#### 資訊管理專題



#### **Hot Issues of Information Management**

### Introduction to Case Study for Information Management

1051IM4B01 TLMXB4B (M0842) Tue 3,4 (10:10-12:00) B507



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淡江大學 資訊管理學系



#### 淡江大學105學年度第1學期 課程教學計畫表 Fall 2016 (2016.09.12 - 2017.01.14)

• 課程名稱:資訊管理專題

(Hot Issues of Information Management)

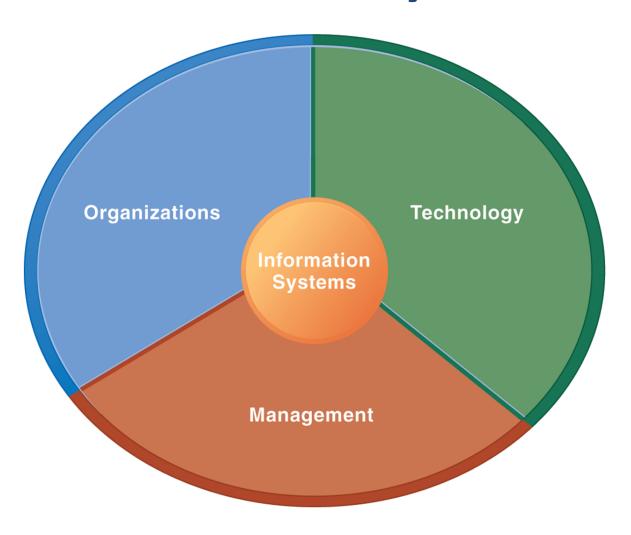
• 授課教師: 戴敏育 (Min-Yuh Day)

• 開課系級:資管4B (TLMXB4B)(M0842)

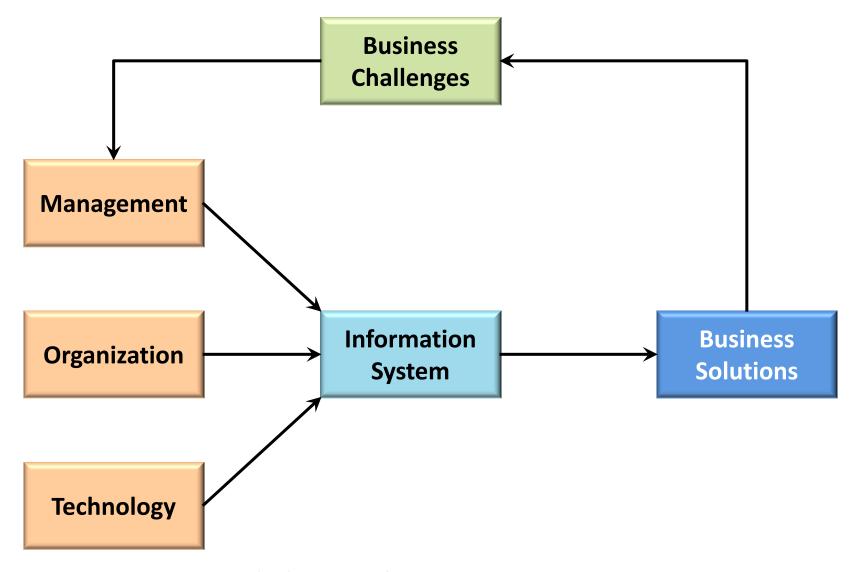
開課資料:必修單學期2學分(2 Credits, Required)

• 上課時間地點:週二 3,4 (10:10-12:00) B507

## Information Management (MIS) Information Systems



## Overview of Fundamental MIS Concepts



#### **Management Information Systems:**

Managing the Digital Firm

Organization, Management, and the Networked Enterprise

2 Information Technology Infrastructure

Key System Applications for the Digital Age

**Building and Managing Systems** 

5

#### 課程簡介

- 本課程透過專題個案研究讓學生理解資訊系統與企業績效的直接連結。
- 資訊管理專題課程讓學生可以更好的了解 特定公司如何使用資訊系統 來達成主要的企業目標:
  - 卓越的經營
  - 新產品、服務和商業模式
  - 客戶和供應商的緊密關係
  - 改善決策制定
  - 競爭優勢
  - 永續經營

#### **Course Introduction**

- This course helps students to understand and analysis
  the direct connection between information systems and
  business performance though
  case study of information management hot topics.
- It helps students a better understanding of how specific companies use information systems to achieve the main business objectives:
  - operational excellence
  - new products, services, and business models
  - customer and supplier intimacy
  - improved decision making
  - competitive advantage
  - survival

#### 課程目標

學生將能夠瞭解及應用 資訊管理專題個案研究的方法

#### **Objective**

 Student will be able to understand and apply the methods of case study for information management hot topics.

