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OPERATIONS STRATEGY IN A GLOBAL ENVIRONMENT

PowerPoint presentation to accompany
Heizer and Render
Operations Management, Eleventh Edition
Principles of Operations Management, Ninth Edition

PowerPoint slides by Jeff Heyl

GLOBAL STRATEGIES

- Boeing sales and supply chain 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, recently purchased by a Chinese company, Geely. The current Volvo S40 is assembled in Belgium, South Africa, Malaysia and China on a platform shared 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

REASONS TO GLOBALIZE

Operasi bisnis domestik memutuskan untuk berubah ke beberapa bentuk operasi internasional untuk enam alasan utama berikut.

- Improve the supply chain
- 2. Reduce costs (labor, taxes, tariffs, etc.)
- 3. Improve operations
- 4. Understand markets
- 5. Improve products
- Attract and retain global talent

- Meningkatkan rantai pasokan
- 2. Mengurangi biaya (buruh, pajak, tarif, dll)
- 3. Meningkatkan operasi
- 4. Memahami pasar
- 5. Meningkatkan produk
- Menarik dan mempertahankan talenta global

Improve the Supply Chain

Locating facilities closer to unique resources

- Auto design to California
- Athletic shoe production to China
- Perfume manufacturing in France

Reduce Costs

- Foreign locations with lower wage rates can lower direct and indirect costs
- Trade agreements can lower tariffs
 - Maquiladoras
 - World Trade Organization (WTO)
 - North American Free Trade Agreement (NAFTA)
 - APEC, SEATO, MERCOSUR, CAFTA
 - European Union (EU)

IMPROVE OPERATIONS

- Understand differences between how business is handled in other countries
 - Japanese inventory management
 - Scandinavians ergonomics
- International operations can improve response time and customer service

UNDERSTAND MARKETS

Interacting with foreign customers, suppliers, competition can lead to new opportunities

- Cell phone design moved from Europe to Japan and South Korea
- 2. Extend the product life cycle



IMPROVE PRODUCTS



- Remain open to free flow of ideas
- Toyota and BMW manage joint research and development
 - Reduced risk, state-ofthe-art design, lower costs
- Samsung and Bosch jointly produce batteries

Attract and Retain Global Talent

Offer better employment opportunities

- Better growth opportunities and insulation against unemployment
- Relocate unneeded personnel to more prosperous locations



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 is the organization going?

- Organization's purpose for being
- Answers 'What do we contribute to society?'
- Provides boundaries and focus

Merck

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.



PespsiCo

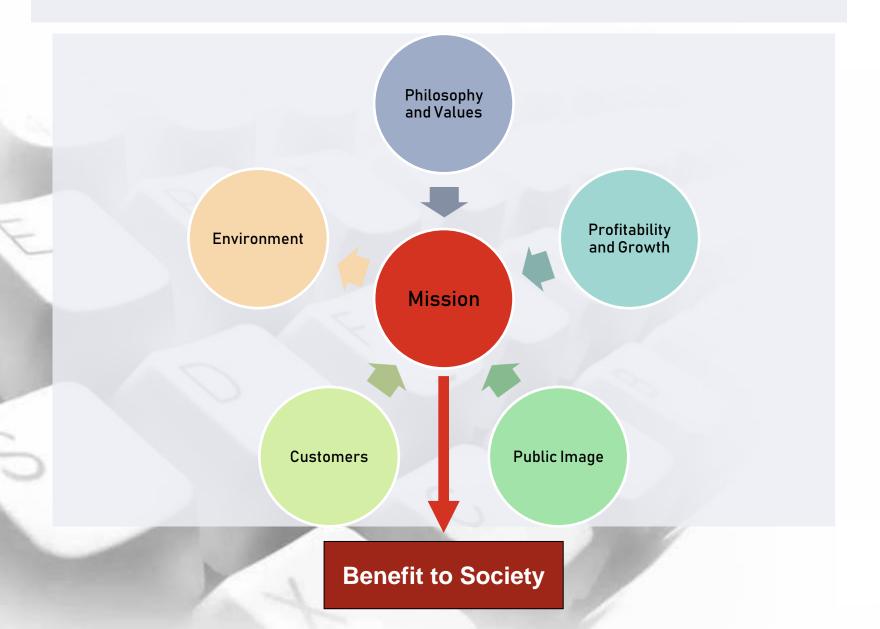
Our mission is to be the world's premier consumer products company focused on convenient foods and beverages. We seek to produce financial rewards to investors as we provide opportunities for growth and enrichment to our employees, our business partners and the communities in which we operate. And in everything we do, we strive for honesty, fairness and integrity.

