

Study note - 1



INTRODUCTION



- 1. Operations management – Introduction**
- 2. Objectives of Operations management**
- 3. Scope of operation management**
- 4. Production management vs operations management**
- 5. Characteristic of modern operations function**
- 6. Recent trends in Production/Operations management**



Meaning of Operations Management

- **Operations management is the management of that part of an organization that is responsible for producing goods and/or services.**
- **Every book you read, every video you watch, every e-mail you send, every telephone conversation you have, and every medical treatment you receive involves the operations function of one or more organizations.**



Meaning of operating system

- **An Operating System is defined as a configuration of resources combined for the provision of goods or services.**
- **Retail organizations, hospitals, bus and taxi services, tailors, hotels and dentists are all examples of operating systems.**
- **Any operating system converts inputs, using physical resources, to create outputs, the function of which is to satisfy customers wants.**
- **Various inputs such as capital, labour, and information are used to create goods or services using one or more transformation processes (e.g., storing, transporting, and cutting).**



OBJECTIVES



Resource Utilization

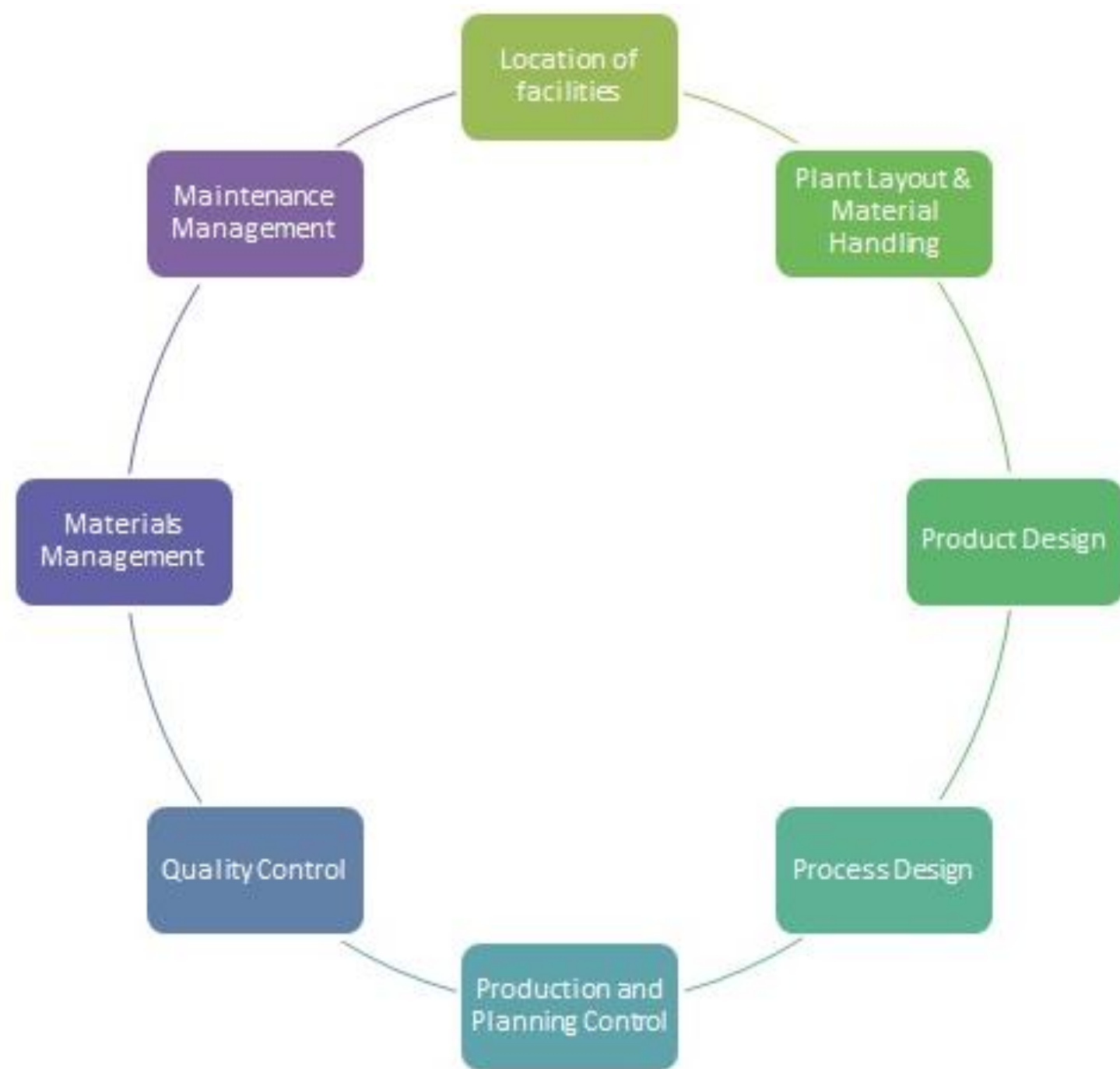


- The first objective is the customer service which means the service for the satisfaction of customer wants.
- Customer service is therefore a key objective of operations management.
- The Operations Management must provide something to a specification which can satisfy the customer in terms of cost and timing.
- Thus, primary objective can be satisfied by providing the 'right thing at the right price at the right time'.

