# Welcome

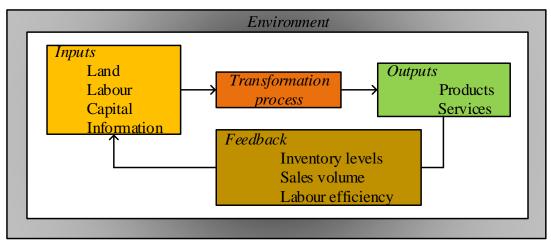
#### **HS300** Principles of Management

Rajesh Kumar R
Associate Professor,
Dept. of Mechanical Engg.,
SNGCE.

## **Module 5-Topics**

- 1. Operations management
- 2. Human resources management
- 3. Marketing management
- 4. Financial management
- 5. Entrepreneurship
- 6. Business plans
- 7. Corporate social responsibility
- 8. Patents
- 9. Intellectual property rights

#### **Introduction to Operations management**



Elements of operations system

- A manufacturing organization essentially engages in converting a variety of inputs into products that are useful for individuals and organizations.
- A service organization, on the other hand, responds to the requirements of customers and satisfies their needs through a service delivery process.
- An operations system is defined as one in which several activities are performed to transform a set of inputs into a useful output using a transformation process.
- ➤ Operations management refers to the activities, decisions and responsibilities of managing the resources which are dedicated to the production and delivery of products and services.

### **Scope of operations management**

- 1. Plant location
- 2. Plant layouts
- 3. Material handling
- 4. Product design
- 5. Process design
- 6. Production and planning control
- 7. Quality control
- 8. Materials management
- 9. Maintenance management

### **Marketing management**

*Marketing management* is the process of *analysis*, planning, *implementation* and *control* of programmes designed to bring about desired exchanges with target markets for the purpose of achieving objectives of the organization.

- 1. Analysis Detailed study of the gathered information regarding market, competitors product, target market, political issues, etc.
- 2. *Planning* Choosing the marketing plan, pricing, advertisement plans, etc.
- 3. *Implementation* Putting the plan into action.
- 4. Controlling

#### Functions of marketing management

- 1. Market research,
- 2. Sales forecasting,
- 3. Pricing,
- 4. Choosing distribution channel,
- 5. Selling,
- 6. Advertising,
- 7. Sales promotion and
- 8. Servicing

#### **Marketing versus Sales**

- ➤ *Marketing activity* finds out the needs of customers so as to deliver the company's products to the customers more effectively and efficiently than its competitors i.e., any activity which facilitates selling is called marketing.
- > Selling activity is concerned with the sales of the company's product or selling activity concentrates on pushing the products to the customer whereby focuses on the needs(targets)set by the seller.

### **Marketing mix**

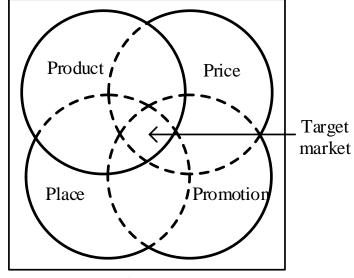
Marketing mix is a set of controllable variables that a firm can use to influence the buyer's response within a given marketing environment. The combination of these variables constitutes the marketing mix.

#### Traditional marketing mix model

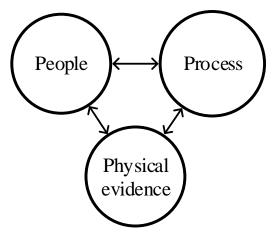
- 1. Product
- 2. Price
- 3. Place
- 4. Promotion

**Booms** and **Bitner's** have added the following 3 additional Ps.

- 5. People
- 6. Process
- 7. Physical evidence



Marketing mix



Extended marketing mix

#### **Market segmentation**

- ➤ Market segmentation is the act of dividing a market into smaller groups of buyers with distinct needs, characteristics or behaviors who might require separate products or marketing mixes.
  - 1. Geographic segmentation
  - **2.** *Demographic segmentation* Demographic segmentation sorts a market by demographic elements such as age, education, income, family size, race, gender, occupation, and more.
  - 3. Behavioral segmentation
  - *4. Psychographic segmentation* This includes values and beliefs, lifestyle, interests and hobbies, personality traits, etc.

#### **Market segmentation**

- ➤ Market segmentation is the act of dividing a market into smaller groups of buyers with distinct needs, characteristics or behaviors who might require separate products or marketing mixes.
  - 1. Geographic segmentation
  - **2.** *Demographic segmentation* Demographic segmentation sorts a market by demographic elements such as age, education, income, family size, race, gender, occupation, and more.
  - 3. Behavioral segmentation
  - *4. Psychographic segmentation* This includes values and beliefs, lifestyle, interests and hobbies, personality traits, etc.