#### 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)

- 週次 (Week) 日期 (Date) 內容 (Subject/Topics)
  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

#### 課程大綱 (Syllabus)

```
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
               (Chap. 14) (pp.586-588)
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
```

#### 教材課本與參考書籍

- 教材課本 (Textbook)
  - Kenneth C. Laudon & Jane P. Laudon (2014),
     Management Information Systems: Managing the Digital Firm,
     Thirteenth Edition, Pearson.
- 參考書籍 (References)
  - 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

#### 修課應注意事項

- 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

#### 學期成績計算方式

• 期中評量: 30.0%

• 期末評量: 30.0%

• 平時評量:40.0%(課堂參與及報告討論表現)

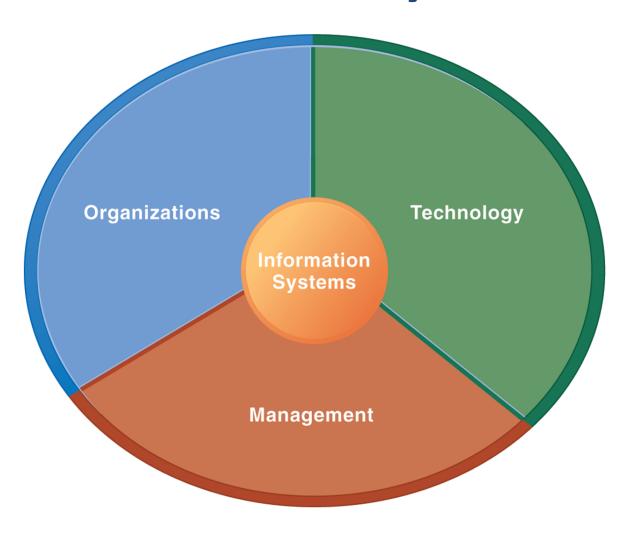
## Case Study

#### **Case Study**

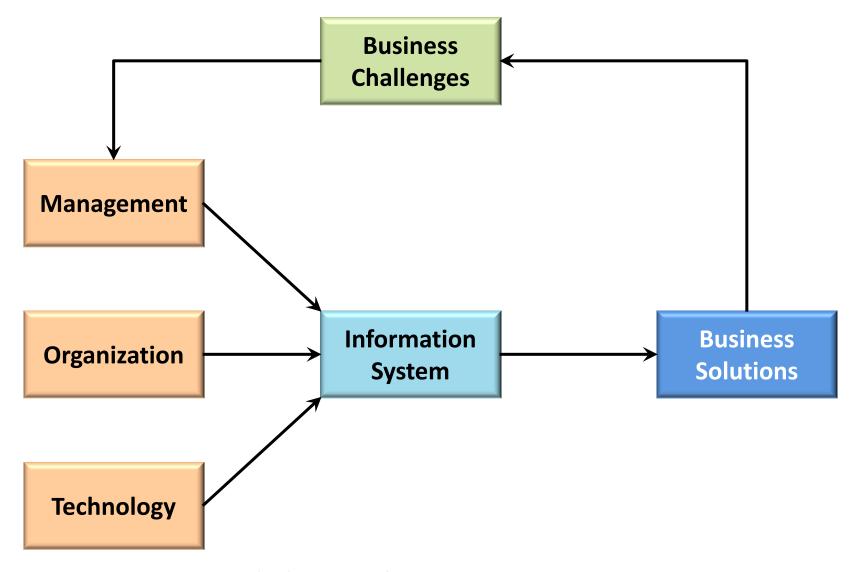
- Harvard Business School
  - The Case Method at HBS
  - Inside the Case Method: The Entrepreneurial Manager
    - http://www.youtube.com/watch?v=YWybEVsVwe4 (15:56)



