資訊管理專題



Hot Issues of Information Management

Information Systems, Organization, and Strategy: Starbucks (Chap. 3)

1051IM4B04 TLMXB4B (M0842) Tue 3,4 (10:10-12:00) B507



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課程大綱 (Syllabus)

- 週次 (Week) 日期 (Date) 內容 (Subject/Topics)
- 1 2016/09/13 Introduction to Case Study for Information Management Hot Topics
- 2 2016/09/20 Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)
- 3 2016/09/27 Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85)
- 4 2016/10/04 Information Systems, Organization, and Strategy: Starbucks (Chap. 3) (pp.129-130)
- 5 2016/10/11 Ethical and Social Issues in Information Systems: Facebook (Chap. 4) (pp.188-190)

課程大綱 (Syllabus)

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- 6 2016/10/18 IT Infrastructure and Emerging Technologies:
 Amazon and Cloud Computing (Chap. 5) (pp. 234-236)
- 7 2016/10/25 Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262)
- 8 2016/11/01 Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7) (pp.318-320)
- 9 2016/11/08 Midterm Report (期中報告)
- 10 2016/11/15 期中考試週

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週次 日期 內容(Subject/Topics)
11 2016/11/22 Enterprise Applications: Summit and SAP
               (Chap. 9) (pp.396-398)
12 2016/11/29 E-commerce: Zagat (Chap. 10) (pp.443-445)
13 2016/12/06 Enhancing Decision Making: Zynga
               (Chap. 12) (pp.512-514)
14 2016/12/13 Building Information Systems: USAA
               (Chap. 13) (pp.547-548)
15 2016/12/20 Managing Projects: NYCAPS and CityTime
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16 2016/12/27 Final Report I (期末報告 I)
17 2017/01/03 Final Report II (期末報告 II)
18 2017/01/10 期末考試週
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Management Information Systems:

Managing the Digital Firm

Organization, Management, and the Networked Enterprise

Information Technology Infrastructure

Key System Applications for the Digital Age

Building and Managing Systems

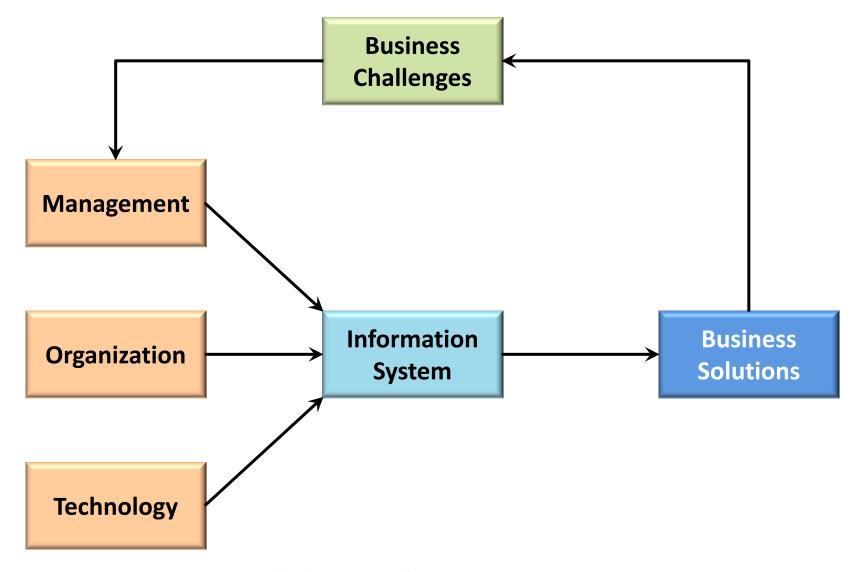
Chap. 3 Information Systems, Organization, and Strategy: Starbucks

Case Study: Starbucks (Chap. 3) (pp.129-130)