Arnold Palmer Hospital

Arnold Palmer Hospital for Children provides state of the art, family-centered healthcare focused on restoring the joy of childhood in an environment of compassion, healing, and hope.



FACTORS AFFECTING MISSION



STRATEGIC PROCESS



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.

Sample OM Department Missions			
Product design	To design and produce products and services with outstanding quality and inherent customer value.		
Quality management	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		
Process design	To determine, design, and 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.		

Sample OM Department Missions			
Location	To locate, design, and build efficient and economical facilities that will yield high value to the company, its employees, and the community.		
Layout design	To achieve, through skill, imagination, and resourcefulness in layout and work methods, production effectiveness and efficiency while supporting a high quality of work life.		
Human resources	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.		

Sample OM Department Missions			
Supply-chain management	To collaborate with suppliers to develop innovative products from stable, effective, and efficient sources of supply.		
Inventory	To achieve low investment in inventory consistent with high customer service levels and high facility utilization.		
Scheduling	To achieve high levels of throughput and timely customer delivery through effective scheduling.		
Maintenance	To achieve high utilization of facilities and equipment by effective preventive maintenance and prompt repair of facilities and equipment.		

STRATEGY

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



Strategies for Competitive Advantage

- 1. Differentiation better, or at least different
- 2. Cost leadership cheaper
- 3. Response more responsive

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
- Walmart small overhead, shrinkage, and distribution costs
- Franz Colruyt no bags, no bright lights, no music, and doors on freezers

Competing on Response

- Flexibility is matching market changes in design innovation and volumes
 - A way of life at Hewlett-Packard
- Reliability is meeting schedules
 - German machine industry
- Timeliness is quickness in design, production, and delivery
 - Sharp, Pizza Hut, Samsung

