ISM 50 - Business Information Systems

Lecture 4

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Announcements

- Read Messerschmitt Ch2.3 for Thursday.
- Read Frito Lay case for Thursday.
- Homework assignment 2 will be posted to web tonight!!!(due in 1 week)

Student Presentations

Review from last class

What is a business process?
- A designed succession of actions to the accomplish of some result in a business.

What is a business function?
- A category of activity in a business that requires people with a particular specialization.
  - IT function, marketing function, sales function, etc.

Porter Competitive Model?

- What is it?
  - A model to help understand the competitive environment in which a company operates.

- What are the "5 forces"?
  - Intra-Industry Competition
  - Bargaining power of Suppliers
  - Bargaining power of Customers
  - Substitutes
  - Threat of New Entrants.

Porter Competitive Model

(Identify the Industry and the Specific Market Being Evaluated)

- Potential New Entrants
- Bargaining Power of Suppliers
- Intra-Industry Rivalry
- Strategic Business Unit
- Bargaining Power of Buyers
- Substitute Products and Services
Intra-Industry Rivalry
- UCSC
- UC campuses, CSU, private universities, community colleges

Bargaining Power of Buyers
- Students
- Parents
- Businesses
- Employers
- Legislators

Bargaining Power of Suppliers
- Faculty
- Staff
- Equipment and service suppliers
- Alumni
- Foundations
- Governments
- IT vendors

Substitute Products and Services
- Internet distance learning
- Books and videos
- Computer-based training
- Company education programs

Potential New Entrants
- Foreign universities
- Shift in strategy by universities or companies

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Porter Competitive Model
Education Industry - Universities

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Porter Model in Business Paper
- You must include a Porter Model in your Business Paper
  - Make it look nice!
  - Narrative analysis of the five forces
    - Identify the industry.
    - Identify the major buyers, suppliers, potential new entrants, substitutes, and intra-industry rivals.
    - Discuss if and why these players put strong or weak competitive pressures on your business.

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Example: Usefulness of Porter Model
- Bob wants to start a dentist office
  - However, Bob did not go to dental school
  - Bob will hire the dentist and other staff
  - Is this a good model?

Suppliers
- Dentist (Alice)

Buyers
- Bob's Dentist Office
- Students
- Public in general
- Insurance companies
- Those wanting cosmetic dentistry

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Example: Usefulness of Porter Model
- Suppose Alice, who is a dentist, opens an office
  - New Entrants: School graduates moving in from other regions
  - Substitutes: Public in general

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"Primary" Porter Strategies
- In economics you will learn a market where
  - Product is a commodity
  - Firms all have the same production costs
  - New firms can enter market at no cost ("free entry")
  - Profits are driven to zero.

- Consequently firms need to
  - Differentiate and/or
  - Achieve Cost leadership

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"Primary" Porter Strategies
- Differentiation—customer values the differences that you provide in products, services or capabilities.

- Cost—become the lowest cost provider. If this is the only primary strategy in the industry, over time there will only be one ultimate winner.
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. To incorrectly define the industry can cause major problems in doing Section I of the business analysis paper.
2. You must identify the specific market being evaluated.
3. Your analysis company is the "Strategic Business Unit."
4. Identify rivals by name for majors, by category for minor rivals if needed to present the best possible profile of rivals.

Porter Model Tips

5. Be sure to address the power implications of both customers and suppliers. Power buys them what?
6. Identify buyers and suppliers by categories versus companies.
7. Summarize your Porter Model analysis.
What do Porter Models Have to do with IT?
Any ideas?

Strategic Application
Evolution
Progression of Information Technology within an enterprise.
Level 1: Strategic
Level 2: Offensive
Level 3: Defensive
Level 4: Cost-Justified
Level 5: Controlled

The progression is from bottom to top.

Strategic Uses of Information Technology

Strategic Uses of Information Technology

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?

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.
**Generic Value Chain**

- **FIRM INFRASTRUCTURE**
  - HUMAN RESOURCE MANAGEMENT
  - TECHNOLOGY DEVELOPMENT
  - PROCUREMENT

- **INBOUND LOGISTICS**
- **OPERATIONS**
- **OUTBOUND LOGISTICS**
- **MARKETING AND SALES**
- **SERVICE**

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**Value Chain Purpose**

- A way of classifying a company's activities and how they help deliver value to customer.
- A framework for evaluating decisions like outsourcing, or deployment of IT.

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**Things to Remember Regarding the Value Chain**

- The ultimate objective is value to customer.
- As a new product and/or service moves through the value chain, it is important to maximize value-add activities and minimize things that do not add value to customer.
- Functional departments must be sure to emphasize the ultimate goal of value to customer and not do things that seem to make them look good but contradict the ultimate objective.

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**Simple Value Chain for Manufacturing Industry**

- **Research and Development**
- **Engineering**
- **Production**
- **Manufacturing**
- **Marketing**
- **Sales and Distribution**
- **Service**

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**Examples of IT Supporting Value Chain**

- **Support Processes**
  - Administration and Support Services
  - Collaborative e-Commerce/Intranet
  - Human Resource Management
  - Employee Benefit Administration
  - Technology Development
  - Product Development/External Partners
  - Procurement of Technical/Engineering Supplies
  - e-Commerce/B2C:
    - Payment Processing
  - Marketing and Sales
  - Distribution
  - Customer Service
  - Finance

- **Primary Business Processes**
  - Order Management
  - On-Line Trading
  - Robotic/Manual Warehousing
  - Order Processing
  - Advanced Small Parts Manufacturing

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**Simple Value Chain for Retail Industry**

- **Partnering with Vendor**
- **Buying**
- **Managing Inventory**
- **Distributing Inventory**
- **Operating Stores**
- **Marketing and Selling**