and designed to limit and control exposure to risks so that accidents are prevented. In some circumstances it is not possible to rely entirely on engineered safe place strategies. It then becomes necessary to examine the work processes in detail and to develop procedures and modes of working that can ensure accident prevention. Often these will be achieved in association with engineered solutions.

Developing safe practices:

This will take account of normal operating conditions and any foreseeable emergencies or unusual circumstances and, where appropriate, take account of the following.

- The degree of risk — the greater the risks the more thorough design of the practice should be and the more rigorous the attention given to determining the consequences of various interactions.
- The nature of physical hazards arising from heat, chemicals, radiation, etc. This provides an opportunity to test the suitability of engineered protection and possible elimination or substitution of the hazards.

- Ergonomics — care is required to ensure the tasks are matched to the workforce, rather than attempt to design tasks that only a limited number of people can do or which cannot actually be achieved as intended.
- The nature of human behaviour — in any workplace and activity, human behaviour can be a major contributor to errors. Account must be taken of the required competencies, behaviours and attitudes required, as well as the suitability of the practices themselves.

Personal Safety:

Health and safety at work

It is important that workers understand:

- the hazards and risks inherent in their work activities
- the control measures in place
- how to undertake the tasks required of them in a safe manner.

Danger recognition and safe behaviour

Workers should understand the requirement of safe behaviour and the need to ensure that their own behaviour does not expose themselves or others to danger. They should follow prescribed procedures, respond to supervision and correctly use work equipment and personal protective equipment (PPE) provided to them.

A key safety risk can be where an employee does not realise or perceive there is danger or does not fully understand the consequences of a decision in safety terms. This can happen as much to managers as junior employees.

Employees should be able to identify the following so that they can recognise and avoid danger:

- unsafe conditions
- process deviations
- unexpected outcomes.

Employees should know what to do in emergencies, particularly in situations of imminent danger.

Use of protective equipment

The Personal Protective Equipment at Work Regulations 1992 make specific provisions for the protection of individuals as a last resort by means of PPE where risks cannot otherwise be controlled.

Vulnerable workers

Certain groups of workers may be especially vulnerable to exposure to danger. These include:

- workers responding to emergencies in hazardous environments where it is not possible to ensure a safe place of work and where usual safe practices may not be appropriate or require extensive adaptation so they cannot be relied upon
- young persons who may lack the necessary skills or experience to identify hazards and appropriate responses
- new and expectant mothers where both mother and baby may be at risk
- persons with a disability who may have special needs in certain circumstances, eg in situations of imminent danger

- workers in particular difficult environments, eg pressurised workings, underwater fitters/engineers (divers) and air crew.

Horseplay

Horseplay at work, eg practical jokes, can result in injuries to employees. In such circumstances, both the employer and the employee(s) taking part in the horseplay could be liable for prosecution or claims for damages from the injured party. It is often a misconception that health and safety is the sole responsibility of their employer.

If such behaviour becomes known to management, appropriate disciplinary procedures should be considered. These will normally consist of a graduated response which, depending on the severity of the incident, results in action ranging from official warnings to dismissal.

Managing Safety:

Managing and supervising the workplace to ensure that the integration of maintaining a safe place of work, development and operation of safe working practices and ensuring the personal safety of all employees is being achieved requires the following three main support mechanisms to be in place.

Inspection

Techniques of inspection can be used to check that the arrangements for safety are in place on a day-to-day or site-by-site basis. This will include a programme, where appropriate, to inspect the physical aspects of both the workplace and equipment to ensure they are being maintained in a safe condition. The programme will also include any legally required inspection.

Monitoring

Adequate monitoring provisions, principally by managers and supervisors, can ensure that standards set down which are designed to achieve a safe place of work, safe working methods and safe people strategies, are working. Monitoring allows deviations from safety standards to be identified and rectified before accidents occur.

Audit

Properly designed audits can provide an overview to ensure that the management systems, put in place to identify and control risks, provide for instruction and training and develop and maintain safe working methods, are adequate.