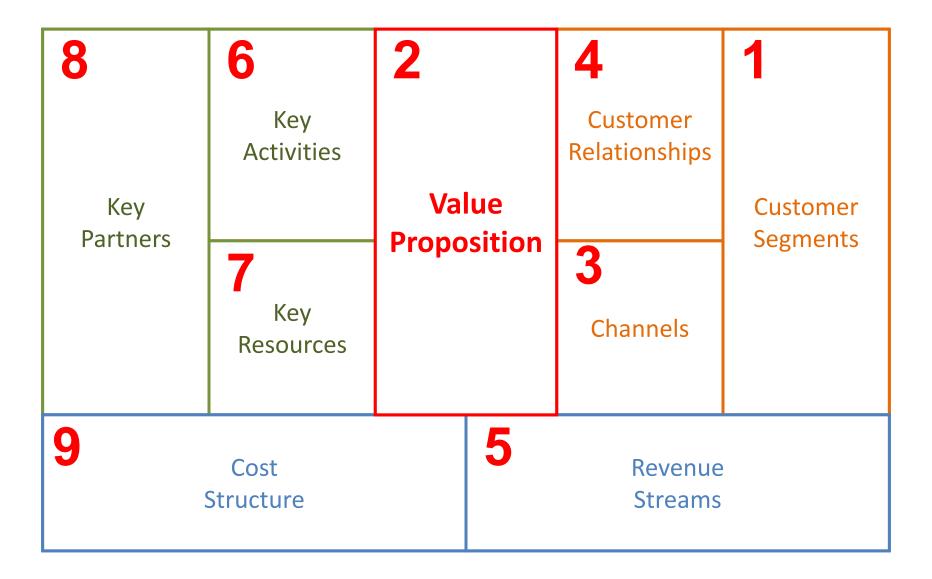
Technology Helps Starbucks Find New Ways to Compete

- 1. Analyze Starbucks using the competitive forces and value chain models.
- 2. What is Starbucks' business strategy? Assess the role played by technology in this business strategy.
- 3. How much has technology helped Starbucks compete? Explain your answer.

