Operations as a Competitive Weapon

FedEx

- Why are they successful?
  - Fast
  - On-time deliveries
  - Relatively low cost
  - Technology in shipment tracking
Operations Management is…

- “The systematic design, direction and control of processes that transform inputs into services and products for internal, as well as external, customers.”

Processes

- Processes should add value.
- Processes can be broken down into sub-processes, which in turn can be broken down further.
- Any process that is part of a larger process is considered a “nested process.”
- Each process and each nested process has inputs and outputs.
Nested Processes

Advertisement Design and Planning Process

Creative design process
• Receive work request
• Assemble team
• Prepare several designs
• Receive inputs from Account Executive
• Prepare final concept
• Revise concept per client’s inputs

Media planning process
• Receive work request
• Prepare several media plans
• Receive inputs from Account Executive
• Prepare final plan
• Revise plan per client’s inputs

Value Chains

• Value chains are an interrelated series of processes that produce a service or product to the satisfaction of customers.
  – Value chains may have core processes or support processes.
• Core processes deliver value to external customers.
• Support processes provide vital inputs for the core processes
Core Processes

- Customer relationship processes
  - Identify, attract, and build relationships with external customers and facilitate the placement of orders.
- New service/product development processes
  - Design and develop new services or products from inputs received from external customer specifications.
- Order fulfillment processes
  - The activities required to produce and deliver the service or product to the external customers.
- Supplier relationship processes
  - Select suppliers of services, materials and information and facilitate the timely and efficient flow of these items into the firm.

Support Processes Internal Value-Chain Linkages

- Firms have many processes that support the core processes.
The Operations Management System

- **Input**
  - Workers
  - Managers
  - Equipment
  - Facilities
  - Materials
  - Services
  - Land
  - Energy

- **External environment**

- **Customer or client participation**

- **Operations and transformations**
  - 1
  - 2
  - 3
  - 4
  - 5

- **Information on performance**

- **Outputs**
  - Goods
  - Services

Operations Management as a Function

- **Types of Organizations**
  - Manufacturing
  - Construction
  - Transportation
  - Health care

- **Wholesaling**
- **Retailing**
- **Bank**
- **Government**

- **Functions**
  - Accounting
  - Marketing
  - Finance
  - Operations
  - Human resources
  - Distribution
  - Engineering

- **Skill Areas**
  - Quantitative methods
  - Organizational behavior
  - General management
  - Management information system
  - Economics
  - International business
  - Business ethics and law
Viewing Operations Management as Process Management

- customer as hindrance factor
- rigid organizational structure
- first priority is structural creation
- process control by coordination manager

- customer orientated goals
- flexible organizational structure
- first priority is process optimization
- flexible process control by workflow manager

Function View

Process View
### Changing Challenges for OM

#### Past Causes Future

<table>
<thead>
<tr>
<th>Local or national focus</th>
<th>Low-cost, reliable worldwide communication and transportation networks</th>
<th>Global Focus</th>
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</thead>
<tbody>
<tr>
<td>Batch (large) shipments</td>
<td>Cost of capital puts pressure on reducing investment in inventory</td>
<td>Just-in-time shipments</td>
</tr>
<tr>
<td>Low-bid purchasing</td>
<td>Quality emphasis requires that suppliers be engaged in product improvement</td>
<td>Supply-chain partners</td>
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</tbody>
</table>

#### Changing Challenges for OM

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<td><strong>Past</strong></td>
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<tr>
<td>Lengthy product development</td>
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<td>Standardized products</td>
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<td>Job specialization</td>
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Operations Management: Different Perspectives

- Competitive priority
  - cost, time, quality, flexibility
- Supply chain management
  - inbound logistics, outbound logistics, production logistics
- Information integration
  - IT, ERP, Supply chain management, EC
- Decision support and knowledge management
  - simulation, models, case study

Information Integration

![Diagram showing information integration components and relationships](Source: IBM)
Addressing the Challenges in Operations Management

Using Operations to Compete
- Operations As a Competitive Weapon
- Operations Strategy
- Project Management

Managing Processes
- Process Strategy
- Process Analysis
- Process Performance & Quality
- Constraint Management
- Process Layout
- Lean Systems

Managing Value Chains
- Supply Chain Strategy
- Location
- Inventory Management
- Forecasting
- Sales & Operations Planning
- Resource Planning
- Scheduling

Operations Management

- Strategy
- Design
- Operation