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Operations and Productivity

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Part 2 Chapter 1



What Is Operations (Production) Management?

Production:

is the creation of goods and services

Operations management (OM):

is the set of activities that create value in the form of goods and services by transforming inputs into outputs

Organizing to Produce Goods and Services

◆ Essential functions:

1. **Marketing** – generates demand
2. **Production/operations** – creates the product
3. **Finance/accounting** – tracks how well the organization is doing, pays bills, collects the money

Why Study OM?

- 1. OM is one of three major functions of any organization, we want to study how people organize themselves for productive enterprise**
- 2. We want (*and need*) to know how goods and services are produced**
- 3. We want to understand what operations managers do**
- 4. OM is such a costly part of an organization**

What Operations Managers Do

Basic Management Functions

- ◆ **Planning**
- ◆ **Organizing**
- ◆ **Staffing**
- ◆ **Leading**
- ◆ **Controlling**



The Critical Decisions

1. Design of goods and services

- ◆ **What good or service should we offer?**
- ◆ **How should we design these products and services?**

2. Managing quality

- ◆ **How do we define quality?**
- ◆ **Who is responsible for quality?**

The Critical Decisions

3. Process and capacity design

- ◆ **What process and what capacity will these products require?**
- ◆ **What equipment and technology is necessary for these processes?**

4. Location strategy

- ◆ **Where should we put the facility?**
- ◆ **On what criteria should we base the location decision?**

The Critical Decisions

5. Layout strategy

- ◆ **How should we arrange the facility?**
- ◆ **How large must the facility be to meet our plan?**

6. Human resources and job design

- ◆ **How do we provide a reasonable work environment?**
- ◆ **How much can we expect our employees to produce?**

The Critical Decisions

7. Supply-chain management

- ◆ **Should we make or buy this component?**
- ◆ **Who should be our suppliers and how can we integrate them into our strategy?**

8. Inventory, material requirements planning, and JIT

- ◆ **How much inventory of each item should we have?**
- ◆ **When do we re-order?**

The Critical Decisions

9. Intermediate and short-term scheduling

- ◆ **Are we better off keeping people on the payroll during slowdowns?**
- ◆ **Which jobs do we perform next?**

10. Maintenance

- ◆ **How do we build reliability into our processes?**
- ◆ **Who is responsible for maintenance?**

Where are the OM Jobs?

- ◆ **Technology/methods**
- ◆ **Facilities/space utilization**
- ◆ **Strategic issues**
- ◆ **Response time**
- ◆ **People/team development**
- ◆ **Customer service**
- ◆ **Quality**
- ◆ **Cost reduction**
- ◆ **Inventory reduction**
- ◆ **Productivity improvement**