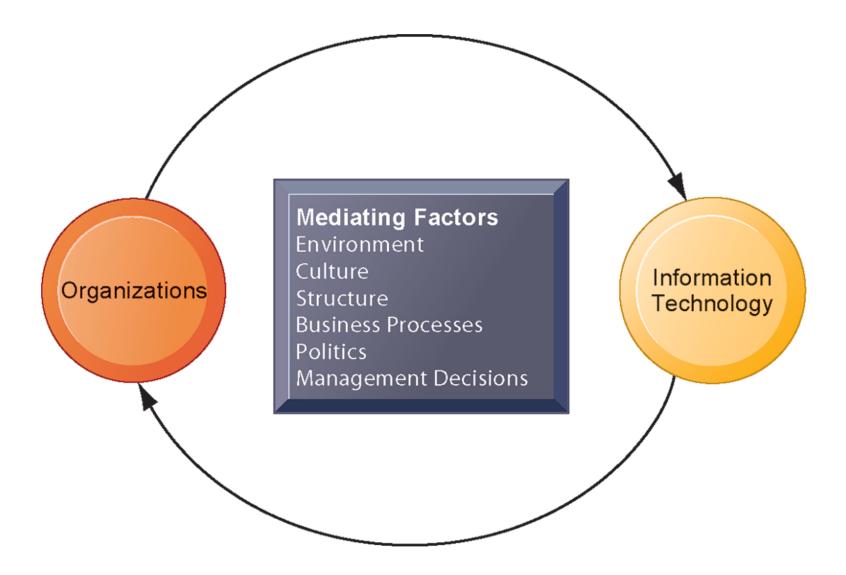
Overview of Fundamental MIS Concepts



Business Model



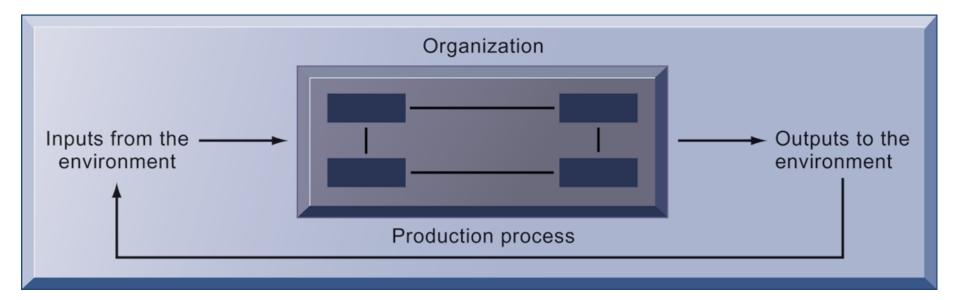
THE TWO-WAY RELATIONSHIP BETWEEN ORGANIZATIONS AND INFORMATION TECHNOLOGY



Definition of Organization

- What is an organization?
 - Technical definition:
 - Stable, formal social structure that takes resources from environment and processes them to produce outputs
 - A formal legal entity with internal rules and procedures, as well as a social structure
 - Behavioral definition:
 - A collection of rights, privileges, obligations, and responsibilities that is delicately balanced over a period of time through conflict and conflict resolution

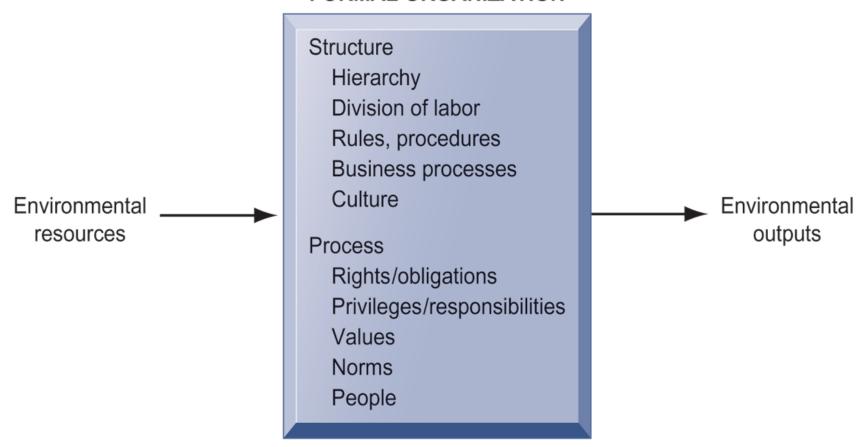
THE TECHNICAL MICROECONOMIC DEFINITION OF THE ORGANIZATION



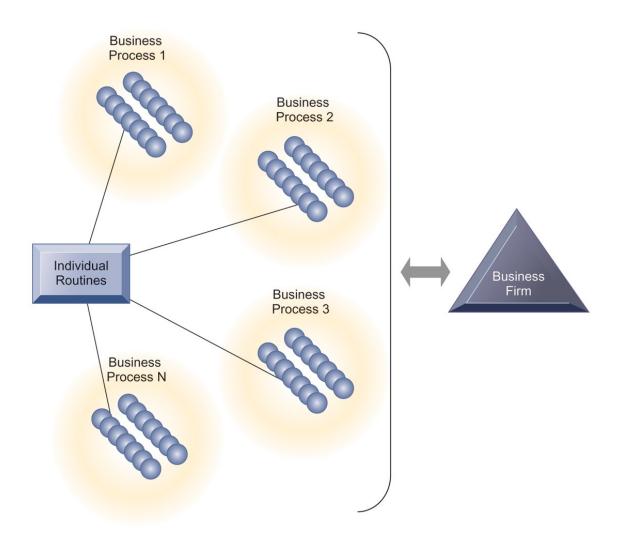
- Capital and labor (the primary production factors provided by the environment) are transformed by the firm through the production process into products and services (outputs to the environment).
- The products and services are consumed by the environment, which supplies additional capital and labor as inputs in the feedback loop.

