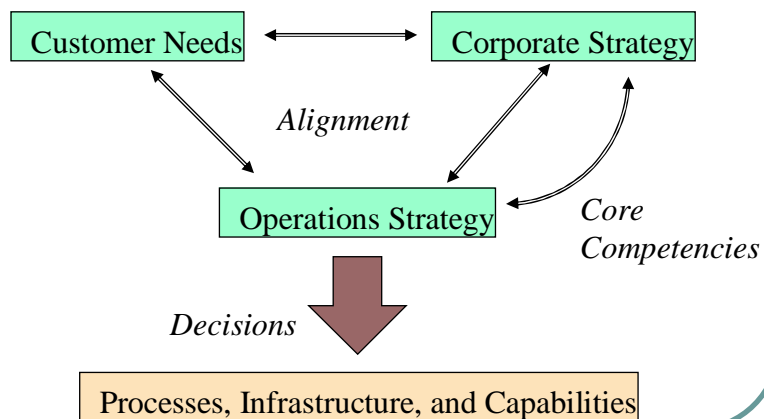


Operations Management

For Competitive Advantage

Operations Strategy and Competitiveness

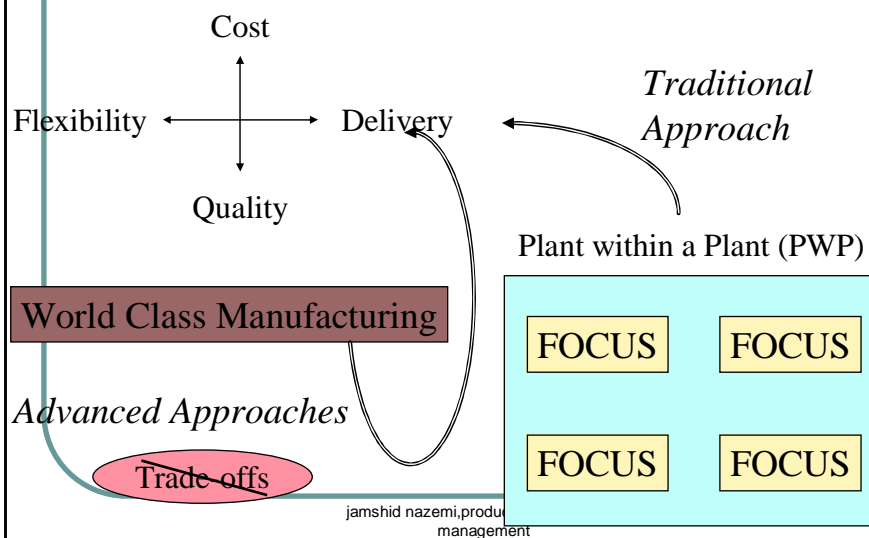
Operations Strategy



Operations Priorities

- Cost
- Quality
- Delivery Flexibility
- Delivery Speed
- Delivery Reliability
- Coping with Changes in Demand
- Flexibility and New Product Introduction Speed
- Other Product-Specific Criteria

Dealing with Trade-offs



STRATEGIC OPERATIONS FACTORS of People, Plants, Processes, Parts, Planning/Control

- ◆ TECHNOLOGY - EQUIP. AUTOMATION, IT, ELECTRONIC LINKS
- ◆ WORKFORCE - SKILLS, WAGE POLICIES, EMPLOYMENT SECURITY
- ◆ QUALITY - DEFECT PREVENTION, MONITORING, INTERVENTION, CUSTOMER SATISFACTION
- ◆ CAPACITY AVAILABILITY - AMOUNT, TIMING, AND TYPE - Priorities Vs. Capacity

FACTORS CONTINUED

- ◆ FACILITIES - SIZE, LOCATION, SPECIALIZATION
- ◆ VERTICAL INTEGRATION - USE OF OUTSIDE SUPPLIERS
- ◆ ERPS - OPERATIONS PLANNING, MAT'LS CONTROL, CENTRALIZATION
- ◆ ORGANIZATIONAL - STRUCTURE, CONTROL/REWARD SYSTEMS, FLEETS OF FOCUSED FACTORIES

World-Class Organizations

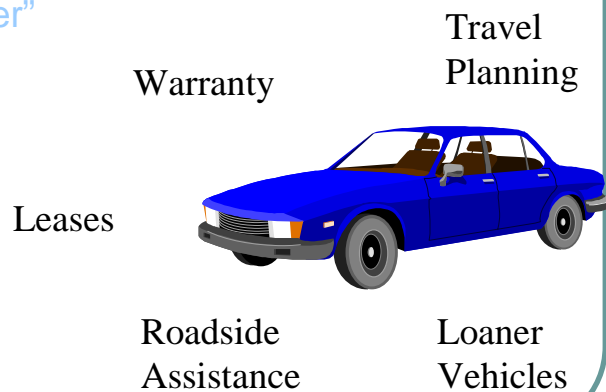
World-class Organizations no longer view *cost*, *quality*, *speed of delivery*, and even *flexibility* as tradeoffs.

They have become *order qualifiers*.