## Information Management (MIS) Information Systems



## Overview of Fundamental MIS Concepts



#### **Management Information Systems:**

Managing the Digital Firm

Organization, Management, and the Networked Enterprise

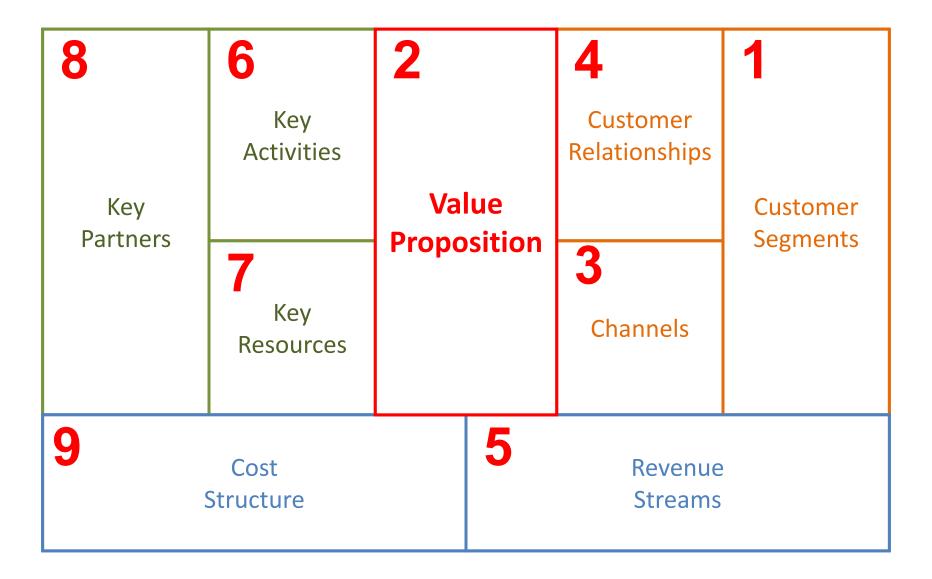
Information Technology Infrastructure

Key System Applications for the Digital Age

Building and Managing Systems

## Business Model

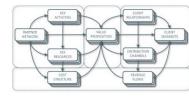
#### **Business Model**

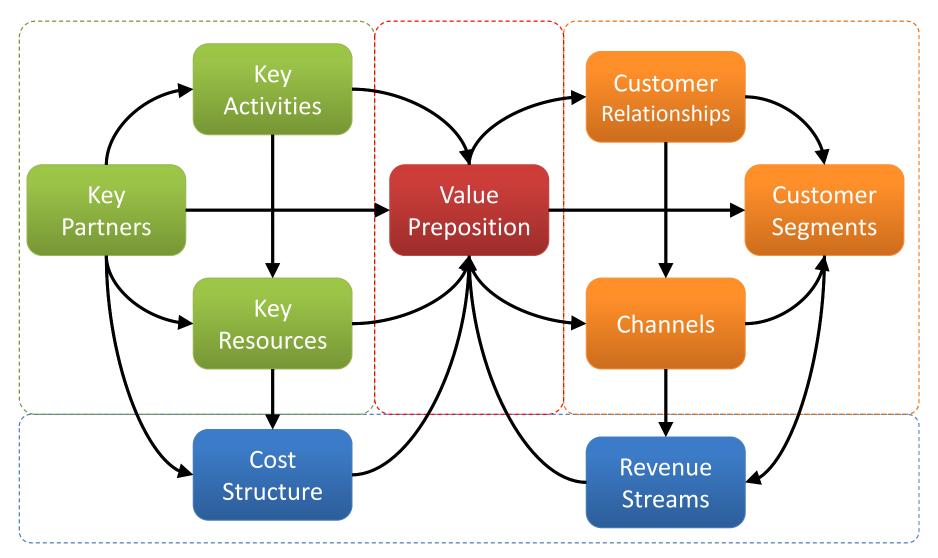


#### **Definition of Business Model**

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

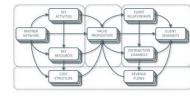
#### **Business Model Canvas**





Source: <a href="http://nonlinearthinking.typepad.com/nonlinear\_thinking/2008/07/the-business-model-canvas.html">https://nonlinearthinking.typepad.com/nonlinear\_thinking/2008/07/the-business-model-canvas.html</a>
<a href="https://www.youtube.com/watch?v=QoAOzMTLP5s">https://www.youtube.com/watch?v=QoAOzMTLP5s</a>