THE BEHAVIORAL VIEW OF ORGANIZATIONS

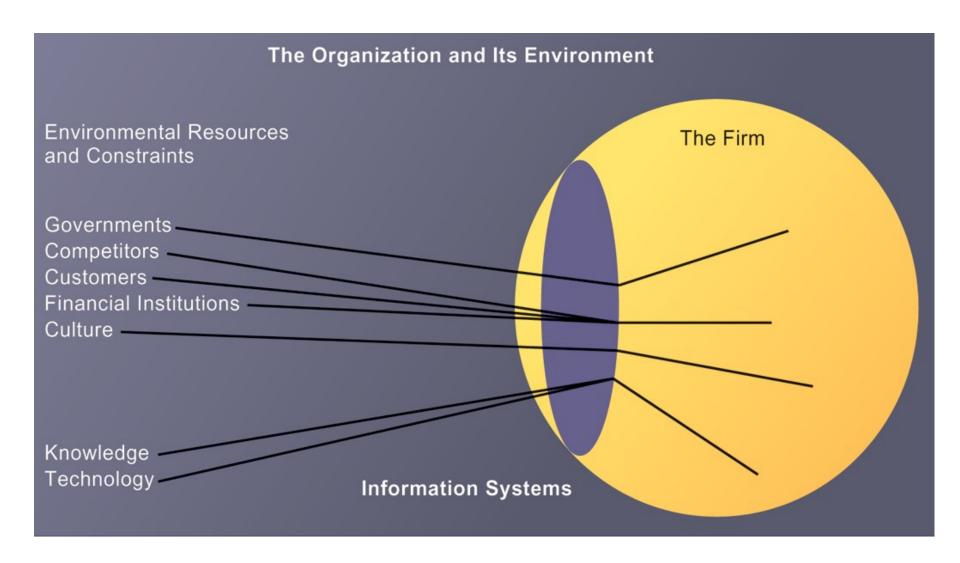
FORMAL ORGANIZATION



ROUTINES, BUSINESS PROCESSES, AND FIRMS



ENVIRONMENTS AND ORGANIZATIONS HAVE A RECIPROCAL RELATIONSHIP



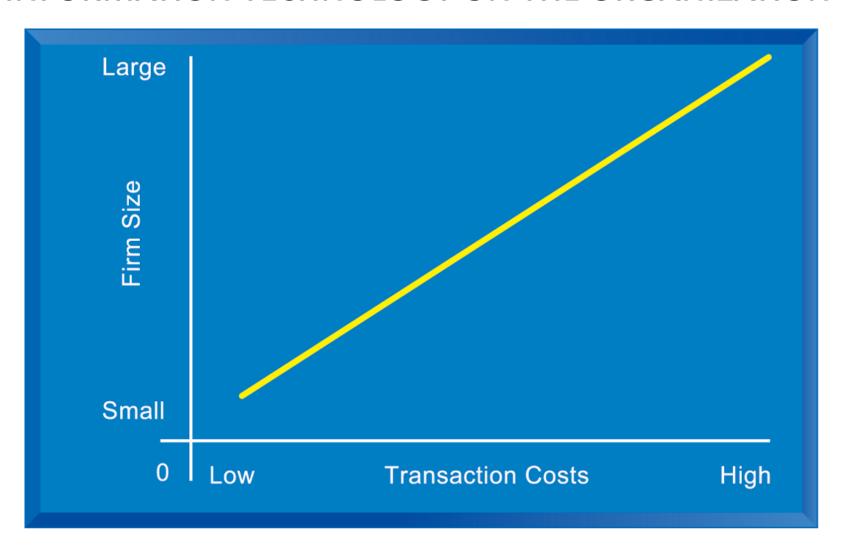
Disruptive Technologies

- Technology that brings about sweeping change to businesses, industries, markets
- Examples: personal computers, word processing software, the Internet, the PageRank algorithm
- First movers and fast followers
 - First movers—inventors of disruptive technologies
 - Fast followers—firms with the size and resources to capitalize on that technology

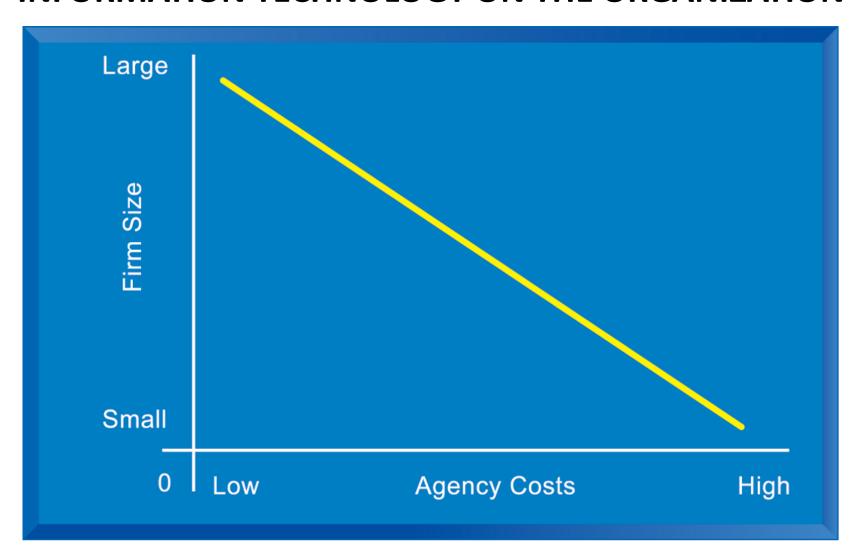
5 Basic Kinds of Organizational Structure