Resource Utilization

- **Another major objective is to utilize resources (Materials, Machines and Labour) for the satisfaction of customer wants effectively, i.e., customer service must be provided with the achievement of effective operations through efficient use of resources.**
- **Inefficient use of resources or inadequate customer service leads to commercial failure of an operating system.**
- **Operations management is concerned essentially with the utilization of resources, i.e., obtaining maximum effect from resources or minimizing their loss, under utilization or waste.**

Scope of operations management





| <p style="text-align: center;">Production management</p> | <p style="text-align: center;">Operations management</p> |
|---|--|
| <p>The term production management is more used for a system where tangible goods are produced.</p> | <p>Operations management is more frequently used where various inputs are transformed into intangible services.</p> |
| <p>It covers manufacturing organizations.</p> | <p>It will cover such service organizations as banks, airlines, pollution control agencies, educational institutions, libraries, consultancy firms and police departments, in addition, of course, to manufacturing enterprises.</p> |
| <p>Production management precedes Operations management.</p> | <p>Operation management is the term that is used nowadays.</p> |

Characteristic of modern operations function

| | | |
|-----------|---|---|
| 1. | Manufacturing as competitive advantage | <ul style="list-style-type: none">▪ In the past production was considered to be like any other function in the organisation. When demand was high and production capacities were inadequate, the concern.▪ But today's scenario is contrasting. Plants have excess capacities, competition is mounting and firms look and gain competitive advantage to survive and succeed. |
| 2. | Service orientation | <ul style="list-style-type: none">▪ As was stated earlier, service sector is gaining greater relevance these days.▪ The production system, therefore, needs to be organized keeping in mind the peculiar requirements of the service component.▪ There is increased presence of professionals on the production. |

Characteristic of modern operations function

| | | |
|-----------|-------------------------------------|---|
| 3. | Disappearance of smokestacks | <ul style="list-style-type: none">▪ Protective labour legislation, environmental movement and gradual emergence of knowledge based organizations have brought total transformation in the production system.▪ Today's factories are aesthetically designed and built, environment friendly - in fact, they are homes away from homes. |
| 4. | Small has become beautiful | <ul style="list-style-type: none">▪ It was E.F. Schumacher who, in his famous book Small is Beautiful, opposed giant organizations and increased specialization.▪ For him, small was beautiful.▪ Businessmen, all over the world, did not believe in Schumacher's philosophy. Inspired by economies of scale, industrialists went in for huge organizations and mass production |



Q. Enumerate the characteristics of a modern operations function.
(December 2019)

Recent trends in Production/Operations management

| | | |
|----|---------------------------------------|--|
| 1. | Global market place | <ul style="list-style-type: none">▪ Globalization of business has compelled many manufacturing firms to have operations in many countries where they have certain economic advantage.▪ This has resulted in a steep increase in the level of competition among manufacturing firms throughout the world. |
| 2. | Production/Operations strategy | <ul style="list-style-type: none">▪ More and more firms are recognizing the importance of production/ operations strategy for the overall success of their business and the necessity for relating it to their overall business strategy. |
| 3. | Total quality management | <ul style="list-style-type: none">▪ TQM approach has been adopted by many firms to achieve customer satisfaction by improving the quality of goods and services. |
| 4. | Flexibility | <ul style="list-style-type: none">▪ The ability to adapt quickly to:<ul style="list-style-type: none">• Changes in volume of demand,• in the product mix demanded, and |

Recent trends in Production/Operations management

| | | |
|----|---------------------------|--|
| 5. | Time reduction | <ul style="list-style-type: none">▪ Reduction of manufacturing cycle time and speed to market for a new product provide competitive edge to a firm over other firms.▪ When companies can provide products at the same price and quality, quicker delivery (short lead times) provide one firm competitive edge over the other. |
| 6. | Technology | <ul style="list-style-type: none">▪ Automation, computerization, information and communication technologies have revolutionized the way companies operate.▪ Technological changes in products and processes can have great impact on competitiveness and quality, if the advanced technology is carefully integrated into the existing system. |
| 7. | Worker involvement | <ul style="list-style-type: none">▪ The recent trend is to assign responsibility for decision making and problem solving to the lower levels in the organisation. This is known as employee involvement and empowerment.▪ Examples of worker involvement are use of work teams or quality improvement teams. |

Recent trends in Production/Operations management

| | | |
|-----|--|--|
| 9. | Environmental issues | <ul style="list-style-type: none">▪ Today's production managers are concerned more and more with pollution control and waste disposal which are key issues in protection of environment and social responsibility.▪ There is increasing emphasis on reducing waste, recycling waste, using less-toxic chemicals. |
| 10. | Corporate downsizing (Right sizing) | <ul style="list-style-type: none">▪ Downsizing or right sizing has been forced on firms to shed their obesity.▪ This has become necessary due to competition, lowering productivity, need for improved profit and for higher dividend payment to shareholders. |
| 11. | Supply chain management | <ul style="list-style-type: none">▪ Management of supply-chain, from suppliers to final customers reduces the cost of transportation, warehousing and distribution throughout the supply chain. |
| 12. | Lean production | <ul style="list-style-type: none">▪ Production systems have become lean production systems which use minimal amounts of resources to produce a high volume of |