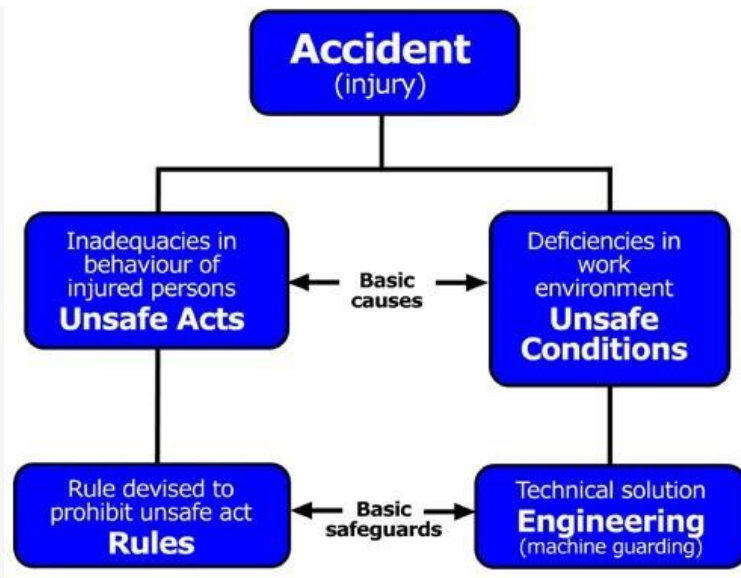
Personal blame

This is probably the earliest of the derived theories and is still commonly found in certain sectors of management. This theory assumes that the fault of the individual was the sole cause of the accident.

Situational

These theories centre around accident causation being a result of either unsafe acts or unsafe conditions, or sometimes both. Different accident prevention strategies result from accidents being considered this way, as shown in Figure 1.

Figure 1 — Unsafe Acts and Unsafe Conditions



Sequential

There are a number of theories of this type; the following are examples.

- The domino effect theory: in a sequential combination of five factors (social environment, human error, unsafe acts, accident, injury), each of the factors alone will not cause an accident so that removing any one would be effective in accident prevention; however, each of the factors can be depicted as a “domino” — when one falls down the others following it also fall down.
- Where the accident is seen as a sequence of events involving immediate, basic and underlying causes (lack of control). Consider an accident where an employee falls over a cable that was trailing across a floor. Immediate causes are those identified at the time of the accident and equate to the unsafe acts or conditions existing immediately prior to an accident, eg the cable stretched across the floor. Basic causes are those that caused the cable to be there, eg the plug socket being too far from the equipment used. Underlying causes relate to management/social factors where a lack of control allowed the design of the room and the use of the equipment to come about in such a way that it was possible for the basic and immediate factors to occur, which in turn gave rise to the accident.

Multi-factorial

These are also called “multi-causal theories” and believe three major types of factor interact to give rise to any accident. An accident can occur in a situation where less than adequate performance in a number of the factors combine together to create an unsafe situation.

The factors are based on:

- decision makers
- line management
- preconditions.

Multi-causal theories often use tree diagrams. Careful use of this technique can ascertain the direct causes, indirect causes and underlying factors that contribute to the accident. The technique known as MEEP is a common approach when pinpointing these underlying factors. This involves identifying: the *materials* involved; the *equipment* used; the *work environment*; and the *people* involved.

It should be noted that multi-factorial theories are currently very influential in many aspects of risk management and can be applied to wider range of scenarios other than just accidents and near misses.

Systems

More recent theories on health and safety management in general have centred around the idea that accident prevention is really a function of management and that management has to be systematic. This is also linked to the idea that understanding culture is an important element. The culture of an organisation should be developed and influenced to secure safety as an intrinsic part of the organisational culture. The systems theories view accident causation as being a result of complex system interactions.

Systems and accident causation

Theories of causation which consider organisational systems and the complexity of the interactions in such systems, including human responses, recognise that:

- accident causation is multi-factorial
- management systems and underlying human behaviours need to be understood
- causation is complex and simple approaches do not deal with the real issues.

An accident then becomes of interest because it demonstrates that there has been some system failure which has exposed the organisation to some risk. Failures in health and safety are largely attributable to organisational factors, ie the culture, management style and general climate of a workplace are largely responsible for success and failure in health and safety. Also, the majority of accidents have a behavioural element. This is an extension of management responsibility.

If the management systems were working properly then the organisational rules should have been effective. If the rule has failed (and somebody ignoring the rule must be seen as a failure of the rule itself) then the management systems that designed, maintained or reviewed the rule were inadequate.

The link of accident causation to management systems approaches is made by the consideration of the fallible decision-making processes of management. Some decisions will not be the right ones, either because of lack of knowledge or because of conflicts of interest (eg production goals versus safety goals).

The systems approach is part of a modern understanding of health and safety management. Accidents are multi-factorial and if they are to be avoided then sufficiently robust management systems related to identification and control of risks need to be in place. These will require systems to both identify and deliver the required controls and will include recruitment and training systems, as well as supervision, monitoring and compliance systems.

Causes of Accidents

Accidents are events that result from a complex interaction of a variety of factors. There is no single theory that can account for the way all accidents arise. It is possible, however, to recognise some of these factors and interactions to assist in identifying preventive measures. They can be classified into direct and indirect causes.

It is occasionally difficult to draw a line between direct and indirect causes and such classification should not be seen as setting hard and fast approaches to accident prevention

and investigation. They do, however, provide a useful way of examining and rationalising accidents.

Direct causes

These can be seen as directly causing the accident because they are mostly physically observable. They include the immediate and basic causes from Bird's approach and consist of a variety of circumstances and situations.