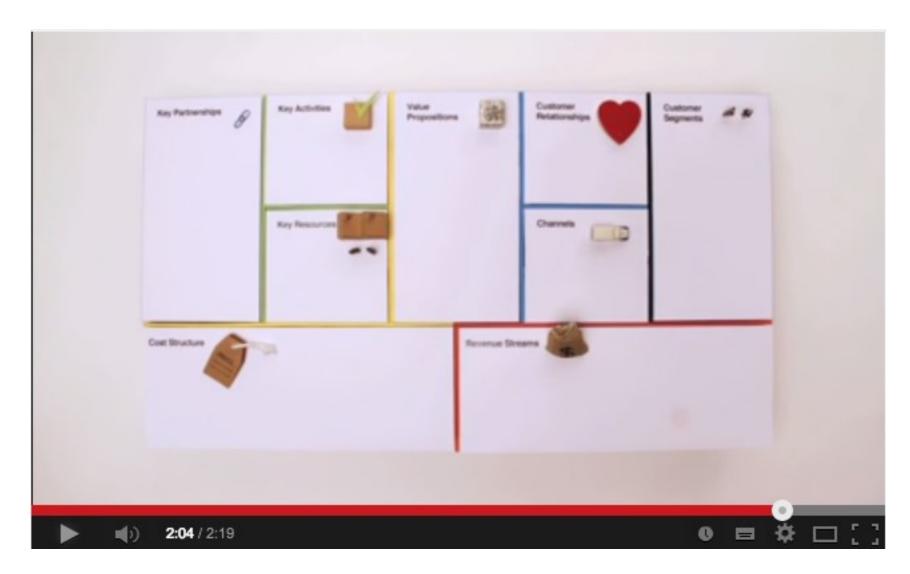
#### **Business Model Canvas**



Infrastructure Customer **Product Interface** Management **Financial Aspects** 

Source: <a href="http://nonlinearthinking.typepad.com/nonlinear\_thinking/2008/07/the-business-model-canvas.html">http://nonlinearthinking.typepad.com/nonlinear\_thinking/2008/07/the-business-model-canvas.html</a>
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<a href="https://www.youtube.com/watch?v=QoAOzMTLP5s">https://www.youtube.com/watch?v=QoAOzMTLP5s</a>

#### **Business Model Canvas Explained**



## The 9 Building Blocks of Business Model

Key Partners	W.	Key Activities	N.	Value Proposition		Customer Relationships	$\bigcirc$	Customer Segments	
8		6		2		1		1	
					•	_		•	
		Key Resources				Channels		-	
		7				3			
				_					
Cost Structure		9			Revenue Streams	5			
						<u> </u>			

# Case Study: UPS (Chap. 1) (pp.53-54) UPS Competes Globally with Information Technology

#### **Ponsse:**

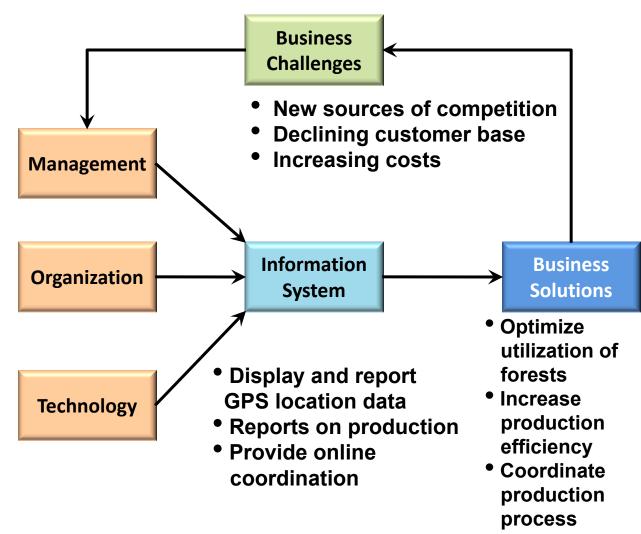
## Efficiency in Wood Harvesting with Information System



