Day 2
The Information Systems Strategy Triangle

Learning Objectives

• Achieve a basic understanding of strategy and organizations
  – Review generic strategy models
  – Review organization applications
• See the balancing relationship between business strategy, org. structure and IS strategy
What is Strategy?

- A firm’s *business strategy* determines…
  - Products and services the firm produces
  - Industries in which the firm competes
  - Competitors, suppliers, and customers of the firm
  - Long-term goals of the firm
Thinking about Strategy

• Strategy is something that should be considered at multiple levels
  – Business
  – Firm
  – Industry

What is a Strategic Information System?

• Changes the goals, operations, products, services, or environmental relationships of organizations to help gain an edge over competition
• Information technology that alters basic competitive structure of industry
Low-Cost Producer: Role of IT

- Efficient Customer Response Systems
  - Directly links consumer behavior back to distribution, production, and supply chains
  - Performed through Supply Chain Management
- Example – Baxter International

BUSINESS STRATEGY FRAMEWORKS

- Porter’s Strategies Framework (and variants)
  1. Five forces
  2. Value chain
  3. Value net
- Hypercompetition and the New 7-S’s framework (D’Aveni)
- Co-opetition (Brandenburg and Nalebuff)
Five Forces Model

**FIGURE 3-15** Porter's competitive forces model.

- New Market Entrants
- Substitute Products and Services
- The Firm
- Traditional Industry Competitors
- Suppliers
- Customers

Ecosystem Strategic Model

**FIGURE 3-16** An ecosystem strategic model.

- New Market Entrants
- Substitute Products and Services
- Suppliers
- Industry 1
- Industry 2
- Industry 3
- Industry 4
- Customers

Industry Ecosystem
Strategic Information Systems in the five forces framework

**Potential threat of new entrants**
- Strategic use
  - Cost effectiveness
  - Market access
  - Differentiation of product or service

**Bargaining power of suppliers**
- Strategic use
  - Selection of supplier
  - Threat of backward integration

**Industry competitors**
- Strategic use
  - Strategic use
    - Cost effectiveness
    - Market access
    - Differentiation of product or service

**Bargaining power of buyers**
- Strategic use
  - Buyer selection
  - Switching costs
  - Differentiation

**Threat of substitutes**
- Strategic use
  - Redefine products and services
  - Improve price/performance

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How the Internet Influences Industry Structure

**Threat of substitute products or services**
- Increased competition
- Interchangeability of products
- Customer awareness of substitutes
- Technology and innovation in substitute products

**Bargaining power of suppliers**
- Increased competition
- Interchangeability of products
- Customer awareness of substitutes
- Technology and innovation in substitute products

**Bargaining power of buyers**
- Increased competition
- Interchangeability of products
- Customer awareness of substitutes
- Technology and innovation in substitute products

**Barriers to entry**
- Legal barriers
  - Patents
  - Government regulations
- Economies of scale
  - Economies of density
  - Capital requirements
- Switching costs
  - High cost to switch products
  - High cost to switch suppliers
- Differentiation
  - Brand loyalty
  - Customer satisfaction

**Barriers to exit**
- Switching costs
  - High cost to exit market
- Differentiation
  - Brand loyalty
  - Customer satisfaction
- Economies of density
  - Economies of scale
- Customer awareness of substitutes
  - Easy access to substitute products

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For more information on strategic management techniques, visit the Strategic Management Institute website at [www.strategicmanagement.org](http://www.strategicmanagement.org).
Business-Level Strategy: Value Chain

- A series of processes in organization
  - Some add value
  - Some reduce value
- Information technology can improve these processes

The Value Chain

Figure 3.11 (Laudon & Laudon 2006)
Gaining competitive value

• The Value Chain model suggests that competition can come from two sources:
  – **Lowering the cost** to perform an activity and
  – **Adding value to a product or service** so buyers will be willing to pay more.

• Lowering costs only achieves competitive advantage if the firm possesses information on the competitor’s costs.

• Adding value is a strategic advantage if a firm possesses accurate information regarding its customer such as: which products are valued? Where can improvements be made?