Unsafe conditions of premises

The conditions at the place of work can be hazardous and will give rise to accidents if the hazards are not controlled. Such conditions can include:

- unsafe design
- environment
- housekeeping
- plant and equipment
- substances
- radiation
- fire.

Maintenance

Failures or inadequacy in the provision of maintenance can give rise to accidents. The absence or inadequacy of maintenance of equipment can also give rise to failures that may cause injury.

Competence

Competence to undertake work activities and tasks is essential to ensuring safety. In general terms, competence can be regarded as the possession of knowledge, skills and experience which enables somebody to achieve specified outcomes. The more complex the outcome the more detailed the knowledge, skills and experience have to be. This includes decision making as well as technical and other skills.

Accidents often arise when the competence of the employee (be they a manager or more junior) is not equal to the outcomes to be achieved by the tasks and activities being carried out.

Indirect/Underlying causes

The indirect causes of accidents can be broadly considered under the following two headings.

Management systems

Management systems are required to both identify and deliver the required risk control measures. Identification of control measures should be made on the basis of the hazards and associated risk in the workplace leading to the development of effective control measures. These include recruitment and training systems, as well as supervision, monitoring and compliance systems.

Where management systems are less than adequate or absent then the conditions in the organisation will tend to be unsafe and the potential for accidents will be increased. The creation and maintenance of management systems is essential in order to comply with the Management of Health and Safety at Work Regulations 1999, Regulation 5(1), which

requires every employer to “give effects to such arrangements...for the effective planning, organisation, control, monitoring and review of preventive and protective measures”.

Cultural factors

A variety of cultural factors are required to support the creation and maintenance of a safe workplace. Where these factors are absent or exist in a negative sense the potential for accidents is increased. Such factors include the following.

- The value in which safety is held. If both the management and the workforce place a high value on effective safety performance then this will support efforts to prevent accidents.
- If the organisation at all levels believes that accidents are preventable then it is likely that this will form a part of the way the organisation is managed. If the management and workforce believe accidents are inevitable then it is likely that unsafe working practices will be tolerated.
- Attitudes and behaviour in the workplace of both management and workforce are positive in respect of the need to work safely.
- It is vital that there is strong and supportive leadership for the management of safety from the highest level in the organisation which has a focus on high achievement rather than on blame for individuals when things go wrong.
- The organisation should have a positive approach to learning from accidents and responding to them in a positive way. When accidents are ignored or their causes not fully understood and responded to then the opportunities for recurrence are increased.

General Safety Rules:

The following are a list of general safety rules to follow while working on the jobsite.

Although this is not a list on all requirements, following these rules may prevent you or a coworker from becoming involved in an incident.

1. Be sure you know how to perform the job and perform it safely.
2. Be sure you know its hazards and how to protect yourself. If you aren't sure or have questions, ask your supervisor!
3. Report all near misses, incidents, injuries and illnesses immediately.
4. Wear the required personal protective equipment necessary for the job. Safety glasses are required as minimum eye protection on all jobsites.
5. Always work clear of suspended loads.
6. Never conduct work, unless trained.
7. Do not become complacent! Always keep your mind and eyes on the task at hand.
8. Always know the emergency action plan for your jobsite. Know what the warning tones are and where to go.
9. Obey all warning signs and barricades.
10. Inspect all equipment, scaffolds, ladders, lifts, etc. before using. If found to be defective remove from service.
11. Report any unsafe tools, equipment or hazardous conditions to your supervisor.
12. See that good housekeeping is maintained in your work area.
13. Exercise proper lifting techniques.
14. Operate vehicles in a safe manner and obey site driving rules.
15. Do not perform work under unsafe conditions. Any employee has the right to stop work if they feel it is unsafe.
16. Horseplay of any kind will not be permitted.
17. Only authorized personnel shall repair company furnished tools or equipment.

18. Firearms on the job are prohibited.
19. Always keep a positive attitude. This will make the day go better and make you a safer worker.
20. Do not use ladders as scaffolds and never climb so high that it is impossible to hold the top step for support.
21. Never use a step ladder as a straight ladder.
22. Don't put yourself and your supervisor on the spot by not observing safety rules and regulations!

Personal Protection Equipment (PPE):

Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Personal protective equipment may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests and full body suits.

All personal protective equipment should be safely designed and constructed, and should be maintained in a clean and reliable fashion. It should fit comfortably, encouraging worker use. If the personal protective equipment does not fit properly, it can make the difference between being safely covered or dangerously exposed. When engineering, work practice, and administrative controls are not feasible or do not provide sufficient protection, employers must provide personal protective equipment to their workers and ensure its proper use. Employers are also required to train each worker required to use personal protective equipment to know:

- When it is necessary
- What kind is necessary
- How to properly put it on, adjust, wear and take it off
- The limitations of the equipment
- Proper care, maintenance, useful life, and disposal of the equipment

If PPE is to be used, a PPE program should be implemented. This program should address the hazards present; the selection, maintenance, and use of PPE; the training of employees; and monitoring of the program to ensure its ongoing effectiveness.