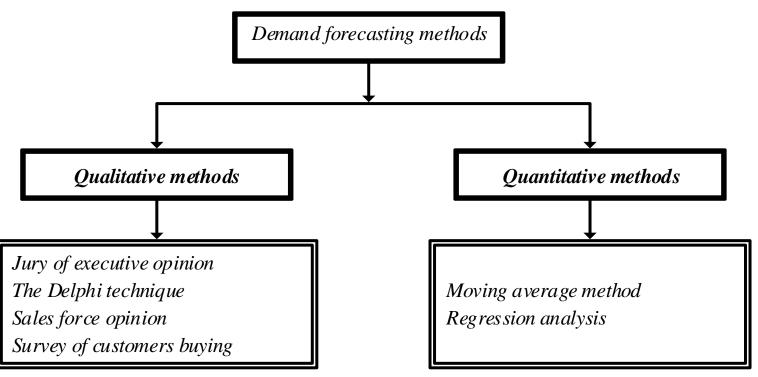
#### Target marketing and Market positioning

- ➤ *Market targeting* is the process of evaluating each market segments' attractiveness and select one or more market segments to enter. For example, target market for *Nike* which sells apparel, equipment, shoes, and accessories is athletes and people who play sports.
- ➤ *Marketing positioning* is the process of developing a marketing mix that puts the product in a unique position to the targeted segments for attracting potential buyers. For example, in the automobile market, Toyota, Suzuki are positioned on the economy, Mercedes on luxury, and BMW on performance.

### **Forecasting**

- Forecasting can be defined as an estimate of future events, that can be obtained by systematically combining past and present data in a predetermined way and arrive at the future data.
- ➤ Demand forecasts, production forecasts, etc., are examples of different types of forecasting.
- Forecasting begins with *demand forecast* (estimate of demand in future) and is followed by production forecast (estimation of quantity and quality of work) and forecasts for costs, finance, purchase, profit or loss, etc.

### **Sales forecasting methods**



Demand forecasting methods

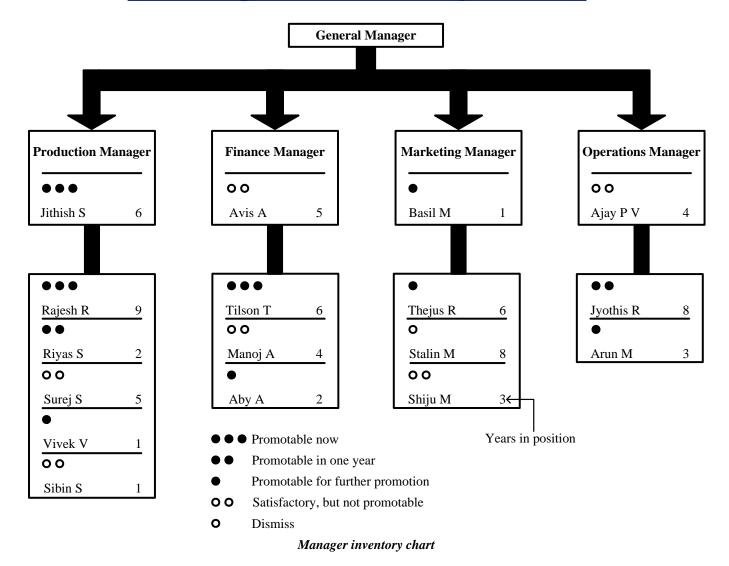
#### **Staffing and related HRD functions**

➤ Human resource management (HRM), or staffing, is defined as the management function devoted to acquiring, training, appraising, and compensating employees. According to Harold Koontz, staffing is defined as 'staffing means filling and keeping filled, positions in the organization structure'.

#### Process of staffing function

- 1. Manpower planning
- 2. Recruitment
- 3. Selection
- 4. Orientation and placement
- 5. Training and development
- 6. Remuneration
- 7. Performance evaluation
- 8. Promotion and transfer

#### **Manager inventory chart**



➤ Manager inventory chart or management replacement chart is simply an organizational chart of a unit having managerial positions being indicated and keyed with a system of promotability to each personnel.

### **Financial management**

➤ 'Financial management comprises the forecasting, planning, organizing, directing, coordinating and controlling of all activities relating to acquisition and application of the financial resources of an undertaking in keeping with its financial objective.'

#### Objectives of financial management

- 1. Profit maximization
- 2. Wealth/Value maximization
- 3. Proper estimation of total financial requirements
- 4. Proper utilization of finance
- 5. Proper coordination
- 6. Reduce cost of capital
- 7. Reduce operating risks

#### **Budget-Problems: #1**

1. The Mendez Company expects sales in 2019 of 200,000 units of serving trays. Mendez's beginning inventory for 2019 is 15000 trays and its target ending inventory is 25000 trays. Compute the number of trays budgeted for production in 2020.