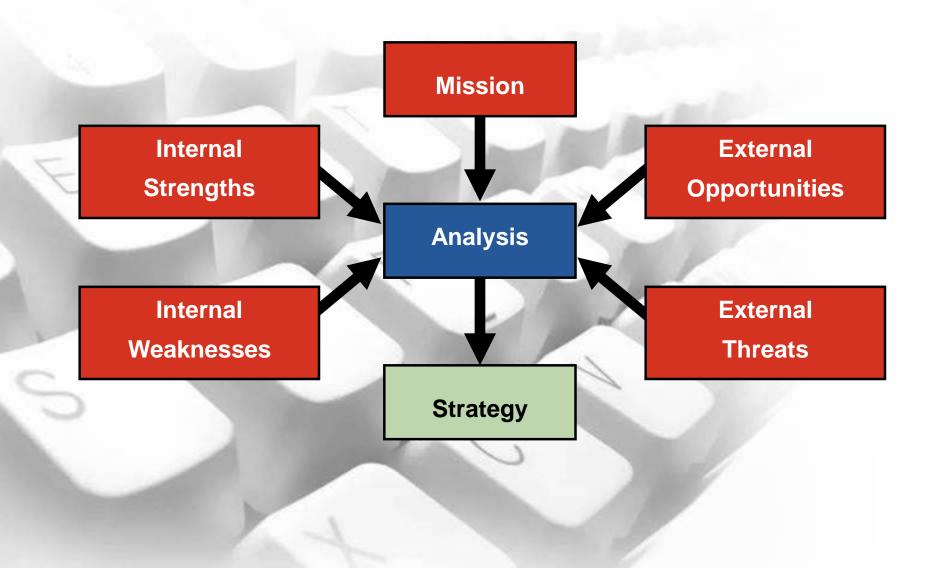
OM's Contribution to Strategy

10 Operations Decisions	Strategy	Example	Competitive Advantage
Product	DIFFERENTIATION: Innovative design	Safeskin's innovative gloves	
Quality	Broad product line After-sales service	Fidelity Security's mutual funds \ Caterpillar's heavy equipment service	
Process	Experience	Hard Rock Café's dining experience	
Location	COST LEADERSHIP: Low overhead	Franz-Colruyt's warehouse-type	Differentiation
Layout	Effective capacity use	stores Southwest Airline's aircraft utilization	Differentiation (better)
Human resource	Inventory management	Walmart's sophisticated distribution system	Response (faster)
Supply chain	RESPONSE:		Cost leadership
Inventory	Flexibility	Hewlett-Packard's response to volatile world market	(cheaper)
Scheduling	Reliability Quickness	FedEx's "absolutely, positively, on time" Pizza Hut's 5-minute guarantee	
Maintenance		at lunchtime	

PRODUCT LIFE CYCLE

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

SWOT Analysis



STRATEGY DEVELOPMENT PROCESS

Analyze the Environment

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

Determine the 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 key success factors
- Integrate OM with other activities
- Build and staff the organization

The operations manager's job is to implement an OM strategy, provide competitive advantage, and increase productivity

KEY SUCCESS FACTORS

Support a Core Competence and Implement Strategy by Identifying and Executing the Key Success Factors in the Functional Areas

Marketing

Service Distribution **Promotion** Channels of distribution **Product positioning** (image, functions)

Finance/Accounting

Cost of capital Working capital Receivables **Payables** Financial control Lines of credit

Leverage

Production/Operations

10 OM Decisions	Sample Options
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Product Customized, or standardized; sustainability

Define customer expectations and how to achieve them Quality **Process**

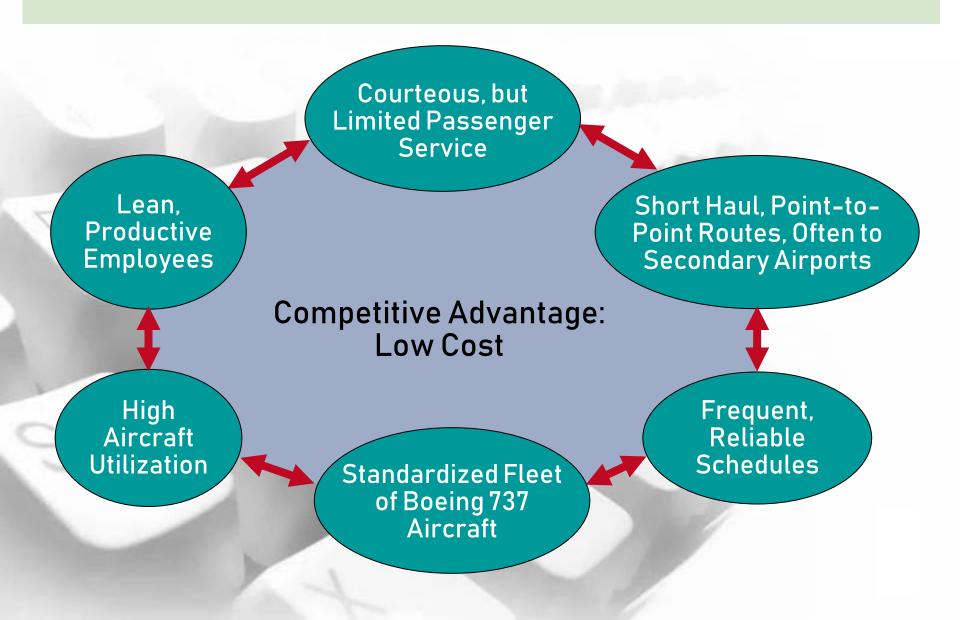
Facility size, technology, capacity, automation

