Organizational Strategy, Competitive Advantage, and Information Systems

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Goals

• Understand the strategic planning process
• Discuss methods for evaluating strategic initiatives
• Identify competitive advantage frameworks
• Discuss ways in which information systems enable and improve business processes
Where does all of this begin?

- Organizations “mission”
- Then “strategy”
- Where do “information systems” fit?
Focus Stories: Deere and Others
**Mission** is the reason for existence for an organization.

**Strategy** tells the organization how to get there.

**Tactics** are the methods and actions taken to accomplish strategies.
Rita is a high school student. She would like to have a career in business, have a good job, and earn enough income to live comfortably

- **Mission:** Live a good life
- **Goal:** Successful career, good income
- **Strategy:** Obtain a college education
- **Tactics:** Select a college and a major
- **Operations:** Register, buy books, take courses, study, graduate, get job
Today, organizations need a wide variety of information systems for conducting their day-to-day business.

Specifically, what will our information strategy be in order to give a competitive advantage?
Frameworks for Strategic Information Systems

Tools that can be used to identify strategic information systems initiatives

- Porter’s Five Competitive Forces Model
- Porter’s Value Chain
- Information Systems SWOT Analysis
SWOT Analysis to Strategy Formulation

Mission

Strategy

Internal Strengths

Internal Weaknesses

External Opportunities

External Threats
• How effectively an organization meets the wants and needs of customers relative to others that offer similar goods or services.
Competitive Product/Service Options

- Price
- Quality
- Service
- Differentiation
- Flexibility
- Time
• A **business process** is:
  an ongoing collection of related activities that create a product or service of value to the organization, its business partners, and/or its customers.

• **Comprised of three elements:**
  • Inputs
  • Resources
  • Outputs
Understand Business Processes

• No single functional area is responsible
• Information systems provide the bond between functional areas
Business Processes (Operations)

Value-added

Inputs
Land
Labor
Capital
Information

Transformation/conversion process

Outputs
Goods
Services

Feedback

Control

Feedback

Feedback
Example: Purchasing Airline Tickets Online

**Traveler**

- Plan Trip
- Check Flights
  - Seats Available?
    - NO
    - Seats Available?
      - YES
      - Submit Ticket Order
    - YES
    - Submit Ticket Order
    - Receive e-Ticket
- Receive Ticket Order
- Issue e-Ticket

**Airline Web Site**

- Receive Ticket Order
- Seats Available
  - YES
  - Reserve Seats
    - Use Credit Card?
      - YES
      - Charge Credit Card
        - Charge OK?
          - YES
          - Confirm Flight(s)
            - Issue e-Ticket
          - NO
          - Notify Traveler
        - NO
        - Notify Traveler
  - NO
  - Notify Traveler
- Frequent Flyer Mileage Sufficient?
  - NO
  - Notify Traveler
  - YES
  - Subtract Mileage
    - Notify Traveler
Another Business Process: Taking this Online Course
Information Systems & Business Processes

• IS’s vital role in three areas of business processes
  1. Executing the process
     • Helping with timing
     • Providing required data
     • Providing a means to complete the task
  2. Capturing and storing process data
  3. Monitoring process performance
     • Information for monitoring & control
     • Information for performance improvement
Initial and Ongoing Processes

• The changing business environment

• Install good business processes

• Reengineering (BPR) and Improvement (BPI)
  • Degree of improvements
  • Customer satisfaction
  • Cost/time/quality
  • Product/service differentiation

• Management (BPM)
Market Pressures

• **Globalization**
  • *The World is Flat*, by Thomas Friedman

• **Changing Nature of the Workforce**
  • Workforce is Becoming More Diversified
    • Women
    • Single Parents
    • Minorities
    • Persons with Disabilities
  • **IT is Enabling Telecommuting Employees**

• **Powerful Customers**
  • Increasing consumer sophistication & expectations (google)
Societal / Political / Legal Pressures

• Social Responsibility
  • Environment
• Compliance with Government Regulations
• Protection against Terrorist Attacks
  • Cyberattacks
• Ethical Issues
  • Email
Successful Business-IT Alignments

• Clear understanding of how IT contributes to business processes
• Knowledgeable workers and management
• Ability to plan, coordinate, and implement information systems
• Employee training
• Ability to monitor the improvements
• “Continuous improvement”
Unsuccessful Business-IT Alignments

- Business managers and IT managers have different objectives
- The business and IT departments are ignorant of the other group’s expertise
- A lack of communication
- Lack of hiring qualified employees