Source: http://www.ponsse.com/

## Overview of Fundamental MIS Concepts using an integrated framework for describing and analyzing information systems

- Develop new production processes
- Develop new management techniques
- Increase use of data by managers
- Build new business production processes
- Train new channels of information flow
- Train employee in use of the systems
- Develop GPS systems for field use
- Create email links with operators
- Develop data base to receive information



## Information Systems in Global Business

- 1. How are information systems transforming business and what is their relationship to globalization?
- 2. Why are information systems so essential for running and managing a business today?
- 3. What exactly is an information system? How does it work? What are its management, organization, and technology components?
- 4. What are complementary assets? Why are complementary assets essential for ensuring that information systems provide genuine value for an organization?
- 5. What academic disciplines are used to study information systems? How does each contribute to an understanding of information systems? What is a sociotechnical systems perspective?

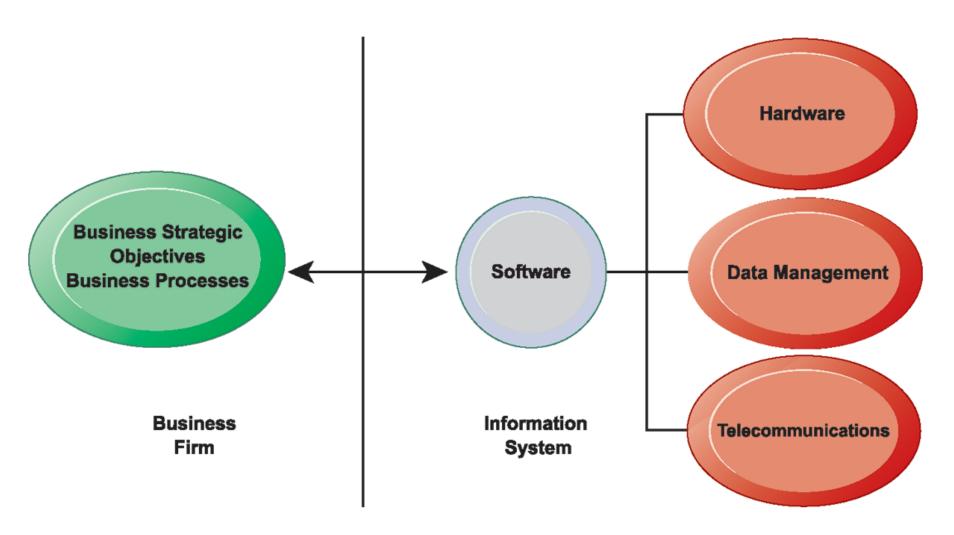
## How information systems are transforming business

- Emerging mobile digital platform
- Growing business use of "big data"
- Growth in cloud computing

#### Globalization opportunities

- Internet has drastically reduced costs of operating on global scale
- Increases in foreign trade, outsourcing
- Presents both challenges and opportunities

## The Interdependence Between Organizations and Information Technology



## Strategic Business Objectives of Information Systems

- 1. Operational Excellence
- 2. New Products, Services and Business Models
- 3. Customer and Supplier Intimacy
- 4. Improved Decision Making
- 5. Competitive Advantage
- 6. Survival

#### 1. Operational Excellence

- Improvement of efficiency to attain higher profitability
- Information systems, technology an important tool in achieving greater efficiency and productivity
- Walmart's Retail Link system links suppliers to stores for superior replenishment system

## 2. New Products, Services, and Business Models

- Business model: describes how company produces, delivers, and sells product or service to create wealth
- Information systems and technology a major enabling tool for new products, services, business models
  - Examples: Apple's iPad, Google's Android OS, and Netflix

### 3. Customer and Supplier Intimacy

- Serving customers well leads to customers returning, which raises revenues and profits.
  - Example: High-end hotels that use computers to track customer preferences and used to monitor and customize environment
- Intimacy with suppliers allows them to provide vital inputs, which lowers costs.
  - Example: JCPenney's information system which links sales records to contract manufacturer