Types of PPE

1. **Gloves:** Protects your hands from microbes and minimizes the possible spreading of microbes.
2. **Masks:** Cover your mouth and nasal area. Some masks have a see-through plastic piece, which also covers your eyes (shield). A special respiratory mask (respirator) forms a tight seal around your nose and mouth. It can be useful to minimize the inhalation of smaller microbes, such as tuberculosis bacteria. [Click here for a comprehensive guide on selecting the appropriate face mask.](#)
3. **Eye protection:** This includes face shields as well as goggles. They can protect the mucous membranes of your eyes from bodily fluids. If the fluids make

contact with the eyes, microbes within the fluid can enter the body through the mucous membranes.

4. **Clothing:** Includes gowns, aprons, head covering, and shoe covers.

CHAPTER 8: LEGISLATION

Intellectual Property Rights (IPR):

Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.

IP is protected in law by, for example, patents, copyright and trademarks, which enable people to earn recognition or financial benefit from what they invent or create. By striking the right balance between the interests of innovators and the wider public interest, the IP system aims to foster an environment in which creativity and innovation can flourish.

Definition

Intellectual property is the product of the human intellect including creativity concepts, inventions, industrial models, trademarks, songs, literature, symbols, names, brands, etc. Intellectual Property Rights do not differ from other property rights. They allow their owner to completely benefit from his/her product which was initially an idea that developed and crystallized. They also entitle him/her to prevent others from using, dealing or tampering with his/her product without prior permission from him/her. He/she can in fact legally sue them and force them to stop and compensate for any damages.

Protection of Intellectual Property Rights

Protection of IPR allows the innovator, brand owner, patent holder and copyright holder to benefit from his/her work, labor and investment, which does not mean monopoly of the intellect. Such rights are set out in the International Declaration of Human Rights, which provides for the right to benefit from the protection of the moral and physical interests resulting from the right holder's work; literal or artistic product.

Copyright

Copyright is a legal term used to describe the rights that creators have over their literary and artistic works. Works covered by copyright range from books, music, paintings, sculpture and films, to computer programs, databases, advertisements, maps and technical drawings. Copyright is a form of IPR concerned with protecting works of human intellect. The domain of copyright is literary and artistic works, might that be writings, musicals and works of fine arts, such as paintings and sculptures, as well as technology-based works such as computer programs and electronic databases.

Patents

A patent is an exclusive right granted for an invention. Generally speaking, a patent provides the patent owner with the right to decide how - or whether - the invention can be used by others. In exchange for this right, the patent owner makes technical information about the invention publicly available in the published patent document.

It is an exclusive right granted by law to an inventor or assignee to prevent others from commercially benefiting from his/her patented invention without permission, for a limited period of time in exchange for detailed public disclosure of patented invention.

Trademarks

A trademark is a sign capable of distinguishing the goods or services of one enterprise from those of other enterprises. Trademarks date back to ancient times when artisans used to put their signature or "mark" on their products

A trademark is a sign that individualizes the goods or services of a given enterprise and distinguishes them from those of competitors. To fall under law protection, a trademark must be distinctive, and not deceptive, illegal or immoral.

What is the Factories Act 1948?

The **Factories Act 1948** emphasizes upon regulating health, physical conditions, forming fair policies for annual leaves and facilitating welfare amenities. It has laid down special provisions in respect of young people, women and children who work in the factories.

Meaning of Factory as per Section 2(m) of the Factories Act, 1948

“Factory means any premises where ten or more than ten workers are working or were working on any day of the preceding twelve months or in any part of which a manufacturing process is carried out with the aid of power or

Twenty or more than twenty workers are or were working preceding twelve months and in any part of which a manufacturing process is being carried out without the aid of power.

Meaning of a Worker as per Section 2(l) of the Factories Act, 1948

“Worker” is a person who is employed directly or through an agency with or without any information about the principal employer whether for remuneration purpose or not, in any manufacturing process, or in cleaning any part of the machinery or premises used for a manufacturing process or any other kind of work incidental to, or connected with the manufacturing process, or the subject of the manufacturing process, however does not include any member of the armed forces of the Union.

Objectives of Factories Act 1948

The main objective of the **Factories Act 1948** is to ensure adequate safety measures in the factory premises. The Factories Act promotes health & welfare of the workers employed in factories as well as prevents haphazard growth of factories. The Act supports workers from being exploited and casts duties, obligations and responsibilities on the occupier of a factory and also on the factory manager for improving the working conditions within the factory premises.