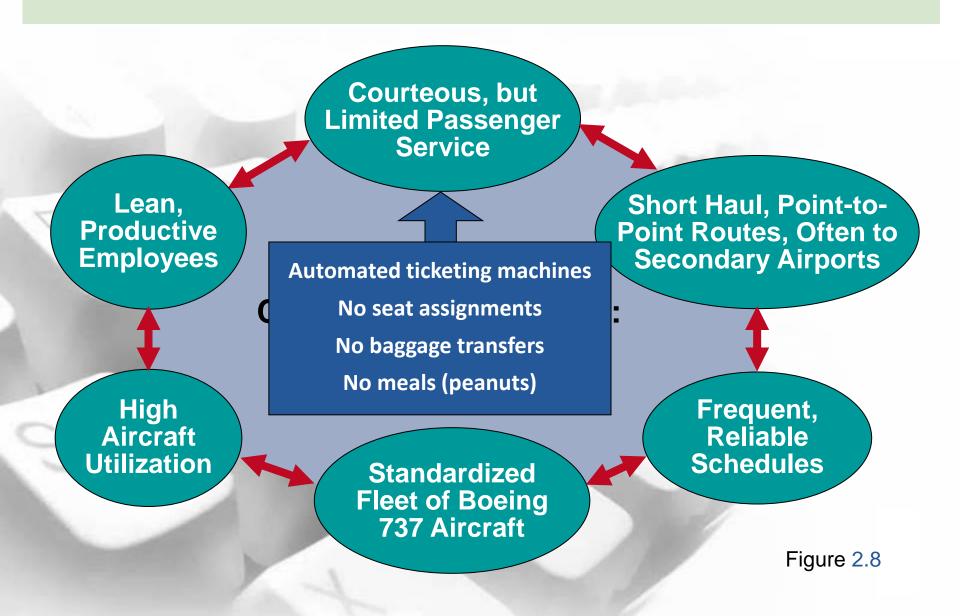
Location Near supplier or near customer Layout Work cells or assembly line Specialized or enriched jobs **Human resource** Single or multiple suppliers Supply chain

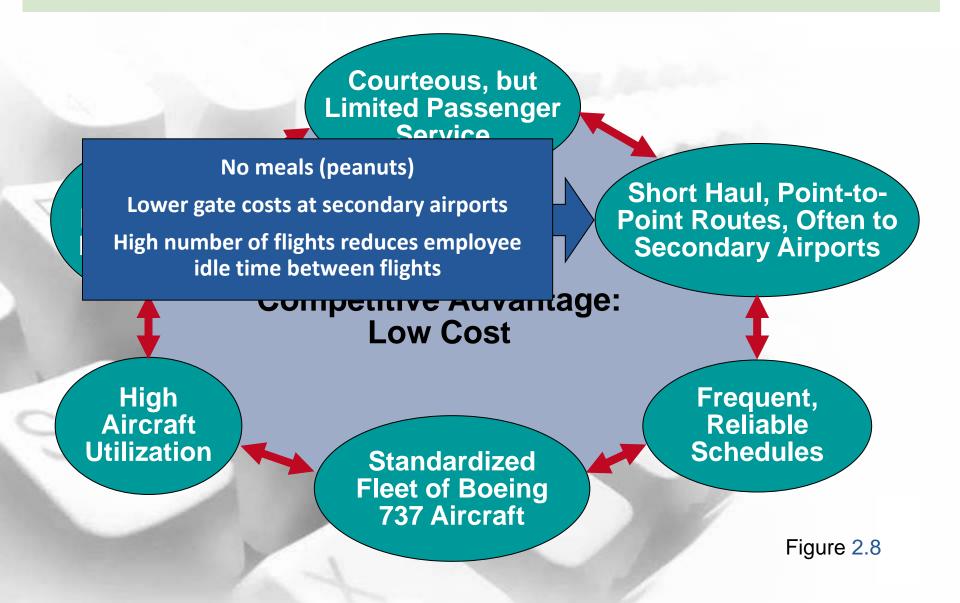
When to reorder, how much to keep on hand Inventory