### 4. Improved Decision Making

- Without accurate information:
  - Managers must use forecasts, best guesses, luck
  - Results in:
    - Overproduction, underproduction
    - Misallocation of resources
    - Poor response times
  - Poor outcomes raise costs, lose customers
- Example:
  - Verizon's Web-based digital dashboard to provide managers with real-time data on customer complaints, network performance, line outages

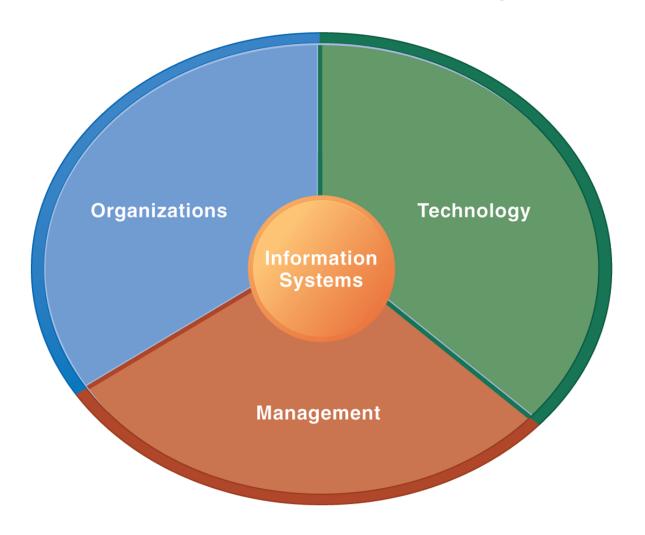
### 5. Competitive advantage

- Delivering better performance
- Charging less for superior products
- Responding to customers and suppliers in real time
- Examples: Apple, Walmart, UPS

#### 6. Survival

- Information technologies as necessity of business
- Industry-level changes
  - Example: Citibank's introduction of ATMs
- Governmental regulations requiring recordkeeping
  - Examples: Toxic Substances Control Act, Sarbanes-Oxley Act

## **Information Systems Are More Than Computers**



### **Dimensions of Information Systems**

#### Organizations

 People, structure, business processes, politics, and culture.

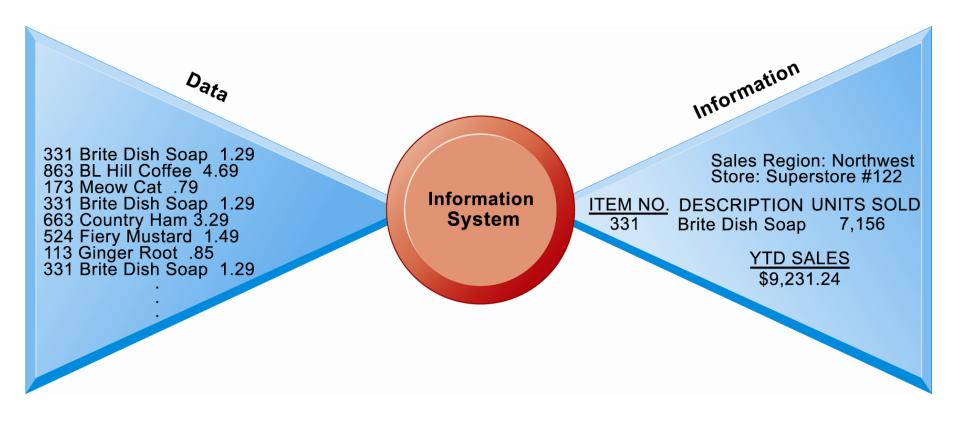
#### Management

 Make sense out of the many situations faced by organizations, make decisions, and formulate action plans to solve organizational problems.

