

02/05

Management Science Mid-1

Unit-1

→ Hierarchy of Needs

Abraham Maslow, a clinical psychologist developed a motivational theory known as hierarchy of needs. As the needs are in hierarchical order hence it is called hierarchy of needs.

Maslow explained the needs based on two assumption

- Each person's needs depend on what he already has. Only needs not yet satisfied can influence behaviour. A satisfied need cannot influence behaviour.

- Needs are arranged in hierarchy of importance. Once one need is satisfied, another emerges and demands satisfaction.

Maslow has classified the individual needs in 5 levels. The lowest is psychological need and the highest is Self-actualization.

- Physiological needs: These are the basic needs such as air, water, food etc. Maslow states that until these needs are satisfied an individual no other needs will serve as basis for motivation.

Organizational needs that ~~afford~~ might satisfy these needs are pay, allowances, incentives, benefits etc.

- Security or Safety need: Safety need include protection from physical harm, ill health etc. Job security, memberships in union, Severance pay, retirement plan, health benefits etc are be considered as organizational security needs.

- Social needs: Social needs are related to the Social nature of people. Non satisfaction in this level may lead to affect individual health.
- Organizational Condition that help to satisfy social need are encouraging team building, providing supportive supervision practice.
- Esteem need: Esteem need comprise ~~the~~ both the awareness of self-esteem and the actual esteem of others. The satisfaction of these needs leads to self confidence and ~~prestige~~ prestige. These needs are power, status, self-confidence, for employee these represent status, awards, promotion, title.
- Self-actualization: This is highest in hierarchy. This refers to the desire to become more and more what one is, organization can help employee satisfy by encouraging Creativity, allowing risk-taking, decision making.

Diff b/w Manager & Leader

Manager	Leader
→ A person who organizes, plans and coordinate task to achieve business goal.	→ A person who inspires, motivates and guides individuals toward a vision.
→ focuses Established roles &	→ Encourage Creativity &
→ position & authority in the organization	→ Influence, trust and Personal charisma.
→ short term obj, stability & performance.	→ long term vision, transformation and growth.

→ Decision is based on data, rules & policies

→ A manager ensure employees meet deadline efficiently

→ Directive, controlling and task forced

→ Decision based on vision, in

→ A leader motivates & inspire employees to innovate and excel

→ Inspirational, engaging and people-focused.

Matrix organizational structure

This structure consist the characteristics of both functional and Project organization structure. This matrix organization possess a dual chain of command. Personnel in this have two Superior i.e functional and project manager.