- Entrepreneurial:
 - Small start-up business
- Machine bureaucracy:
 - Midsize manufacturing firm
- Divisionalized bureaucracy:
 - Fortune 500 firms
- Professional bureaucracy:
 - Law firms, school systems, hospitals
- Adhocracy:
 - Consulting firms

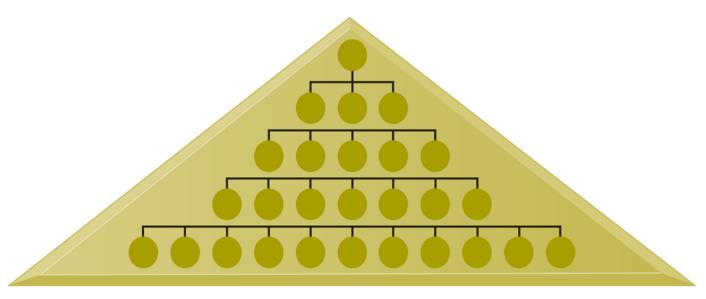
THE TRANSACTION COST THEORY OF THE IMPACT OF INFORMATION TECHNOLOGY ON THE ORGANIZATION



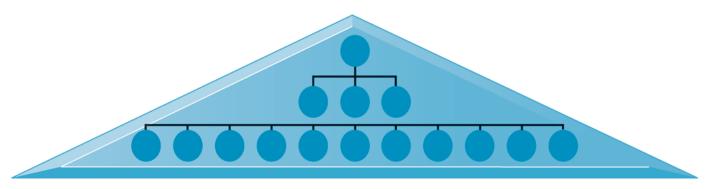
THE AGENCY THEORY OF THE IMPACT OF INFORMATION TECHNOLOGY ON THE ORGANIZATION



FLATTENING ORGANIZATIONS

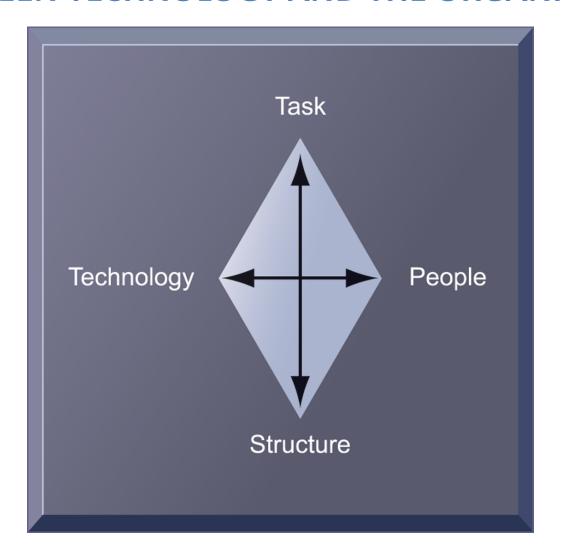


A traditional hierarchical organization with many levels of management



An organization that has been "flattened" by removing layers of management

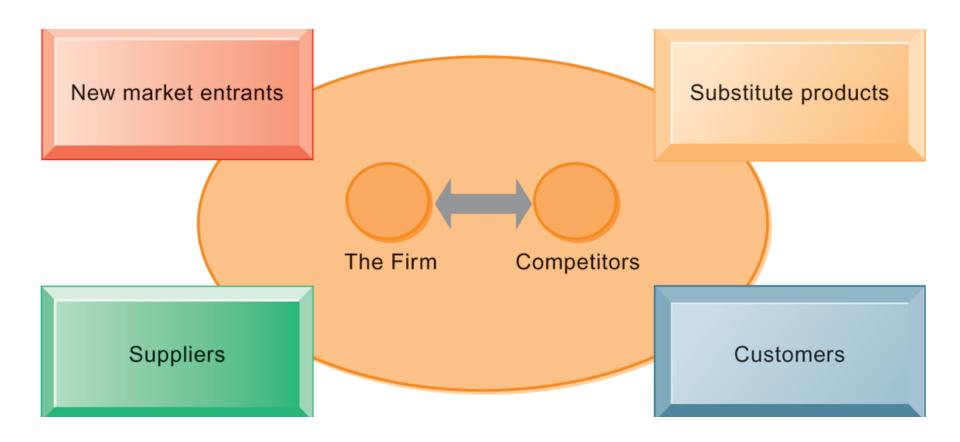
ORGANIZATIONAL RESISTANCE AND THE MUTUALLY ADJUSTING RELATIONSHIP BETWEEN TECHNOLOGY AND THE ORGANIZATION



Using Information Systems to Achieve Competitive Advantage

- Why do some firms become leaders in their industry?
- Michael Porter's competitive forces model
 - Provides general view of firm, its competitors, and environment