Features of Factories Act 1948

The features of Factories Act 1948 indicate all the important points related to working hours, welfare, safety and health. Have a look:

1. Working hours: According to the provision of working hours of adults, a worker cannot be allowed to work in a factory for more than 48 hours in a week. A weekly holiday is mandatory.

2. Health: In order to protect the health of workers, **Factories Act 1948** has laid down the rules that every factory must be kept neat & clean and all necessary precaution should be taken in this regard. The factories should have adequate lighting, drainage system, temperature, ventilation etc.

The arrangement for drinking water must be made. Also, urinals and sufficient latrine spaces should be provided at convenient places. These places must be kept clean and accessible by the workers.

3. Welfare: The **Factories Act 1948** mentions that every factory must provide suitable facilities for washing. Apart from that, facilities for storing & drying clothing and facilities for sitting should be properly provided. The provision of first-aid appliances, rest rooms, shelters, crèches and lunch rooms should be there.

4. Safety: In order to provide safety to the workers, the Act says that the machinery should be fenced. No young person should be allowed to work at any dangerous machine and a

provision for manholes of adequate size should be provided, so that in case of emergency the workers can escape.

The duties of occupier mentioned under the sections of Factories Act 1948:

Before the factory is engaged in the manufacturing process, the occupier has to send a written notice to the Chief Inspector within the scope of the Act. Let's understand his duties in detail:

1. Worker's participation in safety management (Section 41 - G)

The occupier in every factory where a hazardous process takes place must set up a safety committee to promote co-operation between the workers and management, so that proper safety and health at work can be maintained.

2. Workers should be warned about the possible dangers (Section 41 - H)

The occupier must take remedial action in case there is an existence of any danger and send a report of the action to the nearest inspector.

3. Facilities for sitting and canteens (Section 42 to 49)

It is the duty of an occupier to provide welfare facilities like - canteens, crèche, first aid appliances, lunch room, washing facilities etc to all the workers and appoint a welfare officer to manage these facilities.

4. Notice of period of work for adults (Section 61)

The factory manager shall display and maintain every factory in accordance with the provisions of Sub Section (2) of Section 108. A notice of period of work for adults showing the periods during which the adult workers may be required to work and classify them into groups according to the nature of their work indicating the number of groups in each group needs to be mentioned.

5. Register of adult workers (Section 62)

The manager of every factory shall maintain a register of adult workers to be available to the inspector at all the times during working hours or when any work is being carried on in the factory.

6. Annual leave with wage (Section 79)

For the purpose of ensuring continuity of work, representatives of the workers chosen in a prescribed manner may lodge with the Chief Inspector a scheme in writing, whereby the grant of leave will be allowable.

7. Safety and occupational health survey (Section 91 - A)

The occupier or a manager of the factory or any other person needs to take the charge of safety and occupational health surveys. He needs to afford all the facilities including the facilities for the examination and testing of plant and machinery and also the collection of samples or other data relevant data to the survey.

The Factories (Amendment) Bill, 2016

It was introduced in Lok Sabha on 10th August, 2016 by the Minister of Labor and Employment, Mr. Bandaru Dattatreya. The bill amends certain provisions of Factories Act 1948 as given below:

- **Power to make rules on various matters:** The Act permits the State Government to prescribe on a range of matters like - double employment, conditions related to exemptions of certain workers etc.
- **Powers to make rules for exemptions to workers:** The Act permits the State Government to prescribe rules on (a) Define persons who hold management and (b) Exempt certain types of adult workers from fixed hours working, periods of rest etc.

- **Overtime hours of work in a quarter:** The Act permits the State Government to make rules that the overtime must not exceed 50 hours for a quarter. The Bill raises the limit to 100 hours. Rules in this case are prescribed by the Central Government.

In case the factory has an exceptional work load, then the Act enables the State Government to permit adult workers in a factory to work overtime hours. The total overtime in a quarter should not exceed 75. The Bill permits the Central or State Government to raise this limit to 115.

- **Overtime in public interest:** The Bill introduces a provision which permits the Central or State Government to extend the 115 hour limit to 125 hours because of (i) excessive workload in the factory (ii) public interest.

The Payment of Wages Act, 1936

Introduction:

The Payment of Wages Act, 1936 came into force on 23rd April 1936.

This Act was passed to regulate the payment of wages,

it ensures the payment of wages in a prescribed manner and at regular intervals without unauthorized deductions.