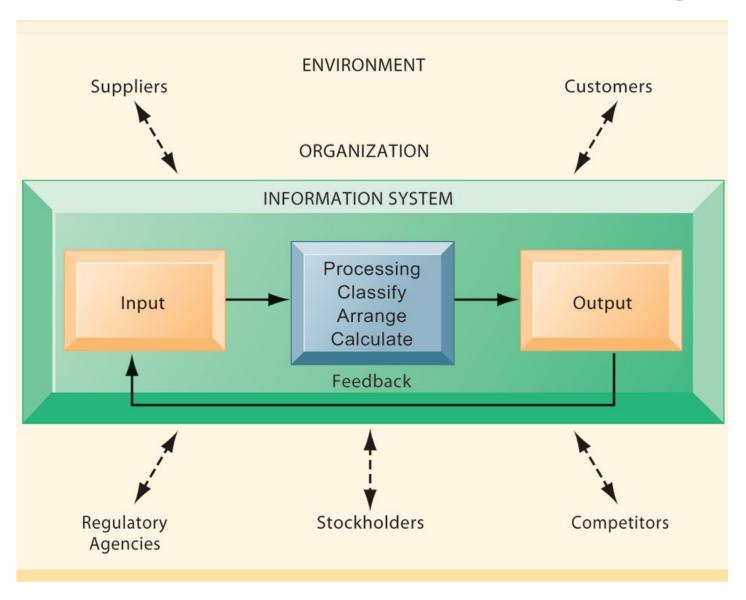
#### Information Technology

 Computer hardware, software, data management technology, networking and telecommunications technology

## Perspectives on Information Systems: Data and Information



### **Functions of an Information System**



#### Levels in a Firm

Senior Management

Middle Management
Scientists and knowledge workers

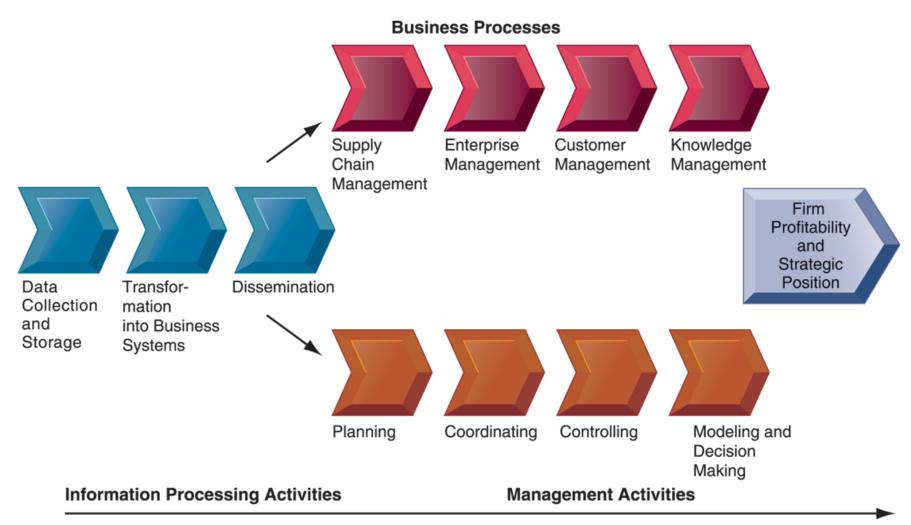
Operational Management
Production and service workers
Data workers

#### **MAJOR BUSINESS FUNCTIONS**

FUNCTION	PURPOSE
Sales and marketing	Selling the organization's products and services
Manufacturing and production	Producing and delivering products and services
Finance and accounting	Managing the organization's financial assets and maintaining the organization's financial records
Human resources	Attracting, developing, and maintaining the organization's labor force; maintaining employee records

# IT ISN'T JUST TECHNOLOGY: A BUSINESS PERSPECTIVE ON INFORMATION SYSTEMS

#### The Business Information Value Chain



#### **Business Value**

#### The Business Information Value Chain

 From a business perspective, information systems are part of a series of value-adding activities for acquiring, transforming, and distributing information that managers can use to improve decision making, enhance organizational performance, and, ultimately, increase firm profitability.

