TIM 50

- Announcements
  - Project team and company assignments to be posted soon
  - Project proposal due 4/24

- Reading
  - Finish Laudon and Laudon Ch 8 by Tuesday
# Database Tutorials

- Watch videos on ecommons
- Attend 1 of 2 optional tutorial sessions
- Scheduled:

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<th>JANUARY</th>
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- Baskin 109
Porter Supporting Strategies

- **Innovation**
  - Can reduce costs and or **differentiate**

- **Growth**
  - Help offset fixed **costs**
  - Establish reputable brand (differentiate)

- **Alliances**
  - Achieve more complete solution (differentiate)
  - Integration of each others technology may **reduce costs**
Rules Regarding Strategies

- Must pick *at least* one of the two primary strategies.

- Can pick any combination of supporting strategies.

Let’s test the logic of this using Dell and Wal-Mart Stores.
Dell, Inc. Strategies

Primary Strategy:
- Differentiation
- Least Cost

Supporting Strategies:
- Innovation
- Growth
- Alliances
Wal-Mart Strategies

Primary Strategy:
Least Cost
Differentiation

Supporting Strategies:
Innovation
Growth
Alliances
Porter Model Tips

1. Defining the industry can cause major problems

2. Identify the specific market being evaluated

3. Your company is the “Strategic Business Unit”

4. Identify rivals by name for majors, by category for minor rivals
Porter Model Tips

5. Be sure to address the power implications of both customers and suppliers. Power gets them what?

6. Identify buyers and suppliers by categories and mention major ones by names.

7. Summarize your Porter Model analysis.
What do Porter Models Have to do with IT?

Any ideas?
Porter Model and Information Systems:

1. Build **barriers** to prevent a company from **entering** an industry

2. Build in costs that would make it difficult for a customer to **switch** to another supplier

3. Change the basis for competition within the industry

4. Change the balance of power between a company and its customers or suppliers

5. Provide the basis for new products and services
Information System Strategies for Dealing with Competitive Forces

• Low-cost leadership
  • Use information systems to achieve the lowest operational costs and the lowest prices.
  
  • E.g. Wal-Mart
    • Inventory replenishment system sends orders to suppliers when purchase recorded at cash register.
    • Minimizes inventory at warehouses, operating costs.
    • Efficient customer response system.
Information System Strategies for Dealing with Competitive Forces

• Product differentiation
  • Use information systems to enable new products and services, or greatly change the customer convenience in using your existing products and services.
  • E.g., Google’s continuous innovations, Apple’s iPhone.
  • Use information systems to customize, personalize products to fit specifications of individual consumers.
    • E.g., Dell
Information System Strategies for Dealing with Competitive Forces

• Focus on market niche.
  • Use information systems to enable specific market focus, and serve narrow target market better than competitors.
    • Analyzes customer buying habits, preferences
    • Advertising pitches to smaller and smaller target markets
  • E.g., Hilton Hotel’s OnQ System
    • Analyzes data collected on guests to determine preferences and guest’s profitability
Information System Strategies for Dealing with Competitive Forces

- Strengthen customer and supplier intimacy.
  - Strong linkages to customers and suppliers increase switching costs and loyalty
  - **Toyota**: uses IS to facilitate direct access from suppliers to production schedules
    - Permits suppliers to decide how and when to ship suppliers to factories, allowing more lead time in producing goods.
  - **Amazon**: keeps track of user preferences for purchases, and recommends titles purchased by others
Information System Strategies for Dealing with Competitive Forces

- Some companies pursue several strategies at the same time.
  - Dell emphasizes low cost plus customization of products.
- Successfully using IS to achieve competitive advantage requires precise coordination of technology, organizations, and people.
The Internet’s Impact on Competitive Advantage

- **Existing competitors:** widens market, increasing competitors, reducing differences, pressure to compete on price

- **New entrants:** reduces barriers to entry (e.g., need for sales force declines), provides technology for driving business processes

- **Substitute products and services:** facilitates creation of new products and services

- **Customers’ bargaining power:** bargaining power shifts to customer

- **Suppliers’ bargaining power:** procurement over Internet raises power over suppliers, suppliers can benefit from reduced barriers to entry and elimination of intermediaries
Porter’s Value Chain

- The Competitive Model deals with the environment within which a company competes.