Adv:-

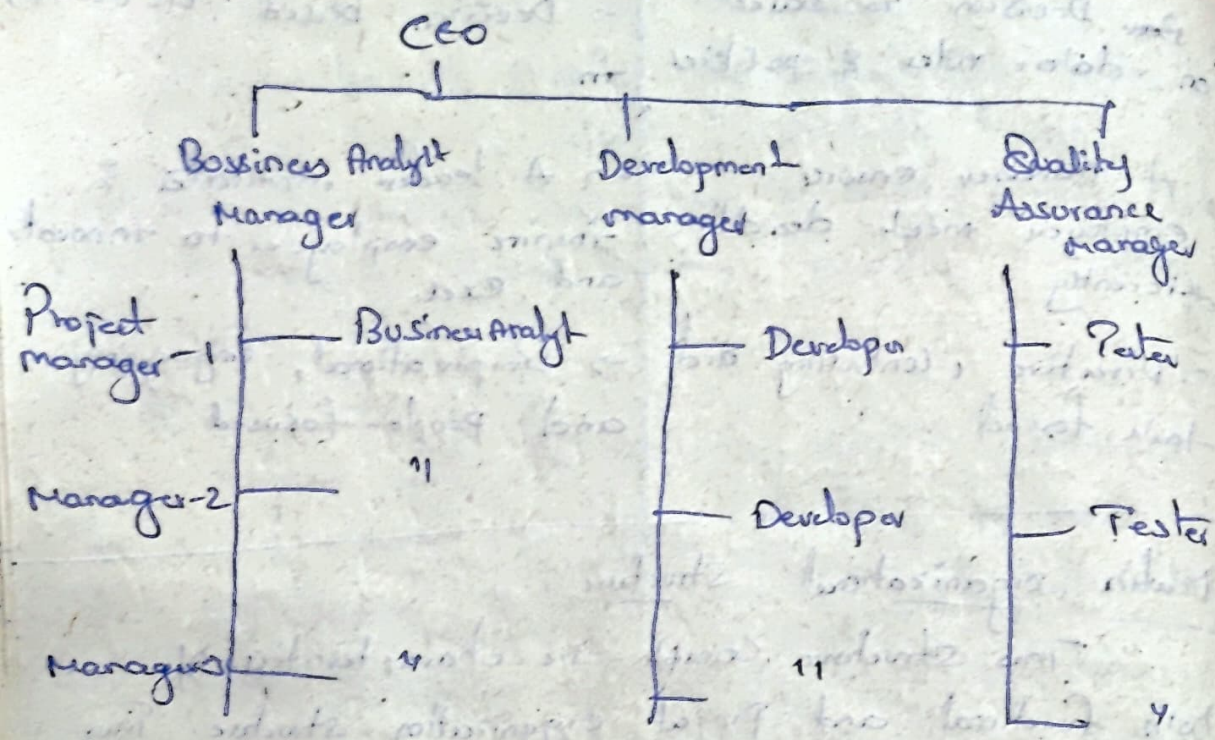
- Functional manager will be paid ~~more~~ whenever they are used by Project manager. Thus, it reduces cost.
- It is more flexible. The personnel can easily transfer from one project to other.
- Project manager is in charge of a unit and feel as a general manager.

Disadv:-

- Difficult to maintain balance b/w two lines of authority.
- Administrative cost will increase.
- Conflict b/w project and functional manager.
- Reporting to two bosses will increase stress on employees.

Sustainability

Organization focuses on two or more issues like technological development, customer satisfaction, functional efficiency etc.



Various leadership styles

→ A leader is a person who motivates, inspires, and guide individual towards a mission.

Leadership is ability to persuade others to seek defined objectives enthusiastically.

Leadership is defined as the process whereby one individual influences other group member towards the attainment of defined group or organizational goal.

Types:-

→ Free-rein or Laissez-faire style

These leaders play less or negative role.

They avoid authorities and responsibilities. These leaders never provide training and motivation.

→ Autocratic style;

Autocratic leaders centralize decision making power with themselves. The followers do not have chance to express. The different types of autocratic leaders are

- Strict autocratic: Autocratic because their method of influence is negative.
- Benevolent autocratic: Typically give reward to followers.
- Incompetent autocratic: Autocratic to hide their incompetency.
- Democratic style: These leaders decentralize the decision making and encourage the followers to express their opinion. But final decision will be taken by leader.
- Participative style: Decision will be made by leader and follower. decentralise authority and encourage subordinates to participate in decision making.

Unit-2

ABC Analysis

Always better control is one of widely used technique of inventory control. The objective of this method is to control the expense associated with the inventory based on the value of annual consumption. The inventory is classified into 3 categories A, B and C.

A category items needs to be strongly controlled, need special action to maintain. It has 70% value in annual consumption and 10% in quality hold. Whereas the B category has 20% of value in annual consumption and 20% in quality hold. The C category has 10% value in annual consumption and 70% stock hold.

Category	A	B	C
Control	Very strict	Moderate	Low
Safety stock	Very low	low Moderate	High
Ordering freq	Frequently	once in 3 months	Batch order
Value analysis	Rigid	Moderate	Minimum

Preparing of Control Statement	Weekly	Monthly	Quarterly
Material planning	Accurate	Estimate based on Past data	Rough Estimation

Process of categorization

- List each item by number
- Determine the annual volume of usage & rupee value of item
- calculate annual consumption
- Compute percentage of items in total inventory
- A - top 10% of items which are expensive
- B - 20% of items which are next highest
- C - 30% of all items which are lowest value.