Applicability of the Act:

1. This Act applies to the whole of India.
2. Section 1(4): This Act applies to the payment of wages to the persons employed:
 - i. in any factory
 - ii. by the railway administration
 - iii. in an industrial establishment
3. Section 1(5): Empowers the Appropriate Govt. to **extend** the whole or part of the Act, for payment of wages to any class of persons employed in the establishment or class of establishments.
Subject to conditions :
 1. 3 months' prior notice must be issued and
 2. Notification of the extension.
(Provided that, the extension of the applicability of the Act to the establishments owned by the Central Govt., no notification shall be issued)

Object of the Act:

- Safeguarding the wages of employees.
- Regulate the payment of wages.
- Ensure timely payment.
- Provide for a speedy and effective remedy to the employees.
- Constitution of authorities for hearing the claims of the persons employed.
- Safeguard the wages of the employees from unlawful deductions.
- Protect the employees from unjustified delay in payment of wages.

Salient Features of the Act:

[Redacted content]

Less than 1,000 workers –	7th day of every month
More than 1,000 workers –	10th day of every month

[Redacted content]

[Redacted content]

All remuneration (whether by way of salary, allowances or otherwise) expressed in terms of money or capable of being so expressed in terms of money if the terms of employment were fulfilled (expressly or impliedly) be payable to a person employed in respect of employment or work done.

In such employment wages include:

1. any remuneration payable under any award for settlement between the parties order of a court
2. any remuneration to which a person employed is entitled in respect of **overtime work** or **holidays** or **any leave period**
3. any additional remuneration payable under the terms of employment

(call by bonus or any other name)

4. any sum payable by reason of the termination of employment of the person employed
5. Any sum to which the person employed is entitled under any scheme framed by any law being in force

But **does not include** –

1. any bonus
2. Traveling allowance
3. Contribution by the employer to the provident fund
4. Value of house accommodation
5. Value of supply of necessities at concessional rate
6. Any gratuity payable on the termination of employment

The definition of wages is comprised of *three parts*:

1. *The first part says:* ‘Wages’ means all remuneration which would be payable to the employed person, if the terms of employment provides expressly or impliedly.
2. *The second part says:* ‘Wages’ shall include any bonus or other remuneration which would be so payable in accordance with the terms of the contract

3. *The third part says:* ‘Wages’ includes sum payable to such person by reason of the termination of his employment and sum payable under the provisions of any law.

Section 3: Responsibilities for payment of wages –

Every employer shall be responsible for the payment of wages to persons employed by him :

1. in Factory

– manager of the factory is responsible

2. In Industrial or other establishments

– a person responsible to the employer for supervision and control of the establishment

3. in Railway

– the person nominated by Railway Administration for that particular local area

4. in case of a Contractor

a person appointed by the contractor who is directly under his charge

5. in other cases

– a person appointed by the employer

Section 4: Fixation of wage period –

- The person responsible for the payment of wages u/s 3 shall fix the wage period for which wages shall be payable.
- Wage period shall not exceed one month in any case.

Section 5: time payment of wages –

A: If the number of persons employed in a Factory, industrial or other establishments or Railway –

S. 5(1)	Are Less Than 1,000 –	Wages to be paid before the 7th Day of every month.
S. 5(2)	Are More Than 1,000 –	Wages to be paid before the 10th day of every month.
S.	in case of Dock, Wharf or Jetty or in	Before the expiry of 2nd working day, from the

5(3)	Mine	day of his employment is terminated.
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B: Wages in cases of termination of employment –

1. before the expiry of 2nd working day
2. in case of closure of the establishment, the wages must be paid before the expiry of 2nd day from the day of termination of employment
(other than weekly or recognized holiday)

C: Exemption –

The state govt. may give a general or special order to exempt the person responsible for making payment of wages.

D: Wages to be paid on a working day, otherwise provided.

Section 6: Mode of Payment of Wages –

All wages must be paid in **currency notes** or **coins** or both.

Provided that, the employer after obtaining written authorization from the employed person, pay him the wages either by **cheque** or by crediting in his **bank account**

Section 7: Deductions –

A: Section 7(1): lays down General Prohibition against any deduction from the wages of a worker.

An employer can not make deductions except those expressly mentioned, from the wages payable to an employee.

Explanation 1: Every payment made by the **employed person** to the **employer** shall be deemed deduction from wages for the purpose of this Act.

B: Section 7(2): Authorized Deductions –

Permissible deductions which may be made from the wages only in accordance with the provisions of the Act.

1. FINES –
2. DEDUCTIONS FROM ABSENCE OF DUTY –
3. DEDUCTION FOR DAMAGE TO GOODS OR LOSS TO GOODS –

4. DEDUCTION FOR HOUSE ACCOMMODATION –
5. DEDUCTION FOR AMENITIES AND SERVICES –
6. DEDUCTION RECOVERY OF ADVANCES –
7. DEDUCTION FOR RECOVERY OF LOANS –
8. DEDUCTION FOR INCOME TAX –

CHAPTER 9: SMART TECHNOLOGY

Concept of IOT:

In a nutshell, the Internet of Things is the concept of connecting any device (so long as it has an on/off switch) to the Internet and to other connected devices. The IoT is a giant network of connected things and people – all of which collect and share data about the way they are used and about the environment around them.