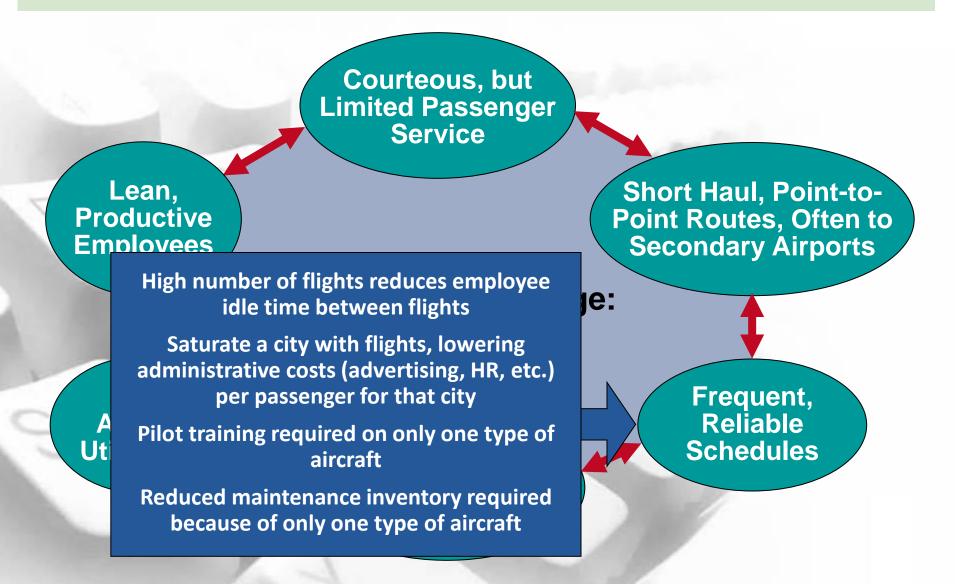
Stable or fluctuating production rate **Schedule**