 - Five competitive forces shape fate of firm:
 - 1. Traditional competitors
 - 2. New market entrants
 - 3. Substitute products and services
 - 4. Customers
 - 5. Suppliers

PORTER'S COMPETITIVE FORCES MODEL



- 1. Low-cost leadership
- 2. Product differentiation
- 3. Focus on market niche
- 4. Strengthen customer and supplier intimacy

1. Low-cost leadership

- Produce products and services at a lower price than competitors while enhancing quality and level of service
- Examples:
 Walmart's efficient customer response system

2. Product differentiation

- Enable new products or services, greatly change customer convenience and experience
- Examples: Google, Nike, Apple
- Mass customization

3. Focus on market niche

- Use information systems to enable a focused strategy on a single market niche; specialize
- Example: Hilton Hotels

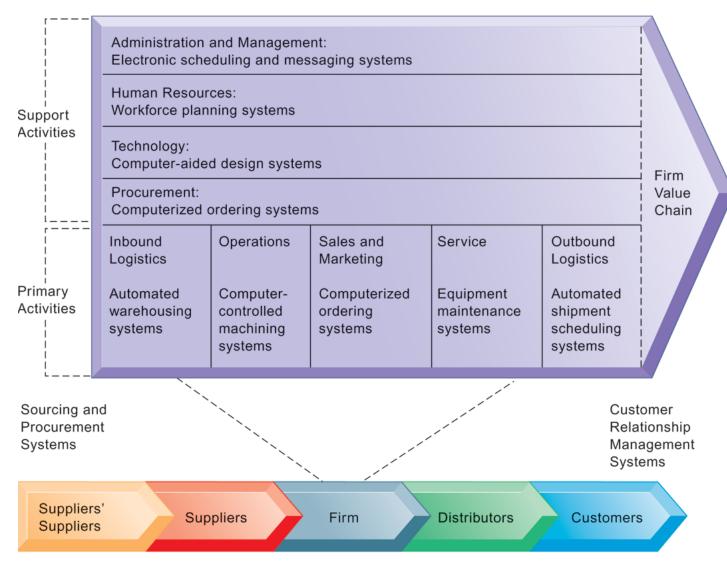
4. Strengthen customer and supplier intimacy

- Use information systems to develop strong ties and loyalty with customers and suppliers
- Increase switching costs
- Example: Netflix, Amazon