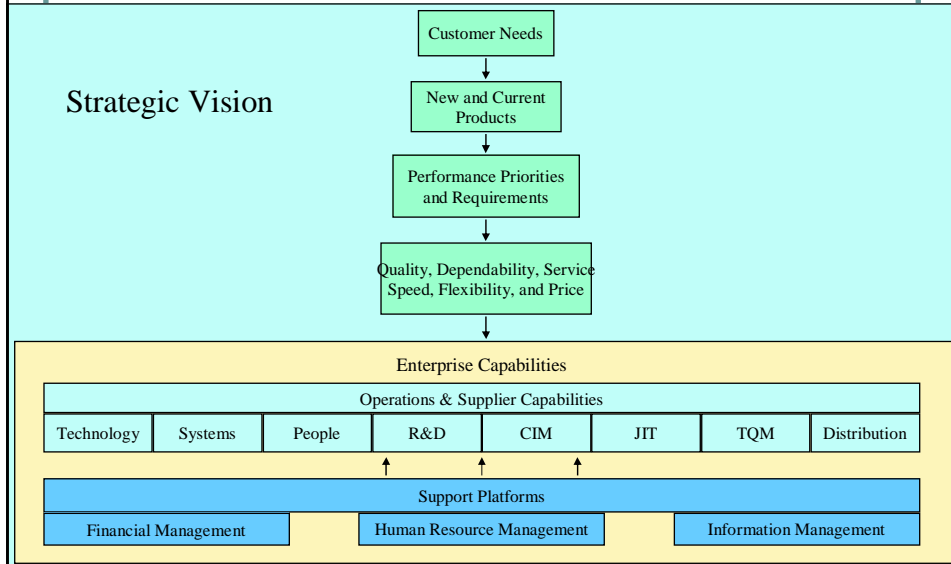
What are the *order winners* in today's market?

Service Breakthroughs

- Service can be an "order winner"



A Framework for Organizational Strategy



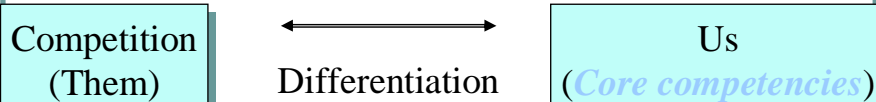
OPERATIONS STRATEGY OBJECTIVES

- ◆ TRANSLATE MARKET REQ'M'TS TO SPECIFIC OPERATIONS PRIMARY MISSIONS
- ◆ MAKE PLANS TO ASSURE OPERATIONS IS CAPABLE TO ACCOMPLISH P.MISSION.
- ◆ STEPS
 - SEGMENT MARKET BY PRODUCT GROUPS
 - IDENTIFY PRODUCT REQ'M'TS
 - DETERMINE ORDER WINNERS AND QUALIFIERS
 - CONVERT ORDER WINNERS INTO SPECIFIC PERFORMANCE REQ'OMTS

Strategy Begins with Priorities

- Consider the case of a personal computer manufacturer.
 1. How would we segment the market according to product group?
 2. How would we identify product requirements, demand patterns, and profit margins for each group?
 3. How do we identify order winner and order qualifiers for each group?

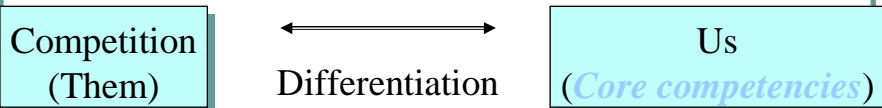
4. How do we convert order winners into specific performance requirements?



Strategy Begins with Priorities

- Consider the case of a Business School.
 1. How would we segment the market according to product group?
 2. How would we identify product requirements, demand patterns, and profit margins for each group?
 3. How do we identify order winner and order qualifiers for each group?

4. How do we convert order winners into specific performance requirements?



Operations' Role in Overall Organizational Strategy

- Stage 1--**Internally Neutral**
 - Minimize operations's negative potential
 - Management control systems
- Stage II--**Externally Neutral**
 - Achieve parity with competitors
 - Follow industry practice
- Stage III--**Internally Supportive**
 - Support the business strategy
- Stage IV-- **Externally Supportive**
 - Operations-based competitive advantage

Four Stages of Service Firm Competitiveness Consider Higher Education as an Example

- Stage I. **Available for Service**
 - Reactive, non-performance-based survival
- Stage II. **Journeyman**
 - Firm neither sought nor avoided
 - Reliable but uninspired operation

Four Stages of Service Firm Competitiveness (continued)

- Stage III. **Distinctive Competence Achieved**
 - Reputation for meeting customers' expectations
 - Customer-focused operations--management support
- Stage IV. **World Class Service Delivery**
 - Firm name synonymous with service excellence--focus on delighting rather than satisfying customers
 - Continuous learning and improvement of operations

MIT Commission on Industrial Productivity *1985 Recommendations - Still Very Accurate Today*

- Place less emphasis on short-term financial payoffs and invest more in R&D.
- Revise corporate strategies to include responses to foreign competition.
 - greater investment in people and equipment
- Knock down communication barriers within organizations and recognize mutuality of interests with other companies and suppliers.

MIT Commission on Industrial Productivity

1985 Recommendations

- Recognize that the labor force is a resource to be nurtured, not just a cost to be avoided.
- Get back to basics in managing production/ operations.
 - Build in quality at the design stage.
 - Place more emphasis on process innovations rather than focusing sole attention on product innovations - dramatically improve costs, quality, speed, & flex.

U. S. Competitiveness Drivers

- Product Development - NPD
 - Teams speed development and enhance manufacturability
- Waste Reduction (JIT Philosophy)
 - WIP, space, tool costs, and human effort
- Improved Customer-Supplier Relationships
 - Look for Win-Win! Taken from Japanese Keiretsu
- Early Adoption of IT Technology Including
 - PC Technology
 - Internet
 - ERPS

SHORTEN PRODUCT CYCLE TIMES

- ◆ GM 60 TO 40 MOS. BUICK
- ◆ HP 52 TO 24 MOS. PRINTERS
- ◆ IBM 48 TO 13 MOS. PCs
- ◆ HONEYWELL 48 TO 12 MOS. THERM'ST.
- ◆ INGERSOLL 42 TO 12 MOS. GRINDER
- ◆ WARNER ELECT 36 TO 10 MOS. BRAKE