#### Solution:

Budgeted sales = 200000 trays

Target ending inventory (stock of products that are ready for sale but not yet sold = 27000 trays

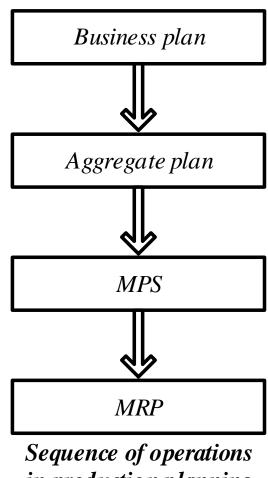
Beginning inventory = 15000 trays

*No. of trays to be manufactured* =

- = Budgeted sales + Target ending inventory Beginning inventory
- = 200000 + 27000 15000 = 212000 trays

#### **Business plans**

- > A business plan/production plan is a statement of what the firm proposes to do in the future.
- > Aggregate planning, also called as aggregate scheduling is the process of planning the quantity and timing of output over the intermediate range (often 3 to 18 months) by adjusting the production rate, employment, inventory, and other controllable variables.
- > Master Production Scheduling (MPS) follows aggregate planning and expresses the overall plan in terms of the amounts of specific end items to produce and dates to produce them.
- ➤ Materials Requirement Planning (MRP) determines the quantity and timing of acquisition of various raw materials/subassemblies needed to the MPS by considering various factors such as carrying cost, ordering cost, etc.



in production planning

#### **Aggregate plan and Master Production Schedule**

Month	J	F	M	A	M	J	J	A	S
Number of motors	40	25	55	30	30	50	30	60	40

Aggregate plan

Month	J	$\mathbf{F}$	M	A	$\mathbf{M}$	J	J	A	S
<b>AC</b> motors									
5hp	15	_	30	_	_	30	_	_	10
25hp	20	25	25	15	15	15	20	30	20
DC motors									
20hp	_	_	_	_	_	_	10	10	_
10hp	5	_	<u> </u>	15	15	5	<u> </u>	20	10

Master Production Schedule (MPS)

### **Corporate Social Responsibility (CSR)**

Corporate social responsibility (CSR) refers to strategies that companies put into action as part of corporate governance that are designed to ensure the company's operations are ethical and beneficial for society.

#### Importance of Corporate Social Responsibility

- 1. CSR helps to build long-term employee, consumer and citizen trust
- 2. CSR helps to build a positive workplace environment
- 3. Improves public image

#### **Design rights**

- ➤ Intellectual property rights (IPR) Intellectual property rights are the rights given to persons over the creations of their minds.
  - 1. Patents
  - 2. Copyright
  - 3. Trademarks

#### **Patent**

- ▶ Patent A patent is an exclusive right granted by a country to the owner of an invention to make, use, manufacture and market the invention, provided the invention satisfies certain conditions stipulated in the law.
  - **➢** Governed by Indian Patent Act, 1970.
  - ➤ If a patent covers a product, the grant of patent gives the patentee the exclusive right to prevent others from performing, without authorisation, the act of making, using, offering for sale, selling or importing that product for the above purpose.

### **Copyright**

- ➤ Copyright A patent is an exclusive right granted by a country to the owner of an invention to make, use, manufacture and market the invention, provided the invention satisfies certain conditions stipulated in the law. Copyright is a right, which is available for creating an original literary or dramatic or musical or artistic work.
  - The Copyright Law in India at present is governed by the Copyright Act, 1957 (as amended in 2012) along with the Copyright Rules, 2013 governs the copyright protection in India.

#### **Coverage**

- 1. Literary, dramatic and musical work.
- 2. Computer programs/softwares
- 3. Artistic work
- 4. Cinematographic films.
- 5. Recording on any disc, tape, etc.

#### **Trademark**



- ➤ Trademark A trademark is a distinctive sign, which identifies certain goods or services as those produced or provided by a specific person or enterprise.
- > Trademarks may be one or combination of words, letters, and numerals.
- They may also consist of drawings, symbols, three dimensional signs such as shape and packaging of goods, or colours used as distinguishing feature.

# **Discussions**

- 1. Describe any one instance of application of Corporate Social Responsibility.
- 2. Clearly explain the functions of financial management? Describe the challenges faced by a finance manager.
- 3. What are the purposes of budget?
- 4. Classify the various budgets and compare them.
- 5. Explain what you understand by recruitment. What are the different sources of recruitment? What are the merits and demerits of recruitment through these sources?
- 6. Describe in detail the various external sources of recruitment. What are the relative merits and demerits of this source?
- 7. Write a note on staffing function of management.
- 8. Give three reasons for the delegation of authority.
- 9. What is a manager inventory chart?
- 10. Distinguish the following: Recruitment, Selection, Placement and Induction.
- 11. List the advantages and limitations of interview as a selection technique.
- 12. What are the requirements of the staff of the firm in order to call it as a culture responsive firm?
- 13. How entrepreneurs differ from workers?
- 14. What are the objectives of operations management?
- 15. Distinguish between the following: (a) Assets and Liabilities (b) Production concept and Marketing concept (c) Needs and Wants (d) Design functions and Operational control functions in operations