TIM50 - Business Information Systems

Lecture 3

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Announcements

- Read
  - Otis Case
    - Assignment about reading due Thursday.
      - (On ecommons)
  - Begin Laudon & Laudon Ch 8 (83-97 until end of section 2, can skip case on 93)
Database Tutorial Sessions

- Try to attend ONE of the following three sessions
  - (they will all cover the same stuff)

Oakes (RM 205)

- Monday, 1/19/15, 2:00-3:30pm
- Wednesday, 1/21/15 2:00-3:30pm
- Friday, 1/23/15 2:00-3:30pm
Figure 2-12

Time/Space Collaboration Tool Matrix

same time synchronous

Face to face interactions
decision rooms, single display
groupware, shared table, wall
displays, roomware,...

Continuous task
team rooms, large public display,
shift work groupware, project
management,...

different time asynchronous

Remote interactions
video conferencing, instance
messaging, charts/MUDs/virtual
worlds, shared screens, multi-user
editors,...

Communication + coordination
e-mail, bulletin boards, blogs,
asynchronous conferencing, group
calenders, workflow, version control,
wikis,...

same place co-located

different place remote
The Information Systems Department

- Programmers
- Systems analysts
  - Principle liaisons to rest of firm
- Information systems managers
  - Leaders of teams of programmers and analysts, project managers, physical facility managers, telecommunications managers, database specialists, managers of computer operations, and data entry staff
- Senior managers: CIO, CSO, CKO
- End users
- External specialists
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
- Intra-Industry Rivalry
  - Strategic Business Unit
- Bargaining Power of Suppliers
- Bargaining Power of Buyers
- Substitute Products and Services
Porter Competitive Model
US Mobile Telephony Industry

- **Bargaining Power of Suppliers**
  - Handset makers
  - Equipment Manufacturers
  - Employees

- **Intra-Industry Rivalry**
  - SBU: AT&T
  - Rivals: Verizon, Sprint-Nextel, T-Mobile

- **Potential New Entrants**
  - Foreign Telcos
  - Change of strategy from player in another industry

- **Substitute Products and Services**
  - VoIP services; VoIP over wifi
  - Messaging, social-networks over wifi

- **Bargaining Power of Buyers**
  - Retail Customers
  - Corporate Customers
Porter Model in Business Paper

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

No! Dentist has too much bargaining power, she could always go into business for herself.
Example: Usefulness of Porter Model

- Suppose Alice, who is a dentist, opens an office

- **New Entrants**
  - Dental School Graduates
  - Dentists moving in from other regions

- **Suppliers**
  - Staff
  - Hygienists

- **Intra-industry rivals**
  - SBU: Alice’s Dentist Office
  - Other local dentist offices

- **Substitutes**
  - Alternative Medicine?

- **Buyers**
  - Public in general
  - Insurance companies
  - Those wanting cosmetic dentistry
“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
“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 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. 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, allowing more lead time in producing goods.
  - *Amazon*: keeps track of user preferences for purchases, and recommends titles purchased by others