### COMPLEMENTARY SOCIAL, MANAGERIAL, AND ORGANIZATIONAL ASSETS REQUIRED TO OPTIMIZE RETURNS FROM INFORMATION **TECHNOLOGY INVESTMENTS**

### Organizational assets

- Supportive organizational culture that values efficiency and effectiveness
- Appropriate business model
- Efficient business processes
- Decentralized authority
- Distributed decision-making rights
- Strong IS development team

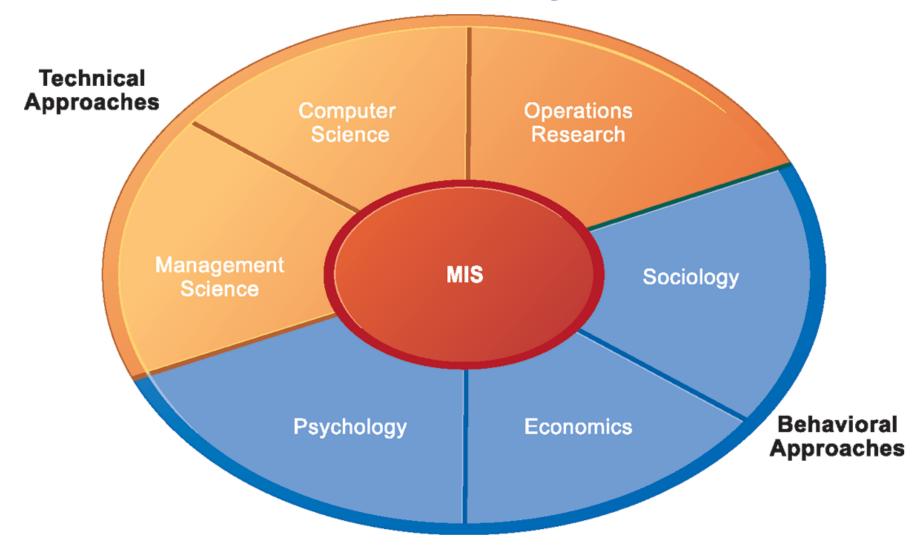
### Managerial assets

- Strong senior management support for technology investment and change
- Incentives for management innovation
- Teamwork and collaborative work environments
- Training programs to enhance management decision skills
- Management culture that values flexibility and knowledge-based decision making.

#### Social assets

- The Internet and telecommunications infrastructure
- IT-enriched educational programs raising labor force computer literacy
- Standards (both government and private sector)
- Laws and regulations creating fair, stable market environments
- Technology and service firms in adjacent markets to assist implementation

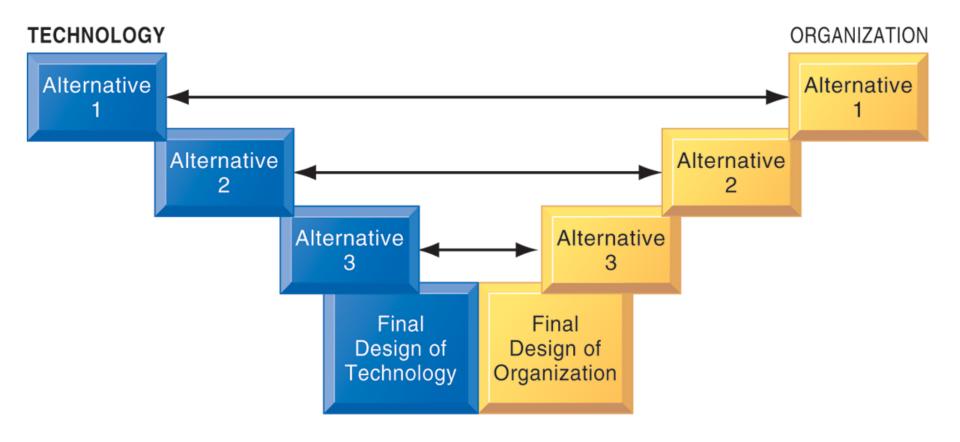
## Contemporary Approaches to Information Systems



### Contemporary Approaches to Information Systems

- Technical Approach
- Behavioral Approach
- Sociotechnical Systems

### A Sociotechnical Perspective on Information Systems



# Case Study: UPS (Chap. 1) (pp.53-54) UPS Competes Globally with Information Technology

- 1. What are the inputs, processing, and outputs of UPS's package tracking system?
- 2. What technologies are used by UPS? How are these technologies related to UPS's business strategy?
- 3. What strategic business objectives do UPS's information systems address?
- 4. What would happen if UPS's information systems were not available?

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### Summary

- This course helps students to understand and analysis
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  - competitive advantage
  - survival

#### **Contact Information**

#### 戴敏育 博士 (Min-Yuh Day, Ph.D.)

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