That includes an extraordinary number of objects of all shapes and sizes – from smart microwaves, which automatically cook your food for the right length of time, to self-driving cars, whose complex sensors detect objects in their path, to wearable fitness devices that measure your heart rate and the number of steps you've taken that day,

How does it work?

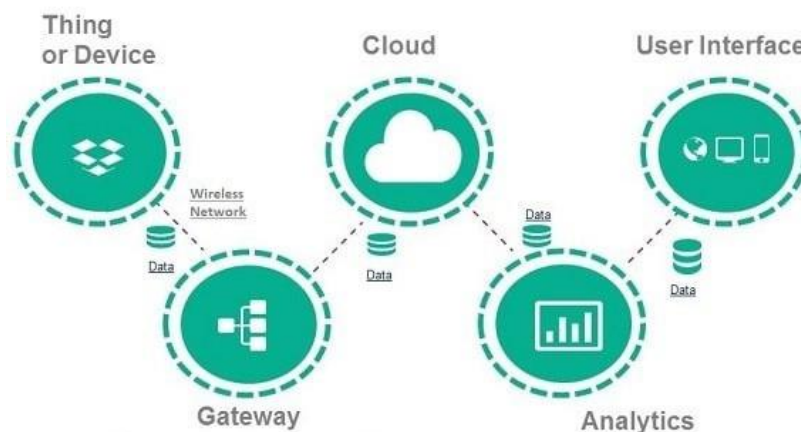
Devices and objects with built in sensors are connected to an Internet of Things platform, which integrates data from the different devices and applies analytics to share the most valuable information with applications built to address specific needs.

These powerful IoT platforms can pinpoint exactly what information is useful and what can safely be ignored. This information can be used to detect patterns, make recommendations, and detect possible problems before they occur. Using Internet of Things technology, I can:

- Use sensors to detect which areas in a showroom are the most popular, and where customers linger longest;
 - Drill down into the available sales data to identify which components are selling fastest;
 - Automatically align sales data with supply, so that popular items don't go out of stock.
- The information picked up by connected devices enables me to make smart decisions about which components to stock up on, based on real-time information, which helps me save time and money.

Components of IOT:

Major Components of IoT



1. Smart devices and sensors – Device connectivity

Devices and sensors are the components of the device connectivity layer. These smart sensors are continuously collecting data from the environment and transmit the information to the next layer.

Latest techniques in the semiconductor technology is capable of producing micro smart sensors for various applications.

Common sensors are:

- Temperature sensors and thermostats
- Pressure sensors
- Humidity / Moisture level
- Light intensity detectors
- Moisture sensors
- Proximity detection
- RFID tags

How the devices are connected?

Most of the modern smart devices and sensors can be connected to low power wireless networks like Wi-Fi, ZigBee, Bluetooth, Z-wave, LoRAWAN etc... Each of these wireless technologies has its own pros and cons in terms of power, data transfer rate and overall efficiency.

Developments in the low power, low cost wireless transmitting devices are promising in the area of IoT due to its long battery life and efficiency. Latest protocols like 6LoWPAN- IPv6 over Low Power Wireless Personal Area Networks have been adapted by many companies to implement energy efficient data transmission for IoT networks.

6LoWPAN uses reduced transmission time (typically short time pulses) and thus saves energy.

2. Gateway



IoT Gateway manages the bidirectional data traffic between different networks and protocols. Another function of gateway is to translate different network protocols and make sure interoperability of the connected devices and sensors.

Gateways can be configured to perform pre-processing of the collected data from thousands of sensors locally before transmitting it to the next stage. In some scenarios, it would be necessary due to compatibility of TCP/IP protocol.

IoT gateway offers certain level of security for the network and transmitted data with higher order encryption techniques. It acts as a middle layer between devices and cloud to protect the system from malicious attacks and unauthorized access.

3. Cloud

Internet of things creates massive data from devices, applications and users which has to be managed in an efficient way. IoT cloud offers tools to collect, process, manage and store huge amount of data in real time. Industries and services can easily access these data remotely and make critical decisions when necessary. Basically, IoT cloud is a sophisticated high performance network of servers optimized to perform high speed data processing of billions of devices, traffic management and deliver accurate analytics. Distributed database management systems are one of the most important components of IoT cloud.

Cloud system integrates billions of devices, sensors, gateways, protocols, data storage and provides predictive analytics. Companies use these analytics data for improvement of products and services, preventive measures for certain steps and build their new business model accurately.

4. Analytics

Analytics is the process of converting analog data from billions of smart devices and sensors into useful insights which can be interpreted and used for detailed analysis. Smart analytics solutions are inevitable for IoT system for management and improvement of the entire system.