Different Stages in Product Cycle

The product life cycle is the course of a Producer's product's sales and profit over its lifetime.

The various stages include

→ Introduction stage

Characteristics

- High cost due to product development and marketing
- Low sales as customers are unaware of product
- Limited competition but high risk

Strategies

- Heavy Promotion
- High pricing or low pricing (Skimming) or (penetration)

→ Growth stage

Characteristics

- Rapid increase in sales and market acceptance
- Profits begin to rise as cost reduce
- More competition

Strategies

- Improve product quality and features
- Expand distribution
- Competitive pricing & marketing strategies.

→ Maturity stage

Char:

- Peak sales with intense competition
- Price wars & marketing expense increase
- Market saturation leads to slow growth

Strategies

- Cost cutting to maintain profitability
- Explore new market or use for the product.

→ Decline stage

Char:

- Sales & profit decline
- Consumer shift to new alternative
- Business may discontinue

Strategy

- Reduce production & marketing cost
- Exit market if necessary
- Diversify or modify product

4Ps of marketing mix:

The 4Ps of marketing mix are fundamental element that business use to develop and execute marketing strategies effectively - It consist of product, Price, place and promotion.

→ Product

A bundle of benefits offered by company to the target customer to satisfy needs and wants.

→ Price: It refers to the money value that the consumers have to pay to buy the product.

→ Place: It stands for the physical distribution activities through which the product moves from the factory to customers. Channel of distribution, logistics, warehousing, transport etc.

→ Promotion: It refers to the activities of Personal Selling, advertising and communicating product benefits and attributes to target consumers to persuade them to purchase.

Job Production

This type of Production is used to produce low volume and high-variety of goods. A job shop production is characterized as:

- High Customization
- High flexibility of equipment
- Skilled labour
- Low volume.

Example

→ Customer made furniture:

A carpenter makes handcrafted wooden dining table based on customer specification. Each table is unique in material and finish.

→ Ship building:

Each ship is built according to specific design & customer needs.

→ Large turbo-generator, special heat treatment are other examples.

Diff b/w Recruitment & Selection

<u>Recruitment</u>	<u>Selection</u>
→ Process of attracting candidates	→ Process of choosing candidates
→ Increasing the no of applicants is main focus	→ The focus is screening and eliminating unqualified candidates
→ Process type is positive - Encourages many applicants	→ Process type is negative - eliminates unsuitable candidates
→ Methods used are ads, referrals, job portal	→ Methods used are interview, test, reference check
→ Identifying job requirements, Sourcing candidates, job ads, screening are stages in recruitment	→ Preliminary screening, written test & selection interviews are stages in selection
→ Faster internal hiring process	→ Ensures the right person is hired for job

Training methods

Depending upon the availability of time, job and need of training organizations employ different method of training from the following

→ On the job training :-

under these methods, the training can be provided by placing the trainee in actual job for which they hired.

The various on-the-job methods include

→ Job instruction training (JIT): Existing ~~on-the-job~~ employee or knowledgeable person gives instruction

to new employee.

Coaching: An expert act as coach and guide trainee to do their jobs.

Job rotation: The employee will be moved to higher level job in the same or different company for a period of time.

Internship / apprenticeship: It is training Programme jointly sponsored by college, universities and industries to provide the practical knowledge to students.

Off the job training: Here the trainee is separated from actual workplace and allowed only after completion of training.

- > Lecture method: Expert gives theoretical knowledge
- > Verbal training: The work environment can be created in class room
- > Conference method: Group of individuals with their ideas & knowledge are involved.
- > Programmed Instruction (PI): The instruction to be followed to fulfil job can be given to employee in printed form.