The Internet's impact on competitive advantage

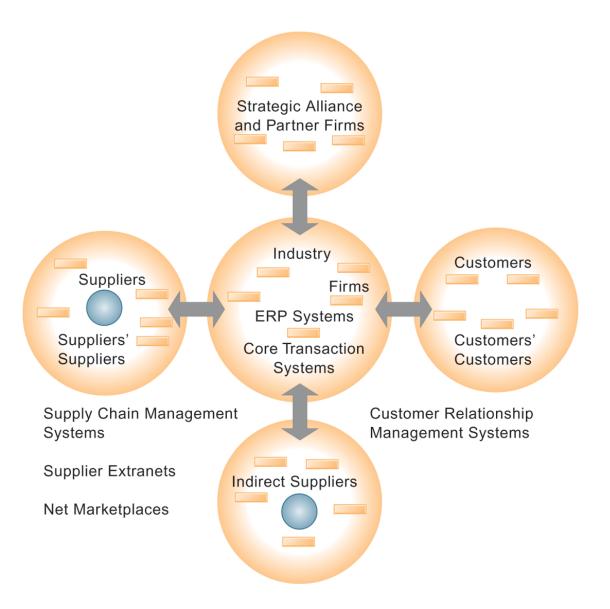
- Transformation, destruction, threat to some industries
 - Examples: travel agency, printed encyclopedia, newspaper
- Competitive forces still at work, but rivalry more intense
- Universal standards allow new rivals, entrants to market
- New opportunities for building brands and loyal customer bases

THE VALUE CHAIN MODEL



Industry Value Chain

THE VALUE WEB



Synergies

- Information systems can improve overall performance of business units by promoting synergies and core competencies
- Synergies
 - When output of some units used as inputs to others, or organizations pool markets and expertise
 - Example: merger of Bank of NY and JPMorgan
 Chase
 - Purchase of YouTube by Google

Core competencies

- Activity for which firm is world-class leader
- Relies on knowledge, experience, and sharing this across business units
- Example:
 - Procter & Gamble's intranet and directory of subject matter experts

Network-based strategies

- Take advantage of firm's abilities to network with each other
- Include use of:
 - Network economics
 - Virtual company model
 - Business ecosystems

Traditional economics Network economics

- Traditional economics: Law of diminishing returns
 - The more any given resource is applied to production, the lower the marginal gain in output, until a point is reached where the additional inputs produce no additional outputs

Network economics:

- Marginal cost of adding new participant almost zero,
 with much greater marginal gain
- Value of community grows with size
- Value of software grows as installed customer base grows

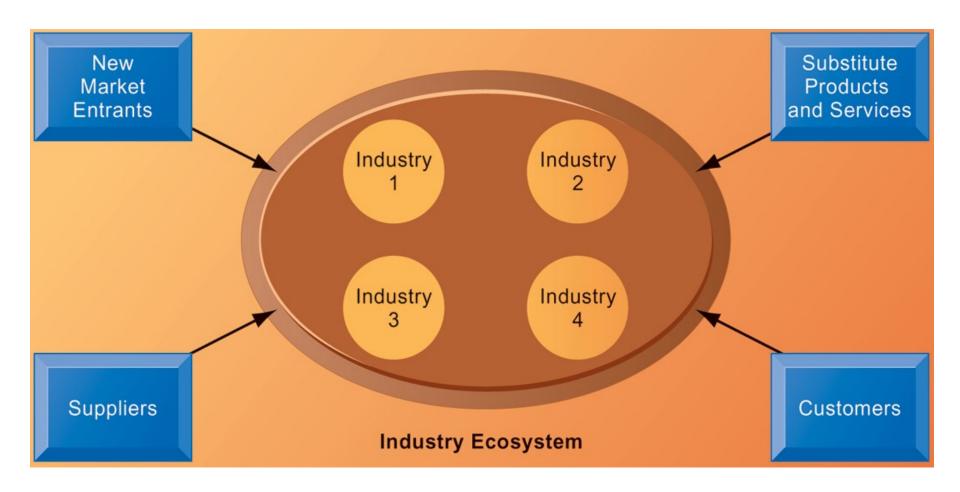
Virtual company strategy

- Virtual company uses networks to ally with other companies to create and distribute products without being limited by traditional organizational boundaries or physical locations
- Example: Li & Fung manages production, shipment of garments for major fashion companies, outsourcing all work to more than 7,500 suppliers

Business ecosystems

- Industry sets of firms providing related services and products
 - Microsoft platform used by thousands of firms
 - Walmart's order entry and inventory management
- Keystone firms:
 - Dominate ecosystem and create platform used by other firms
- Niche firms:
 - Rely on platform developed by keystone firm
- Individual firms can consider how IT will help them become profitable niche players in larger ecosystems

AN ECOSYSTEM STRATEGIC MODEL



Using Information Systems for Competitive Advantage: Management Issues

- Sustaining competitive advantage
 - Competitors can retaliate and copy strategic systems
 - Systems may become tools for survival
- Aligning IT with business objectives
 - Performing strategic systems analysis
 - Structure of industry
 - Firm value chains
- Managing strategic transitions
 - Adopting strategic systems requires changes in business goals, relationships with customers and suppliers, and business processes

Definition of Business Model

A business model describes the rationale of how an organization creates, delivers, and captures value.