The value system: interconnecting Relationships between organizations

- Supplier’s value chain
- Firm’s value chain
- Channel’s value chains
- Buyer’s value chains
Value Web (extension of Value Chain)

- Customer-driven network of independent firms
- Collection of firms that use IT to coordinate value chains for collectively producing product or service

Figure 3.12 (Laudon & Laudon 2006)
The Value System and Strategic Alliances

- Many industries are experiencing the growth of strategic alliances that are directly linked to sharing information resources across existing value systems.
- An alliance between American Airlines, Marriott and Budget Rent-A-Car called AMRIS provides travelers with a single point of contact.
- Thus, electronically pooling information services of several companies can create competitive advantage by saving customers time.

Industry-Level Strategy: Information Partnerships

- Cooperative alliance between two or more corporations
  - Share information to gain strategic advantage
- Firms gain access to new customers
  - new opportunities for cross-selling and targeting products
Differentiation Strategies

• **Shareholder value model**: create advantage through the use of knowledge and timing (Fruhan)
  – Information arbitrage

• **Barriers to entry model**: firms create barriers to entry to keep competitors out of their markets (see Five Forces model)

• **Unlimited resources model**: companies with a large resource can sustain losses more easily than ones with fewer resources

These make the most sense under relatively stable conditions. What of times of rapid change, and instability?

Alternative Notions of Strategy
Hypercompetition and the 7-S’s framework (D’Aveni)

- Sustained competitive advantage is not possible
- Only temporary advantages exist, created by a company’s speed and aggressiveness.
- Assumes:
  - Every advantage becomes eroded
  - Sustaining an advantage uses too much time and resources.
  - Instead, companies must seek to stay ahead of its competitors by creating temporary advantages. Goal: is disruption not stability.
  - These are done in small steps over short competitive cycles. Focus on creating the next temp. advantage. Constant innovation.

Disruption and the new 7-S’s

**Vision for Disruption**
Create temporary advantage through understanding stakeholder satisfaction or strategic soothsaying

**Market Disruption**

**Capability for Disruption**
Sustaining momentum through speed and surprise can create temporary advantages

**Tactics for Disruption**
Gain advantage by: shifting the rules, signaling, simultaneous and sequential strategic thrusts
D’Aveni’s new 7-S’s

- **Superior stakeholder satisfaction**: maximize customer satisfaction by adding value strategically
- **Strategic soothsaying**: use new knowledge to predict new windows of opportunity
- **Positioning for speed**: prepare the org. to react as fast as possible
- **Positioning for surprise**: surprise competitors
- **Shifting the rules of competition**: serve customers in novel ways
- **Signaling strategic intent**: communicate intentions in order to stall competitors
- **Simultaneous and sequential strategic thrusts**: take steps to stun and confuse competitors in order

Co-opetition *(Brandenburger & Nalebuff)*

- More about forming alliances to better compete.
  - Airlines: Star Alliance
  - “the Value net”: in which companies, competitors, customers and suppliers are participate (and compete in)
    - Key concept is “complementors”, companies that sell complementary products and services.
      - E.g., hardware and software
      - Co-branding
    - These can often gain advantage by forming an alliance to provide a more competitive
      - E.g., work with competitors to grow a market
Q: Why are strategic advantage Models essential to Info Systems (IS) planning?

- Giving up authority on IS decisions is giving up IS strategy
- Poorly chosen IS infrastructure undermines strategy
- Business strategy needs to address:
  - What is the business goal or objective?
  - What is the plan for achieving it? What is the role of IS in this plan?
  - Who are the crucial competitors and cooperators, and what is required of a successful player in this value net?

Summary of strategy frameworks

1. **Generic Strategies**: competitive advantage through low cost, differentiation or cross-functional focus
2. **Hypercompetition**: competitive advantage is temporary, created through speed and aggression in the market
3. **Co-opetition**: companies create alliances of firms with complementary outputs to better compete
Wrap Up

1. **Business strategy drives organizational strategy and IS strategy.**
   - Organization strategy must complement business strategy. Business organization either supports business strategy or gets in the way.
   - Likewise, IS strategy must complement business strategy. When IS support business goals, the business appears to be working well.

2. **Org. strategy and info. strategy must complement each other.**
   - They must support, rather than hinder each other.

3. **If a decision is made to change one corner of the triangle, it is necessary to evaluate the other two corners to ensure that the balance is preserved.**