ISM 50 - Business Information Systems

Lecture 5

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Announcements

- **Read**
  - Messerschmitt Ch 2.3 (38-50)
  - Messerschmitt Ch 3.1-3.3 (59-82)

- **Due Tuesday**
  - For those assigned News Folio
    - First News Folio Article

- **Due Next Thursday:**
  - Assignment 2

- **10/19:**
  - Business paper proposal due
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

Primary Activities:
- Inbound Logistics
- Operations
- Outbound Logistics
- Marketing and Sales
- Service
Value Chain Purpose

- A way of classifying a company's activities and how they help deliver value to the customer.

- A framework for evaluating decisions like outsourcing, or deployment of IT.
Things to Remember Regarding the Value Chain

- The ultimate objective is value to customer.

- As a new product and/or services moves through the value chain,
  - maximize value-add activities
  - minimize/eliminate things that do not add value to customer.

- Functional departments must be sure to emphasize the ultimate goal of value
Simple Value Chain for Manufacturing Industry
Examples of IT Supporting Value Chain

- Administrative Coordination and Support Services
- Collaborative Workflow Intranet
- Human Resources Management
- Employee Benefits Intranet
- Technology Development
- Product Development Extranet with Partners
- Procurement of Resources
- e-Commerce Web Portals for Suppliers

Support Processes

Primary Business Processes

- Inbound Logistics
- Automated Just-in-Time Warehousing
- Operations
- Computer-Aided Flexible Manufacturing
- Outbound Logistics
- Online Point-of-Sale and Order Processing
- Marketing and Sales
- Targeted Marketing
- Customer Service
- Customer Relationship Management

Competitive Advantage
Other terms in Chapter 2

- Explicit knowledge
  - That which can be written down

- Tacit Knowledge
  - That which is can not be written down
  - Example: How to Ride a bicycle.

- Much of a company’s value is in its knowledge
  - Patents, documents
  - Tacit knowledge in employee’s heads
Other terms in Chapter 2

- **Knowledge-Creating Company**
  - Create new business knowledge
  - Disseminate knowledge throughout company

- **Knowledge Management Systems**
  - Facilitate this dissemination
  - Often, like a search engine on a company intranet.

- **Aside: might a knowledge management system affect the negotiating power of employees?**
Chapter 2 Summary

- Porter models are important as a way to evaluate competitive environment and/or internal processes.
- Use Porter strategy terminology in discussing how an industry and companies in the industry compete.
Frito Lay Case
Frito Lay

- **Market:**
  - Salty Snacks

- **Who owns Frito Lay**
  - Pepsico

- **Competitors:**
  - P & G (Pringles)
  - Anheuser Busch (Eagle Snacks)
  - Borden (Wise Chips)
  - Small Regionals

- **Sales Force**
  - 10000 people
  - Drive around in trucks; sell and deliver snacks
Frito Lay

- **Growth**
  - In the 70s, “double digit”
  - Mid 80s - slowed to single digit.
  - Foreign Expansion?
    - Not for Frito-Lay division, because PepsiCo has a separate international snacks div.

- **Good:**
  - Several top brands

- **Bad**
  - Monolithic national approach
Frito-Lay

- Segmentation
  - Supermarkets
  - “up/down street”

- Regionalized Micro-Marketing
  - Targeted smaller brands to regional customers

- Hand Held Computer
  - Small computer for each salesperson to carry around
  - Log sale transaction data.
Frito-Lay

- 3 stated objectives
  - Replace optical scanner system used now
    - IBM will stop supporting it soon
  - $\frac{1}{2}$ hour per day per driver paper-work reduction
  - Marketing effectiveness
    - Detailed sales data
      - will help make regional marketing decisions
      - Negotiate with stores for more shelf space
Frito-Lay

Cost of Implementation:

- Data Center upgrade
  - $1.2 million
- Machinery in Truck
  - 10000 X 3000 = $30 million
- Computers in distribution centers
  - 5-10 million?
- 45 Systems Development Professionals
  - $70K x 45 = ~3 million

TOTAL: 45-55 million
Frito Lay

✗ To have a 10% Rate of Return, what would the benefits per year have to be?
   (for simplicity assume these benefits are received every year forever)
~5 million
Break into discussion groups of 3 or 4

- What are the risks the project is facing?

- What is Frito Lay doing to mitigate these risks?

- Does your group think the potential benefits are worth the risks and costs? Why or why not?