- The Value Chain addresses the flow of a product through the organization.
  - It starts with the original idea in research and tracks its progress all the way to the customers.
The Business Value Chain Model

- Highlights activities in a business where
  - competitive strategies can best be applied
  - ISs are likely to have a strategic impact.
  - Primary activities
  - Support activities
Figure 3-2
The Value Chain Model

**Firm Value Chain**

**Primary Activities**
- Inbound Logistics: Automated warehousing systems
- Operations: Computer-controlled machining systems
- Sales and Marketing: Computerized ordering systems
- Service: Equipment maintenance systems
- Outbound Logistics: Automated shipment scheduling systems

**Support Activities**
- Administration and Management: Electronic scheduling and messaging systems
- Human Resources: Workforce planning systems
- Technology: Computer-aided design systems
- Procurement: Computerized ordering systems

**Industry Value Chain**

Suppliers' Suppliers → Suppliers → Firm → Distributors → Customers

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Synergies, Core Competencies, and Network-Based Strategies

- **Synergies:**
  - When output of some units can be used as inputs to other units
  - When two firms can pool markets and expertise (e.g., recent bank mergers)
  - Lower costs and generate profits
  - Enabled by information systems that ties together disparate units so they act as whole
Synergies, Core Competencies, and Network-Based Strategies

• Network-based strategies:
  • **Network economics:**
    • Marginal costs of adding another participant are near zero, whereas marginal gain is much larger
    • E.g., larger number of participants in Internet, greater value to all participants
  • **Virtual company:**
    • Uses networks to link people, resources, and ally with other companies to create and distribute products without traditional organizational boundaries or physical locations
Synergies, Core Competencies, and Network-Based Strategies

• Core competency:
  • Activities for which firm is world-class leader.
    • E.g., world’s best miniature parts designer, best package delivery service.
  • Relies on knowledge that is gained over many years of experience as well as knowledge research.
  • Any information system that encourages the sharing of knowledge across business units enhances competency.
    • E.g., Procter & Gamble uses intranet to help people working on similar problems share ideas and expertise.
Disruptive Technologies: Riding the Wave

- Disruptive technologies:
  - Technologies with disruptive impact on industries and businesses, rendering existing products, services and business models obsolete:
    - Personal computers
    - World Wide Web
    - Internet music services
  - First movers versus fast followers
    - First movers of disruptive technologies may fail to see potential, allowing second movers to reap rewards (fast followers)
Prior to the Internet, competing globally was only an option for huge firms able to afford factories, warehouses, and distribution centers abroad.

The Internet drastically reduces costs of operating globally.

Globalization benefits:
- Scale economies and resource cost reduction
- Higher utilization rates, fixed capital costs, and lower cost per unit of production
- Speeding time to market
Hewlett-Packard and other electronics companies assign distribution and production of their products to a number of different countries.
Global Business and System Strategies

- Domestic exporters
  - Heavy centralization of corporate activities in home country
- Multinationals
  - Concentrates financial management at central home base
  - decentralize production, sales, and marketing to other countries
- Franchisers
  - Product created, designed, financed, and initially produced in home country
  - rely on foreign units for further production, marketing, and human resources
- Transnationals
  - Regional (not national) headquarters and perhaps world headquarters; optimizing resources as needed
Global System Configurations

• Centralized systems:
  • All development and operation at domestic home base

• Duplicated systems:
  • Development at home base but operations managed by autonomous units in foreign locations

• Decentralized systems:
  • Each foreign unit designs own solutions and systems

• Networked systems:
  • Development and operations occur in integrated and coordinated fashion across all units
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<th>SYSTEM CONFIGURATION</th>
<th>Strategy</th>
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<td></td>
<td>Domestic Exporter</td>
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<tr>
<td>Centralized</td>
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The large Xs show the dominant patterns, and the small Xs show the emerging patterns. For instance, domestic exporters rely predominantly on centralized systems, but there is continual pressure and some development of decentralized systems in local marketing regions.

**Figure 3-5**