Repair as required or preventive maintenance Maintenance

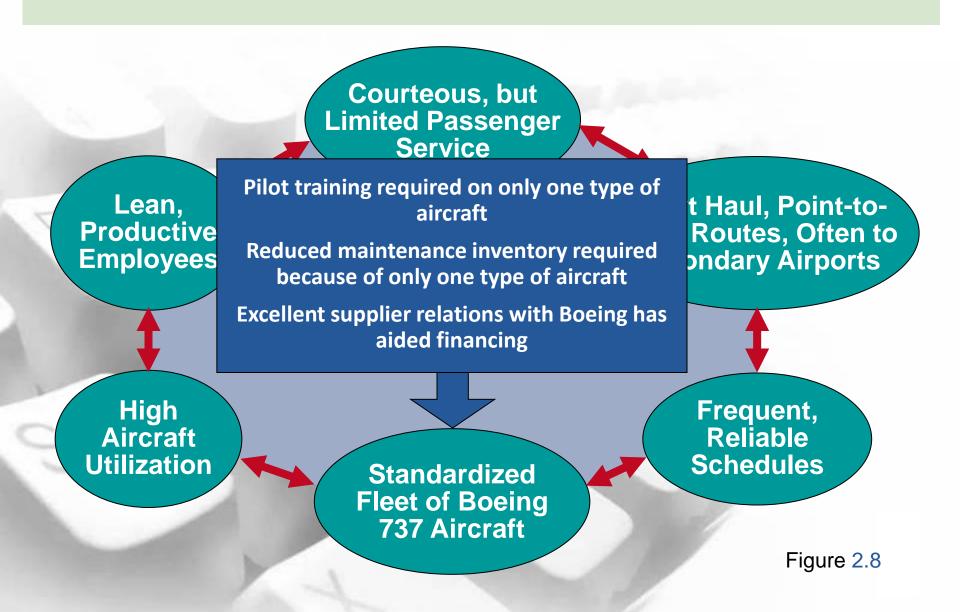




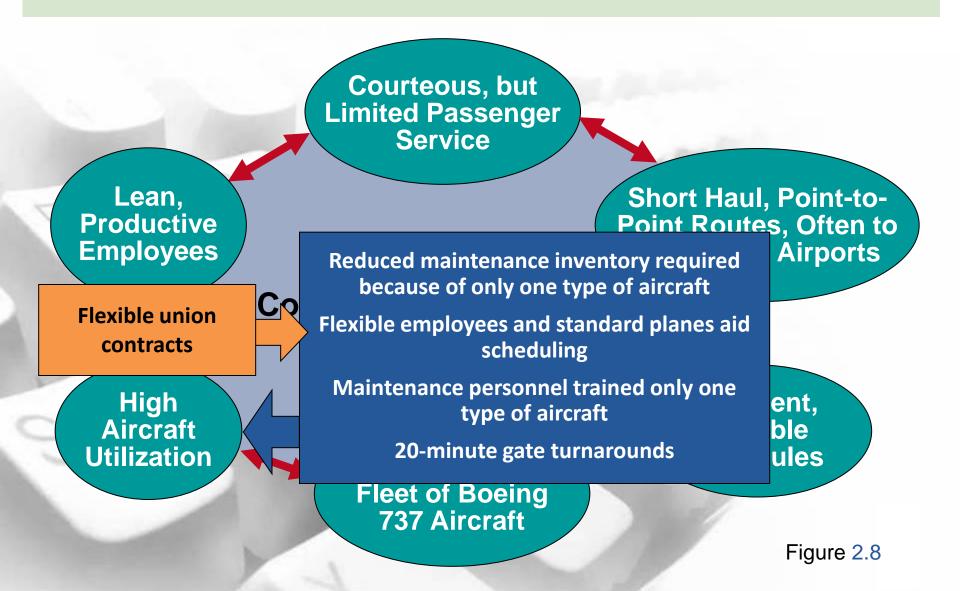




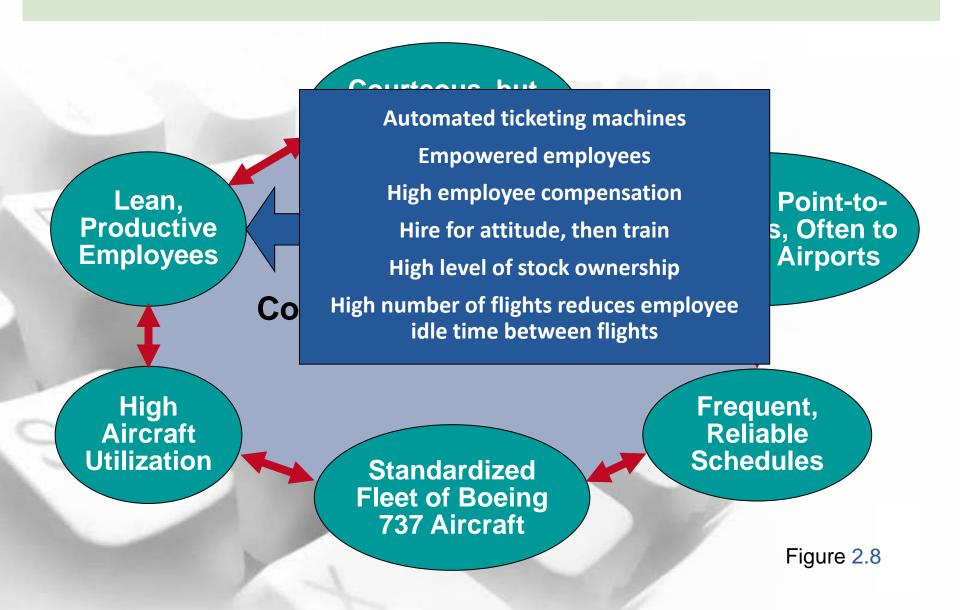
ACTIVITY MAPPING AT SOUTHWEST AIRLINES



ACTIVITY MAPPING AT SOUTHWEST AIRLINES



ACTIVITY MAPPING AT SOUTHWEST AIRLINES



Implementing Strategic Decisions

	Operations Strategies of Two Drug Companies		
		BRAND NAME DRUGS, INC.	GENERIC DRUGS CORP.
	COMPETITIVE ADVANTAGE	PRODUCT DIFFERENTIATION STRATEGY	LOW COST STRATEGY
/	Product selection and design	Heavy R&D investment; extensive labs; focus on development in a broad range of drug categories	Low R&D investment; focus on development of generic drugs
	Quality	Quality is major priority, standards exceed regulatory requirements	Meets regulatory requirements on a country-by-country basis, as necessary
-	Process	Product and modular production process; tries to have long product runs in specialized facilities; builds capacity ahead of demand	Process focused; general production processes; "job shop" approach, short-run production; focus on high utilization
7	Location	Still located in city where it was founded	Recently moved to low-tax, low-labor-cost environment

Implementing Strategic Decisions

	Operations Strategies of Two Drug Companies		
		BRAND NAME DRUGS, INC.	GENERIC DRUGS CORP.
	COMPETITIVE ADVANTAGE	PRODUCT DIFFERENTIATION STRATEGY	LOW COST STRATEGY
	Layout	Layout supports automated product- focused production	Layout supports process-focused "job shop" practices
	Human resources	Hire the best; nationwide searches	Very experienced top executives provide direction; other personnel paid below industry average
	Supply chain	Long-term supplier relationships	Tends to purchase competitively to find bargains
	Inventory	Maintains high finished goods inventory primarily to ensure all demands are met	Process focus drives up work-in- process inventory; finished goods inventory tends to be low