Definition of Business Strategy

A business strategy
is
a long term plan of action

designed to achieve a particular goal or set of goals or objectives.

Business

 "the activity of providing goods and services involving financial, commercial and industrial aspects." (WordNet 2.0)

Model

• "a simplified description and representation of a complex entity or process." (WordNet 2.0)

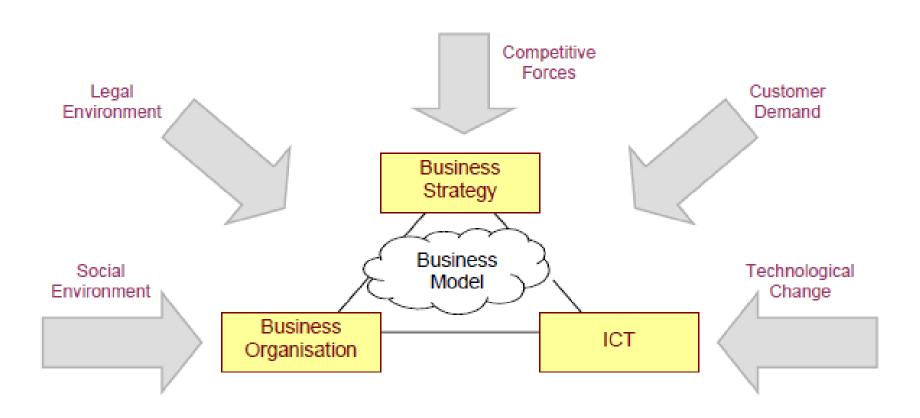
Business Model vs. Business Process Model

- Business Model
 - a view of the firm's logic for creating and commercializing value
- Business process model
 - how a business case is implemented in processes

Business Model vs. Strategy

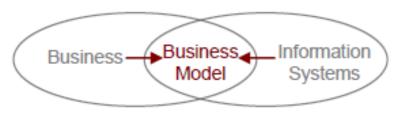
- Business Models
 - a system that shows how the pieces of a business fit together.
 - an abstraction of a firm's strategy
- Strategy
 - includes competition

The Business Model's Place in the Firm



Business Strategy and Information Systems Alignment

Managers are aware of the use of Information Systems to realize goals, exploit opportunities and obtain competitive advantage



Information Systems support the company's business model and are targeted on areas that are critical to successful business performance

Case Study: Facebook (Chap. 4) (pp.188-190)

Facebook: It's about the Money

- 1. Perform an ethical analysis of Facebook.

 What is the ethical dilemma presented by this case?
- 2. What is the relationship of privacy to Facebook's business model?
- 3. Describe the weaknesses of Facebook's privacy policies and features. What management, organization, and technology factors have contributed to those weaknesses?
- 4. Will Facebook be able to have a successful business model without invading privacy? Explain your answer. Are there any measures Facebook could take to make this possible?

資訊管理專題 (Hot Issues of Information Management)

- 1. 請同學於資訊管理專題個案討論前應詳細研讀個案,並思考個案研究問題。
- 2. 請同學於上課前複習相關資訊管理相關理論, 以作為個案分析及擬定管理對策的依據。
- 3. 請同學於上課前 先繳交資訊管理專題個案研究問題書面報告。
- 4.上課時間地點: 週二 3,4 (10:10-12:00) B507

References

- Kenneth C. Laudon & Jane P. Laudon (2014),
 Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.
- Kenneth C. Laudon & Jane P. Laudon原著,
 游張松 主編,陳文生 翻譯 (2014),
 資訊管理系統,第13版,滄海