Outline

- **Global Company Profile: Boeing**
- **A Global View of Operations**
  - **Cultural and Ethical Issues**
- **Developing Missions And Strategies**
  - **Mission**
  - **Strategy**
Achieving Competitive Advantage Through Operations

- Competing On Differentiation
- Competing On Cost
- Competing On Response

Ten Strategic OM Decisions
Outline – Continued

☑ Issues In Operations Strategy
  ☑ Research
  ☑ Preconditions
  ☑ Dynamics
Outline – Continued

☑ Strategy Development and Implementation

☑ Critical Success Factors and Core Competencies

☑ Build and Staff the Organization

☑ Integrate OM with Other Activities
Outline – Continued

☑ Global Operations Strategy Options
  ☑ International Strategy
  ☑ Multidomestic Strategy
  ☑ Global Strategy
  ☑ Transnational Strategy
Learning Objectives

When you complete this chapter you should be able to:

1. Define mission and strategy
2. Identify and explain three strategic approaches to competitive advantage
3. Identify and define the 10 decisions of operations management
Learning Objectives

When you complete this chapter you should be able to:

4. Identify five OM strategy insights provided by PIMS research
5. Identify and explain four global operations strategy options
Global Strategies

- **Boeing** – sales and production are worldwide
- **Benetton** – moves inventory to stores around the world faster than its competition by building flexibility into design, production, and distribution
- **Sony** – purchases components from suppliers in Thailand, Malaysia, and around the world
Global Strategies

☑ Volvo – considered a Swedish company but it is controlled by an American company, Ford. The current Volvo S40 is built in Belgium and shares its platform with the Mazda 3 built in Japan and the Ford Focus built in Europe.

☑ Haier – A Chinese company, produces compact refrigerators (it has one-third of the US market) and wine cabinets (it has half of the US market) in South Carolina
## Some Multinational Corporations

<table>
<thead>
<tr>
<th>Company</th>
<th>Home Country</th>
<th>% Sales Outside Home Country</th>
<th>% Assets Outside Home Country</th>
<th>% Foreign Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citicorp</td>
<td>USA</td>
<td>34</td>
<td>46</td>
<td>NA</td>
</tr>
<tr>
<td>Colgate-Palmolive</td>
<td>USA</td>
<td>72</td>
<td>63</td>
<td>NA</td>
</tr>
<tr>
<td>Dow Chemical</td>
<td>USA</td>
<td>60</td>
<td>50</td>
<td>NA</td>
</tr>
<tr>
<td>Gillette</td>
<td>USA</td>
<td>62</td>
<td>53</td>
<td>NA</td>
</tr>
<tr>
<td>Honda</td>
<td>Japan</td>
<td>63</td>
<td>36</td>
<td>NA</td>
</tr>
<tr>
<td>IBM</td>
<td>USA</td>
<td>57</td>
<td>47</td>
<td>51</td>
</tr>
</tbody>
</table>
# Some Multinational Corporations

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<tbody>
<tr>
<td>ICI</td>
<td>Britain</td>
<td>78</td>
<td>50</td>
<td>NA</td>
</tr>
<tr>
<td>Nestle</td>
<td>Switzerland</td>
<td>98</td>
<td>95</td>
<td>97</td>
</tr>
<tr>
<td>Philips Electronics</td>
<td>Netherlands</td>
<td>94</td>
<td>85</td>
<td>82</td>
</tr>
<tr>
<td>Siemens</td>
<td>Germany</td>
<td>51</td>
<td>NA</td>
<td>38</td>
</tr>
<tr>
<td>Unilever</td>
<td>Britain &amp; Netherlands</td>
<td>95</td>
<td>70</td>
<td>64</td>
</tr>
</tbody>
</table>
## Some Boeing Suppliers (787)

<table>
<thead>
<tr>
<th>Firm</th>
<th>Country</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latecoere</td>
<td>France</td>
<td>Passenger doors</td>
</tr>
<tr>
<td>Labinel</td>
<td>France</td>
<td>Wiring</td>
</tr>
<tr>
<td>Dassault</td>
<td>France</td>
<td>Design and PLM software</td>
</tr>
<tr>
<td>Messier-Bugatti</td>
<td>France</td>
<td>Electric brakes</td>
</tr>
<tr>
<td>Thales</td>
<td>France</td>
<td>Electrical power conversion system and integrated standby flight display</td>
</tr>
<tr>
<td>Messier-Dowty</td>
<td>France</td>
<td>Landing gear structure</td>
</tr>
<tr>
<td>Diehl</td>
<td>Germany</td>
<td>Interior lighting</td>
</tr>
<tr>
<td>Firm</td>
<td>Country</td>
<td>Component</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Cobham</td>
<td>UK</td>
<td>Fuel pumps and valves</td>
</tr>
<tr>
<td>Rolls-Royce</td>
<td>UK</td>
<td>Engines</td>
</tr>
<tr>
<td>Smiths Aerospace</td>
<td>UK</td>
<td>Central computer system</td>
</tr>
<tr>
<td>BAE SYSTEMS</td>
<td>UK</td>
<td>Electronics</td>
</tr>
<tr>
<td>Alenia Aeronautics</td>
<td>Italy</td>
<td>Upper center fuselage &amp; horizontal stabilizer</td>
</tr>
<tr>
<td>Toray Industries</td>
<td>Japan</td>
<td>Carbon fiber for wing and tail units</td>
</tr>
</tbody>
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<th>Country</th>
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<tr>
<td>Fuji Heavy Industries</td>
<td>Japan</td>
<td>Center wing box</td>
</tr>
<tr>
<td>Kawasaki Heavy Industries</td>
<td>Japan</td>
<td>Forward fuselage, fixed section of wing, landing gear well</td>
</tr>
<tr>
<td>Teijin Seiki</td>
<td>Japan</td>
<td>Hydraulic actuators</td>
</tr>
<tr>
<td>Mitsubishi Heavy Industries</td>
<td>Japan</td>
<td>Wing box</td>
</tr>
<tr>
<td>Chengdu Aircraft Group</td>
<td>China</td>
<td>Rudder</td>
</tr>
<tr>
<td>Hafei Aviation</td>
<td>China</td>
<td>Parts</td>
</tr>
</tbody>
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</thead>
<tbody>
<tr>
<td>Korean Aviation</td>
<td>South Korea</td>
<td>Wingtips</td>
</tr>
<tr>
<td>Saab</td>
<td>Sweden</td>
<td>Cargo access doors</td>
</tr>
</tbody>
</table>
**Reasons to Globalize**

- **Tangible Reasons**
  1. Reduce costs (labor, taxes, tariffs, etc.)
  2. Improve supply chain
  3. Provide better goods and services
  4. Understand markets
  5. Learn to improve operations
  6. Attract and retain global talent

- **Intangible Reasons**
Reduce Costs

☑ Foreign locations with lower wage rates can lower direct and indirect costs

☑ Maquiladoras
☑ World Trade Organization (WTO)
☑ North American Free Trade Agreement (NAFTA)
☑ APEC, SEATO, MERCOSUR
☑ European Union (EU)
Improve the Supply Chain

- Locating facilities closer to unique resources
  - Auto design to California
  - Athletic shoe production to China
  - Perfume manufacturing in France
Provide Better Goods and Services

- Objective and subjective characteristics of goods and services
  - On-time deliveries
  - Cultural variables
  - Improved customer service
Understand Markets

- Interacting with foreign customers and suppliers can lead to new opportunities
  - Cell phone design from Europe
  - Cell phone fads from Japan
  - Extend the product life cycle
Learn to Improve Operations

☑️ *Remain open to the free flow of ideas*

☑️ *General Motors partnered with a Japanese auto manufacturer to learn*

☑️ *Equipment and layout have been improved using Scandinavian ergonomic competence*
Attract and Retain Global Talent

- Offer better employment opportunities
  - Better growth opportunities and insulation against unemployment
  - Relocate unneeded personnel to more prosperous locations
  - Incentives for people who like to travel
Cultural and Ethical Issues

- Cultures can be quite different
- Attitudes can be quite different towards
  - Punctuality
  - Lunch breaks
  - Environment
  - Intellectual property
  - Thievery
  - Bribery
  - Child labor
You May Wish To Consider

- National literacy rate
- Rate of innovation
- Rate of technology change
- Number of skilled workers
- Political stability
- Product liability laws
- Export restrictions
- Variations in language
- Work ethic
- Tax rates
- Inflation
- Availability of raw materials
- Interest rates
- Population
- Number of miles of highway
- Phone system
Match Product & Parent

- Braun Household Appliances
- Firestone Tires
- Godiva Chocolate
- Haagen-Dazs Ice Cream
- Jaguar Autos
- MGM Movies
- Lamborghini Autos
- Alpo Petfoods

1. Volkswagen
2. Bridgestone
3. Campbell Soup
4. Ford Motor Company
5. Gillette
6. Nestlé
7. Pillsbury
8. Sony
Match Product & Parent

- **Braun Household Appliances**
  - 1. Volkswagen

- **Firestone Tires**
  - 2. Bridgestone

- **Godiva Chocolate**
  - 3. Campbell Soup

- **Haagen-Dazs Ice Cream**
  - 4. Ford Motor Company

- **Jaguar Autos**
  - 5. Gillette

- **MGM Movies**
  - 6. Nestlé

- **Lamborghini Autos**
  - 7. Pillsbury

- **Alpo Petfoods**
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1. Great Britain
2. Germany
3. Japan
4. United States
5. Switzerland
Match Product & Country

- Braun Household Appliances
- Firestone Tires
- Godiva Chocolate
- Haagen-Daz Ice Cream
- Jaguar Autos
- MGM Movies
- Lamborghini Autos
- Alpo Pet Foods

1. Great Britain
2. Germany
3. Japan
4. United States
5. Switzerland
Developing Missions and Strategies

*Mission* statements tell an organization where it is going.

The *Strategy* tells the organization how to get there.
Mission

- **Mission - where are you going?**
  - Organization’s purpose for being
  - Answers ‘What do we provide society?’
  - Provides boundaries and focus
FedEx

FedEx is committed to our People-Service-Profit philosophy. We will produce outstanding financial returns by providing total reliable, competitively superior, global air-ground transportation of high priority goods and documents that require rapid, time-certain delivery. Equally important, positive control of each package will be maintained using real time electronic tracking and tracing systems. A complete record of each shipment and delivery will be presented with our request for payment. We will be helpful, courteous, and professional to each other and the public. We will strive to have a completely satisfied customer at the end of each transaction.

Figure 2.2
The mission of Merck is to provide society with superior products and services - innovations and solutions that improve the quality of life and satisfy customer needs - to provide employees with meaningful work and advancement opportunities and investors with a superior rate of return.
Our Mission: To spread the spirit of Rock ‘n’ Roll by delivering an exceptional entertainment and dining experience. We are committed to being an important, contributing member of our community and offering the Hard Rock family a fun, healthy, and nurturing work environment while ensuring our long-term success.
Arnold Palmer Hospital is a healing environment providing family-centered care with compassion, comfort and respect... when it matters the most.
Factors Affecting Mission

Philosophy and Values

Environment

Customers

Profitability and Growth

Public Image

Benefit to Society
Sample Missions

Sample Company Mission
To manufacture and service an innovative, growing, and profitable worldwide microwave communications business that exceeds our customers’ expectations.

Sample Operations Management Mission
To produce products consistent with the company’s mission as the worldwide low-cost manufacturer.

Figure 2.3
### Sample OM Department Missions

<table>
<thead>
<tr>
<th>Mission</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product design</strong></td>
<td>To design and produce products and services with outstanding quality and inherent customer value.</td>
</tr>
<tr>
<td><strong>Quality management</strong></td>
<td>To attain the exceptional value that is consistent with our company mission and marketing objectives by close attention to design, procurement, production, and field service operations</td>
</tr>
<tr>
<td><strong>Process design</strong></td>
<td>To determine and design or produce the production process and equipment that will be compatible with low-cost product, high quality, and good quality of work life at economical cost.</td>
</tr>
</tbody>
</table>

*Figure 2.3*
## Sample OM Department Missions

<table>
<thead>
<tr>
<th>Mission</th>
<th>Mission Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>To locate, design, and build efficient and economical facilities that will yield high value to the company, its employees, and the community.</td>
</tr>
<tr>
<td>Layout design</td>
<td>To achieve, through skill, imagination, and resourcefulness in layout and work methods, production effectiveness and efficiency while supporting a high quality of work life.</td>
</tr>
<tr>
<td>Human resources</td>
<td>To provide a good quality of work life, with well-designed, safe, rewarding jobs, stable employment, and equitable pay, in exchange for outstanding individual contribution from employees at all levels.</td>
</tr>
</tbody>
</table>
### Sample OM Department Missions

<table>
<thead>
<tr>
<th>Mission</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply chain management</td>
<td>To collaborate with suppliers to develop innovative products from stable, effective, and efficient sources of supply.</td>
</tr>
<tr>
<td>Inventory</td>
<td>To achieve low investment in inventory consistent with high customer service levels and high facility utilization.</td>
</tr>
<tr>
<td>Scheduling</td>
<td>To achieve high levels of throughput and timely customer delivery through effective scheduling.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>To achieve high utilization of facilities and equipment by effective preventive maintenance and prompt repair of facilities and equipment.</td>
</tr>
</tbody>
</table>

*Figure 2.3*
Strategic Process

Organization’s Mission

Functional Area Missions

Marketing

Operations

Finance/Accounting
Strategy

- Action plan to achieve mission
- Functional areas have strategies
- Strategies exploit opportunities and strengths, neutralize threats, and avoid weaknesses
Strategies for Competitive Advantage

- **Differentiation** – better, or at least different
- **Cost leadership** – cheaper
- **Response** – rapid response
Competing on Differentiation

Uniqueness can go beyond both the physical characteristics and service attributes to encompass everything that impacts customer’s perception of value

- Safeskin gloves – leading edge products
- Walt Disney Magic Kingdom – experience differentiation
- Hard Rock Cafe – dining experience
Competing on Cost

Provide the maximum value as perceived by customer. Does not imply low quality.

- **Southwest Airlines** – secondary airports, no frills service, efficient utilization of equipment
- **Wal-Mart** – small overheads, shrinkage, distribution costs
- **Franz Colruyt** – no bags, low light, no music, doors on freezers
Competing on Response

- **Flexibility is matching market changes in design innovation and volumes**
  - Institutionalization at Hewlett-Packard
- **Reliability is meeting schedules**
  - German machine industry
- **Timeliness is quickness in design, production, and delivery**
  - Johnson Electric, Bennigan’s, Motorola
## OM’s Contribution to Strategy

<table>
<thead>
<tr>
<th>Operations Decisions</th>
<th>Examples</th>
<th>Specific Strategy Used</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Sony’s constant innovation of new products</td>
<td>Design</td>
<td>FLEXIBILITY:</td>
</tr>
<tr>
<td>Quality</td>
<td>HP’s ability to lead the printer market</td>
<td>Volume</td>
<td></td>
</tr>
<tr>
<td>Process</td>
<td>Southwest Airlines No-frills service</td>
<td>LOW COST</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Pizza Hut’s 5-minute guarantee at lunchtime</td>
<td>Speed</td>
<td>DELIVERY:</td>
</tr>
<tr>
<td>Layout</td>
<td>Federal Express’s “absolutely, positively on time”</td>
<td>Dependability</td>
<td></td>
</tr>
<tr>
<td>Human resource</td>
<td>Motorola’s HDTV converters</td>
<td>Conformance</td>
<td>QUALITY:</td>
</tr>
<tr>
<td>Supply chain</td>
<td>Motorola’s pagers</td>
<td>Performance</td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>Caterpillar’s after-sale service on heavy equipment</td>
<td>AFTER-SALE SERVICE</td>
<td></td>
</tr>
<tr>
<td>Scheduling</td>
<td>Fidelity Security’s broad line of mutual funds</td>
<td>BROAD PRODUCT LINE</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2.4**

- Differentiation (Better)
- Cost leadership (Cheaper)
- Response (Faster)
10 Strategic OM Decisions

1. Goods and service design
2. Quality
3. Process and capacity design
4. Location selection
5. Layout design
6. Human resources and job design
7. Supply chain management
8. Inventory
9. Scheduling
10. Maintenance
### Goods and Services and the 10 OM Decisions

<table>
<thead>
<tr>
<th>Operations Decisions</th>
<th>Goods</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods and service design</td>
<td>Product is usually tangible</td>
<td>Product is not tangible</td>
</tr>
<tr>
<td>Quality</td>
<td>Many objective standards</td>
<td>Many subjective standards</td>
</tr>
<tr>
<td>Process and capacity design</td>
<td>Customers not involved</td>
<td>Customer may be directly involved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capacity must match demand</td>
</tr>
</tbody>
</table>

Table 2.1
## Goods and Services and the 10 OM Decisions

<table>
<thead>
<tr>
<th>Operations Decisions</th>
<th>Goods</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location selection</td>
<td>Near raw materials and labor</td>
<td>Near customers</td>
</tr>
<tr>
<td>Layout design</td>
<td>Production efficiency</td>
<td>Enhances product and production</td>
</tr>
<tr>
<td>Human resources and job design</td>
<td>Technical skills, consistent labor standards, output based wages</td>
<td>Interact with customers, labor standards vary</td>
</tr>
</tbody>
</table>

Table 2.1
# Goods and Services and the 10 OM Decisions

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<th>Operations Decisions</th>
<th>Goods</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply chain</td>
<td>Relationship critical to final product</td>
<td>Important, but may not be critical</td>
</tr>
<tr>
<td>Inventory</td>
<td>Raw materials, work-in-process, and finished goods may be held</td>
<td>Cannot be stored</td>
</tr>
<tr>
<td>Scheduling</td>
<td>Level schedules possible</td>
<td>Meet immediate customer demand</td>
</tr>
</tbody>
</table>
# Goods and Services and the 10 OM Decisions

<table>
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<tr>
<th>Operations Decisions</th>
<th>Goods</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>Often preventive and takes place at production site</td>
<td>Often “repair” and takes place at customer’s site</td>
</tr>
</tbody>
</table>

Table 2.1
Managing Global Service Operations

Requires a different perspective on:

- Capacity planning
- Location planning
- Facilities design and layout
- Scheduling
Process Design

High

Process-focused
JOB SHOPS
(Print shop, emergency room, machine shop, fine-dining restaurant)

Moderate

Repetitive (modular) focus
ASSEMBLY LINE
(Cars, appliances, TVs, fast-food restaurants)

Low

Mass Customization
Customization at high Volume
(Dell Computer’s PC, cafeteria)

Product focused
CONTINUOUS
(steel, beer, paper, bread, institutional kitchen)

Variety of Products

Volume

Low

Moderate

High

Low

Moderate Volume

High
## Operations Strategies for Two Drug Companies

<table>
<thead>
<tr>
<th>Competitive Advantage</th>
<th>Product Differentiation</th>
<th>Low Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Selection and Design</td>
<td>Heavy R&amp;D investment; extensive labs; focus on development in a broad range of drug categories</td>
<td>Low R&amp;D investment; focus on development of generic drugs</td>
</tr>
<tr>
<td>Quality</td>
<td>Major priority, exceed regulatory requirements</td>
<td>Meets regulatory requirements on a country by country basis</td>
</tr>
</tbody>
</table>

Table 2.2
# Operations Strategies for Two Drug Companies

<table>
<thead>
<tr>
<th>Competitive Advantage</th>
<th>Product Differentiation</th>
<th>Low Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process</strong></td>
<td>Product and modular process; long production runs in specialized facilities; build capacity ahead of demand</td>
<td>Process focused; general processes; “job shop” approach, short-run production; focus on high utilization</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Still located in the city where it was founded</td>
<td>Recently moved to low-tax, low-labor-cost environment</td>
</tr>
</tbody>
</table>

Table 2.2
# Operations Strategies for Two Drug Companies

<table>
<thead>
<tr>
<th>Competitive Advantage</th>
<th>Product Differentiation</th>
<th>Low Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scheduling</strong></td>
<td>Centralized production planning</td>
<td>Many short-run products complicate scheduling</td>
</tr>
<tr>
<td><strong>Layout</strong></td>
<td>Layout supports automated product-focused production</td>
<td>Layout supports process-focused “job shop” practices</td>
</tr>
</tbody>
</table>

Table 2.2
<table>
<thead>
<tr>
<th>Competitive Advantage</th>
<th>Product Differentiation</th>
<th>Low Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand Name Drugs, Inc.</strong></td>
<td>Hire the best; nationwide searches</td>
<td>Very experienced top executives; other personnel paid below industry average</td>
</tr>
<tr>
<td><strong>Generic Drug Corp.</strong></td>
<td></td>
<td>Tends to purchase competitively to find bargains</td>
</tr>
</tbody>
</table>

Table 2.2
# Operations Strategies for Two Drug Companies

<table>
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<th>Competitive Advantage</th>
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<th>Low Cost</th>
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</thead>
<tbody>
<tr>
<td><strong>Inventory</strong></td>
<td>High finished goods inventory to ensure all demands are met</td>
<td>Process focus drives up work-in-process inventory; finished goods inventory tends to be low</td>
</tr>
<tr>
<td><strong>Maintenance</strong></td>
<td>Highly trained staff; extensive parts inventory</td>
<td>Highly trained staff to meet changing demand</td>
</tr>
</tbody>
</table>

Table 2.2
Issues In Operations Strategy

☑ Research about effective operations management strategies
☑ Preconditions for developing effective OM strategies
☑ The dynamics of OM strategy development
Characteristics of High ROI Firms

- High product quality
- High capacity utilization
- High operating efficiency
- Low investment intensity
- Low direct cost per unit

From the PIMS program of the Strategic Planning Institute
Strategic Options to Gain a Competitive Advantage

28% - Operations Management
18% - Marketing/distribution
17% - Momentum/name recognition
16% - Quality/service
14% - Good management
4% - Financial resources
3% - Other
Elements of Operations Management Strategy

- Low-cost product
- Product-line breadth
- Technical superiority
- Product characteristics/differentiation
- Continuing product innovation
- Low-price/high-value offerings
- Efficient, flexible operations adaptable to consumers
- Engineering research development
- Location
- Scheduling
Preconditions

One must understand:

☑ Strengths and weaknesses of competitors and possible new entrants into the market
☑ Current and prospective environmental, technological, legal, and economic issues
☑ The product life cycle
☑ Resources available within the firm and within the OM function
☑ Integration of OM strategy with company’s strategy and with other functional areas
Dynamics of Strategic Change

☑ Changes within the organization
  ☑ Personnel
  ☑ Finance
  ☑ Technology
  ☑ Product life

☑ Changes in the environment
<table>
<thead>
<tr>
<th>Product Life Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
</tr>
<tr>
<td>Best period to increase market share</td>
</tr>
<tr>
<td>R&amp;D engineering is critical</td>
</tr>
<tr>
<td>Internet search engines</td>
</tr>
<tr>
<td>Sales</td>
</tr>
</tbody>
</table>

**Figure 2.5**
## Product Life Cycle

<table>
<thead>
<tr>
<th>OM Strategy/Issues</th>
<th>Introduction</th>
<th>Growth</th>
<th>Maturity</th>
<th>Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product design and development critical</strong></td>
<td>Forecasting critical</td>
<td>Standardization</td>
<td>Little product differentiation</td>
<td></td>
</tr>
<tr>
<td><strong>Frequent product and process design changes</strong></td>
<td>Product and process reliability</td>
<td>Less rapid product changes – more minor changes</td>
<td>Cost minimization</td>
<td></td>
</tr>
<tr>
<td><strong>Short production runs</strong></td>
<td>Competitive product improvements and options</td>
<td>Optimum capacity</td>
<td>Overcapacity in the industry</td>
<td></td>
</tr>
<tr>
<td><strong>High production costs</strong></td>
<td>Increase capacity</td>
<td>Increasing stability of process</td>
<td>Prune line to eliminate items not returning good margin</td>
<td></td>
</tr>
<tr>
<td><strong>Limited models</strong></td>
<td>Shift toward product focus</td>
<td>Long production runs</td>
<td>Reduce capacity</td>
<td></td>
</tr>
<tr>
<td><strong>Attention to quality</strong></td>
<td>Enhance distribution</td>
<td>Product improvement and cost cutting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 2.5*
SWOT Analysis

Mission

Analysis

Strategy

Internal Strengths

Internal Weaknesses

External Opportunities

External Threats
Strategy Development Process

Environmental Analysis
Identify the strengths, weaknesses, opportunities, and threats. Understand the environment, customers, industry, and competitors.

Determine Corporate Mission
State the reason for the firm’s existence and identify the value it wishes to create.

Form a Strategy
Build a competitive advantage, such as low price, design, or volume flexibility, quality, quick delivery, dependability, after-sale service, broad product lines.
Strategy Development and Implementation

- Identify critical success factors
- Build and staff the organization
- Integrate OM with other activities

The operations manager’s job is to implement an OM strategy, provide competitive advantage, and increase productivity
# Critical Success Factors

## Decisions Sample Options Chapter

<table>
<thead>
<tr>
<th>Decision</th>
<th>Sample Options</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td>Customized, or standardized</td>
<td>5</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>Define customer expectations and how to achieve them</td>
<td>6, S6</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>Facility size, technology, capacity</td>
<td>7, S7</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Near supplier or near customer</td>
<td>8</td>
</tr>
<tr>
<td><strong>Layout</strong></td>
<td>Work cells or assembly line</td>
<td>9</td>
</tr>
<tr>
<td><strong>Human resource</strong></td>
<td>Specialized or enriched jobs</td>
<td>10, S10</td>
</tr>
<tr>
<td><strong>Supply chain</strong></td>
<td>Single or multiple suppliers</td>
<td>11, S11</td>
</tr>
<tr>
<td><strong>Inventory</strong></td>
<td>When to reorder, how much to keep on hand</td>
<td>12, 14, 16</td>
</tr>
<tr>
<td><strong>Schedule</strong></td>
<td>Stable or fluctuating production rate</td>
<td>13, 15</td>
</tr>
<tr>
<td><strong>Maintenance</strong></td>
<td>Repair as required or preventive maintenance</td>
<td>17</td>
</tr>
</tbody>
</table>

*Figure 2.7*
Activity Mapping

- Courteous, but Limited Passenger Service
- Lean, Productive Employees
- Short Haul, Point-to-Point Routes, Often to Secondary Airports
- High Aircraft Utilization
- Standardized Fleet of Boeing 737 Aircraft
- Frequent, Reliable Schedules

Competitive Advantage: Low Cost

Figure 2.8
Activity Mapping

- Courteous, but Limited Passenger Service
- Standardized Fleet of Boeing 737 Aircraft
- Lean, Productive Employees
- Short Haul, Point-to-Point Routes, Often to Secondary Airports
- High Aircraft Utilization
- Frequent, Reliable Schedules

Automated ticketing machines
- No seat assignments
- No baggage transfers
- No meals (peanuts)

Figure 2.8
Activity Mapping

No meals (peanuts)
Lower gate costs at secondary airports
High number of flights reduces employee idle time between flights

Courteous, but Limited Passenger Service

Standardized Fleet of Boeing 737 Aircraft

Hungry, Productive Employees

Short Haul, Point-to-Point Routes, Often to Secondary Airports

High Aircraft Utilization

Frequent, Reliable Schedules

Figure 2.8
Activity Mapping

High number of flights reduces employee idle time between flights

Saturate a city with flights, lowering administrative costs (advertising, HR, etc.) per passenger for that city

Pilot training required on only one type of aircraft

Reduced maintenance inventory required because of only one type of aircraft

Figure 2.8
Activity Mapping

Pilot training required on only one type of aircraft

Reduced maintenance inventory required because of only one type of aircraft

Excellent supplier relations with Boeing has aided financing

Lean, Productive Employees

High Aircraft Utilization

Standardized Fleet of Boeing 737 Aircraft

Frequent, Reliable Schedules

Short Haul, Point-to-Point Routes, Often to Secondary Airports

Figure 2.8
Activity Mapping

- Courteous, but limited passenger service
- Standardized fleet of Boeing 737 aircraft
- Competitive advantage: low cost
- Lean, productive employees
- Short haul, point-to-point routes, often to secondary airports
- High aircraft utilization
- Frequent, reliable schedules

Reduced maintenance inventory required because of only one type of aircraft

Flexible employees and standard planes aid scheduling

Maintenance personnel trained only one type of aircraft

20-minute gate turnarounds

Figure 2.8
Activity Mapping

Automated ticketing machines

Empowered employees

High employee compensation

Hire for attitude, then train

High level of stock ownership

High number of flights reduces employee idle time between flights

Figure 2.8
Four International Operations Strategies

- High International Strategy
  - Import/export or license existing product
  - Examples: U.S. Steel, Harley Davidson

Local Responsiveness Considerations (Quick Response and/or Differentiation)

High Cost Reduction Considerations

Low

Low
Four International Operations Strategies

Cost Reduction Considerations

High

Low

Local Responsiveness Considerations

Low

High

International Strategy

- Import/export or license existing product

Examples

U.S. Steel
Harley Davidson

Local Responsiveness Considerations
(Quick Response and/or Differentiation)
Four International Operations Strategies

Global Strategy

- Standardized product
- Economies of scale
- Cross-cultural learning

Examples:
- Texas Instruments
- Caterpillar
- Otis Elevator

Cost Reduction Considerations

Local Responsiveness Considerations

(Queen Response and/or Differentiation)
Four International Operations Strategies

Cost Reduction Considerations

High

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- Standardized product
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Examples
- Texas Instruments
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Low

International Strategy
- Import/export or license existing product

Examples
- U.S. Steel
- Harley Davidson

Low

Local Responsiveness Considerations
(Quick Response and/or Differentiation)

High
Multidomestic Strategy

- Use existing domestic model globally
- Franchise, joint ventures, subsidiaries

Examples
- Heinz
- McDonald’s
- The Body Shop
- Hard Rock Cafe
Four International Operations Strategies

**Global Strategy**
- Standardized product
- Economies of scale
- Cross-cultural learning

Examples
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Cost Reduction Considerations

High

Low

Local Responsiveness Considerations

Low

High

(Quick Response and/or Differentiation)
Four International Operations Strategies

**Transnational Strategy**
- Move material, people, ideas across national boundaries
- Economies of scale
- Cross-cultural learning

Examples
- Coca-Cola
- Nestlé

**Multi-domestic Strategy**
- Use existing domestic model globally
- Franchise, joint ventures, subsidiaries

Examples
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- The Body Shop
- McDonald’s
- Hard Rock Café

**Global Strategy**
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**Cost Reduction Considerations**
- High
- Low

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- (Quick Response and/or Differentiation)
- High
- Low
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  - Economies of scale
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    - Hard Rock Cafe

Local Responsiveness Considerations
(Quick Response and/or Differentiation)
Ranking Corruption

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>2006 CPI Score (out of 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Finland</td>
<td>9.6</td>
</tr>
<tr>
<td>1</td>
<td>Iceland</td>
<td>9.6</td>
</tr>
<tr>
<td>1</td>
<td>New Zealand</td>
<td>9.6</td>
</tr>
<tr>
<td>5</td>
<td>Singapore</td>
<td>9.4</td>
</tr>
<tr>
<td>7</td>
<td>Switzerland</td>
<td>9.1</td>
</tr>
<tr>
<td>11</td>
<td>UK</td>
<td>8.6</td>
</tr>
<tr>
<td>14</td>
<td>Canada</td>
<td>8.5</td>
</tr>
<tr>
<td>15</td>
<td>Hong Kong</td>
<td>8.3</td>
</tr>
<tr>
<td>16</td>
<td>Germany</td>
<td>8.0</td>
</tr>
<tr>
<td>17</td>
<td>Japan</td>
<td>7.6</td>
</tr>
<tr>
<td>20</td>
<td>USA, Belgium</td>
<td>7.3</td>
</tr>
<tr>
<td>34</td>
<td>Israel, Taiwan</td>
<td>5.9</td>
</tr>
<tr>
<td>70</td>
<td>Brazil, China, Mexico</td>
<td>3.3</td>
</tr>
<tr>
<td>121</td>
<td>Russia</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Table 8.2