	Scheduling	Centralized production planning	Many short-run products complicate scheduling
	Maintenance	Highly trained staff; extensive parts inventory	Highly trained staff to meet changing demands

Strategic Planning, Core Competencies, and Outsourcing

- Outsourcing transferring activities that traditionally been internal to external suppliers
- Accelerating due to
 - Increased technological expertise
 - More reliable and cheaper transportation
 - Rapid development and deployment of advancements in telecommunications and computers

Strategic Planning, Core Competencies, and Outsourcing

- Subcontracting contract manufacturing
- Outsourced activities
 - Legal services
 - Travel services
 - Payroll

- Production
- Surgery

Theory of Comparative Advantage

- If an external provider can perform activities more productively than the purchasing firm, then the external provider should do the work
- Purchasing firm focuses on core competencies
- Drives outsourcing

Risks of Outsourcing

Potential Advantages and Disadvantages of Outsourcing		
ADVANTAGES	DISADVANTAGES	
Cost savings	Increased logistics and inventory costs	
Gaining outside expertise	Loss of control (quality, delivery, etc.)	
Improving operations and service	Potential creation of future competition	
Maintaining a focus on core competencies	Negative impact on employees	
Accessing outside technology	Risks may not manifest themselves for years	

Rating Outsourcing Providers

- Insufficient analysis most common reason for failure
- Factor rating method
- Points and weights assigned for each factor to each

RATING PROVIDER SELECTION CRITERIA

Factor Ratings Applied to National Architects's Potential IT Outsourcing Providers

FACTOR (CRITERION)

- 1. Can reduce operating costs
- 2. Can reduce capital investment
- 3. Skilled personnel
- 4. Can improve quality
- 5. Can gain access to technology not in company
- 6. Can create additional capacity
- 7. Aligns with policy/philosophy/culture

Global Operations Strategy Options