One of the major advantages of an efficient IoT system is real time smart analytics which helps engineers to find out irregularities in the collected data and act fast to prevent an undesired scenario. Service providers can prepare for further steps if the information is collected accurately at the right time.

Big enterprises use the massive data collected from IoT devices and utilize the insights for their future business opportunities. Careful analysis will help organizations to predict trends in the market and plan ahead for a successful implementation.

Information is very significant in any business model and predictive analysis ensures success in concerned area of business line.

5. User interface

User interfaces are the visible, tangible part of the IoT system which can be accessible by users. Designers will have to make sure a well designed user interface for minimum effort for users and encourage more interactions.

Characteristics of IOT:

1. Connectivity

In the case of IoT, the most important feature one can consider is connectivity. Without seamless communication among the interrelated components of the IoT ecosystems (i.e sensors, compute engines, data hubs, etc.) it is not possible to execute any proper business

use case. IoT devices can be connected over Radio waves, Bluetooth, Wi-Fi, Li-Fi, etc. We can leverage various protocols of internet connectivity layers in order to maximize efficiency and establish generic connectivity across IoT ecosystems and Industry. There may be special cases where the IoT ecosystem is built on-premises or in an intranet.

2. Sensing

We humans can naturally understand and analyze our circumstances easily based on our past experiences with various things or situations. In the case of IoT in order to get the best of it, we need to read the analog signal, convert it in such a way that we can derive meaningful insights out of it. We use Electrochemical, gyroscope, pressure, light sensors, GPS, Electrochemical, pressure, RFID, etc. to gather data based on a particular problem. For example for automotive use cases, we use Light detection sensors along with pressure, velocity and imagery sensors. To make a use case successful we need to choose the proper sensing paradigm.

3. Active Engagements

IoT device connects various products, cross-platform technologies and services work together by establishing an active engagement between them. In general, we use cloud computing in blockchain to establish active engagements among IoT components. In the case of Industry grade, IoT solutions raw analog data need to be acquired, preprocessed and rescale as per business capacity. As per Google, only 50% of structured and 1% of unstructured data is used to make important business decisions. So while designing the IoT ecosystems carriers need to consider the future needs of manipulating such a huge scale of data to satisfy incremental business needs. One can confuse the need of active engagements with scale, practically it means your systems should be able to handle huge data across various technologies, platforms, products, and industries.

4. Scale

IoT devices should be designed in such a way that they can be scaled up or down easily on demand. In general, IoT is being used from smart home automation to automating large factories and work stations, so the use cases vary in scale. A carrier should design their IoT infrastructure depending upon their current and future engagement scale.

5. Dynamic Nature

For any IoT use case, the first and foremost step is to collecting and converting data in such a way that means business decisions can be made out of it. In this whole process, various components of IoT need to change their state dynamically. For example, the input of a temperature sensor will vary continuously based on weather conditions, locations, etc. IoT devices should be designed this keeping in mind.

6. Intelligence

In almost every IoT use cases in today's world, the data is used to make important business insights and drive important business decisions. We develop machine learning/ deep learning models on top of this massive data to obtain valuable insights. The analog signals are preprocessed and converted to a format on which machine-learning models are trained. We need to keep in mind the proper data infrastructure based on business needs.

7. Energy

From end components to connectivity and analytics layers, the whole ecosystems demand a lot of energy. While designing an IoT ecosystem, we need to consider design methodology such that energy consumption is minimal.

8. Safety

One of the main features of the IoT ecosystem is security. In the whole flow of an IoT ecosystem, sensitive information is passed from endpoints to the analytics layer via

connectivity components. While designing an IoT system we need to adhere to proper safety, security measures, and firewalls to keep the data away from misuse and manipulations. Compromising any component of an IoT ecosystem can eventually lead to failure of the whole pipeline.

9. Integration

IoT integrates various cross-domain models to enrich user experience. It also ensures proper trade-off between infrastructure and operational costs.

Categories of IOT:

The networking, communication and connectivity protocols depend largely on the specific IoT application deployed. Just as there are many different IoT devices, there are many types of IoT applications based on their usage. Here are some of the most common ones:

- Consumer IoT - Primarily for everyday use. Eg: home appliances, voice assistance, and light fixtures.
- Commercial IoT - Primarily used in the healthcare and transport industries. Eg: smart pacemakers and monitoring systems.
- Military Things (IoMT) - Primarily used for the application of IoT technologies in the military field. Eg: surveillance robots and human-wearable biometrics for combat.
- Industrial Internet of Things (IIoT) - Primarily used with industrial applications, such as in the manufacturing and energy sectors. Eg: Digital control systems, smart agriculture and industrial big data.
- Infrastructure IoT - Primarily used for connectivity in smart cities. Eg: infrastructure sensors and management systems.

Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc