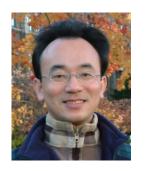
#### 資訊管理專題



#### Hot Issues of Information Management

### Ethical and Social Issues in Information Systems: Facebook (Chap. 4)

1061IM4C05 TLMXB4C (M0842) Thu 7,8 (14:10-16:00) B702



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#### 課程大綱 (Syllabus)

- 週次 (Week) 日期 (Date) 內容 (Subject/Topics) 1 2017/09/21 Introduction to Case Study for Hot Issues of
- 2 2017/09/28 Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)

Information Management

- 3 2017/10/05 Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85)
- 4 2017/10/12 Information Systems, Organization, and Strategy: Starbucks (Chap. 3) (pp.129-130)
- 5 2017/10/19 Ethical and Social Issues in Information Systems: Facebook (Chap. 4) (pp.188-190)
- 6 2017/10/26 IT Infrastructure and Emerging Technologies:
  Amazon and Cloud Computing (Chap. 5) (pp. 234-236)

#### 課程大綱 (Syllabus)

週次 (Week) 日期 (Date) 內容 (Subject/Topics) 7 2017/11/02 Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262) 2017/11/09 Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7) (pp.318-320) 9 2017/11/16 Midterm Report (期中報告) 10 2017/11/23 Midterm Exam Week (期中考試週) 11 2017/11/30 Enterprise Applications: Summit and SAP (Chap. 9) (pp.396-398)

12 2017/12/07 E-commerce: Zagat (Chap. 10) (pp.443-445)

#### 課程大綱 (Syllabus)

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週次 日期 內容(Subject/Topics)
13 2017/12/14 Enhancing Decision Making: Zynga
               (Chap. 12) (pp.512-514)
14 2017/12/21 Building Information Systems: USAA
               (Chap. 13) (pp.547-548)
15 2017/12/28 Managing Projects: NYCAPS and CityTime
               (Chap. 14) (pp.586-588)
16 2018/01/04 Final Report I (期末報告 I)
17 2018/01/11 Final Report II (期末報告 II)
18 2018/01/18 Final Exam Week (期末考試週)
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#### **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** 

# Chap. 4 Ethical and Social Issues in Information Systems: Facebook

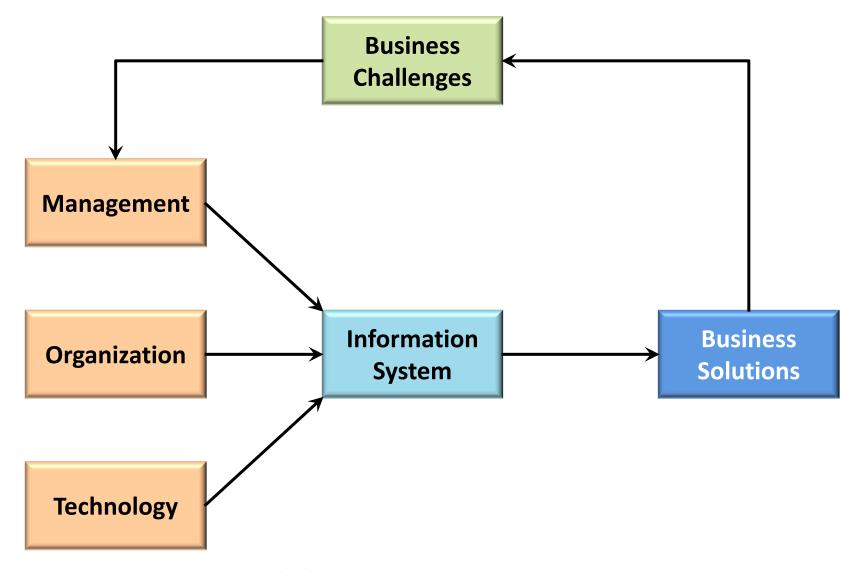
#### Case Study: Facebook (Chap. 4) (pp.188-190)

#### Facebook: It's about the Money

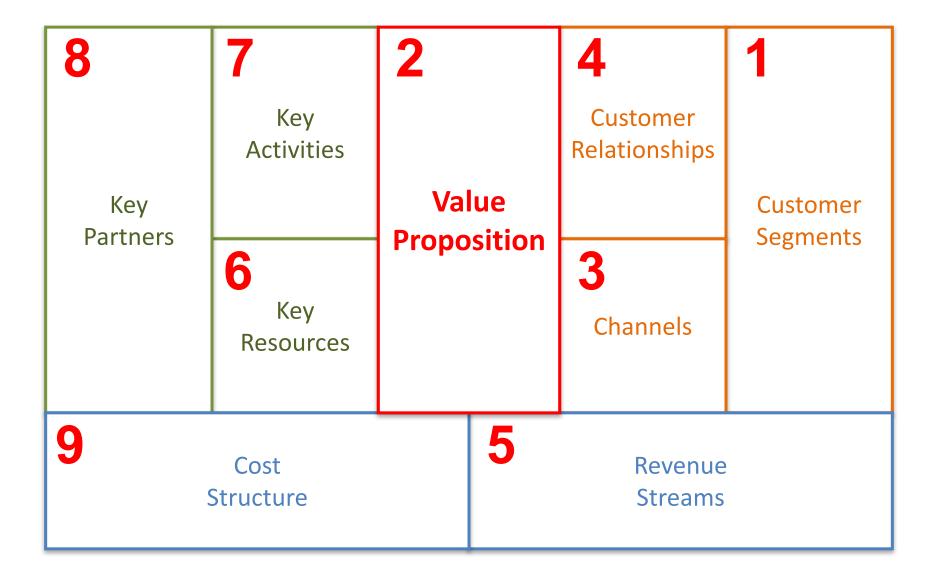
- 1. Perform an ethical analysis of Facebook.

  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?

### Overview of Fundamental MIS Concepts



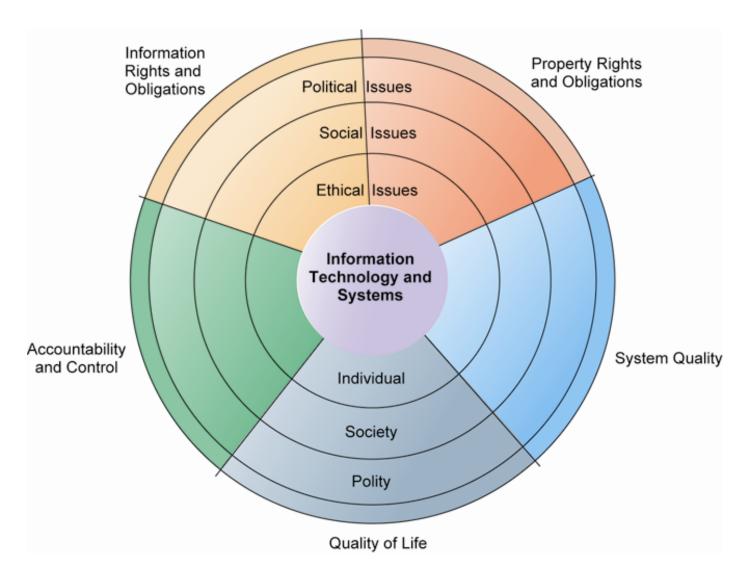
#### **Business Model**



#### **Information Systems and Ethics**

- Information systems raise new ethical questions because they create opportunities for:
  - Intense social change, threatening existing distributions of power, money, rights, and obligations
  - New kinds of crime

### THE RELATIONSHIP AMONG ETHICAL, SOCIAL, POLITICAL ISSUES IN AN INFORMATION SOCIETY



# A model for thinking about ethical, social, and political Issues

- Society as a calm pond
- IT as rock dropped in pond, creating ripples of new situations not covered by old rules
- Social and political institutions cannot respond overnight to these ripples—it may take years to develop etiquette, expectations, laws
  - Requires understanding of ethics to make choices in legally gray areas

# Five moral dimensions of the information age

- 1. Information rights and obligations
- 2. Property rights and obligations
- 3. Accountability and control
- 4. System quality
- 5. Quality of life

### Key technology trends that raise ethical issues

#### 1. Doubling of computer power

 More organizations depend on computer systems for critical operations.

#### 2. Rapidly declining data storage costs

 Organizations can easily maintain detailed databases on individuals.

#### 3. Networking advances and the Internet

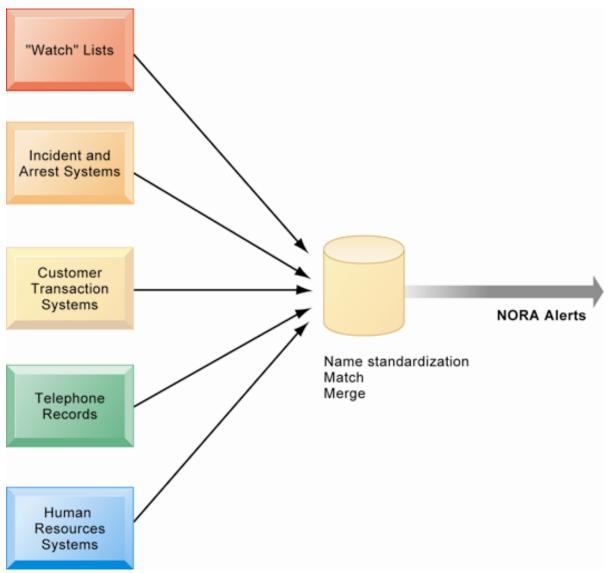
 Copying data from one location to another and accessing personal data from remote locations are much easier.

### Key technology trends that raise ethical issues

#### 4. Advances in data analysis techniques

- Profiling
  - Combining data from multiple sources to create dossiers of detailed information on individuals
- Nonobvious relationship awareness (NORA)
  - Combining data from multiple sources to find obscure hidden connections that might help identify criminals or terrorists
- 5. Mobile device growth
  - Tracking of individual cell phones

### NONOBVIOUS RELATIONSHIP AWARENESS (NORA)



#### Basic concepts for ethical analysis

#### Responsibility:

- Accepting the potential costs, duties, and obligations for decisions
- Accountability:
  - Mechanisms for identifying responsible parties
- Liability:
  - Permits individuals (and firms) to recover damages done to them
- Due process:
  - Laws are well-known and understood, with an ability to appeal to higher authorities

#### Five-step ethical analysis

- 1. Identify and clearly describe the facts.
- 2. Define the conflict or dilemma and identify the higher-order values involved.
- 3. Identify the stakeholders.
- 4. Identify the options that you can reasonably take.
- 5. Identify the potential consequences of your options.

# Information rights: privacy and freedom in the Internet age

#### Privacy:

- Claim of individuals to be left alone, free from surveillance or interference from other individuals, organizations, or state; claim to be able to control information about yourself
- In the United States, privacy protected by:
  - First Amendment (freedom of speech)
  - Fourth Amendment (unreasonable search and seizure)
  - Additional federal statues (e.g., Privacy Act of 1974)

#### **Fair Information Practices (FIP)**

- Set of principles governing the collection and use of information
  - Basis of most U.S. and European privacy laws
  - Based on mutuality of interest between record holder and individual
  - Restated and extended by FTC in 1998 to provide guidelines for protecting online privacy
- Used to drive changes in privacy legislation
  - COPPA
  - Gramm-Leach-Bliley Act
  - HIPAA
  - Do-Not-Track Online Act of 2011

### Federal Trade Commission (FTC) Fair Information Practices (FIP) principles

#### 1. Notice/awareness (core principle)

 Web sites must disclose practices before collecting data.

#### 2. Choice/consent (core principle)

 Consumers must be able to choose how information is used for secondary purposes.

#### 3. Access/participation

 Consumers must be able to review and contest accuracy of personal data.

### Federal Trade Commission (FTC) Fair Information Practices (FIP) principles

#### 4. Security

 Data collectors must take steps to ensure accuracy, security of personal data.

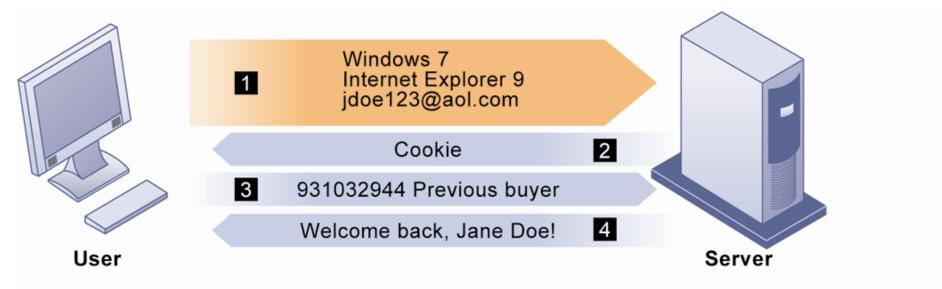
#### 5. Enforcement

Must be mechanism to enforce FIP principles.

#### Internet challenges to privacy

- Cookies
  - Identify browser and track visits to site
  - Super cookies (Flash cookies)
- Web beacons (Web bugs)
  - Tiny graphics embedded in e-mails and Web pages
  - Monitor who is reading e-mail message or visiting site
- Spyware
  - Surreptitiously installed on user's computer
  - May transmit user's keystrokes or display unwanted ads
- Google services and behavioral targeting

## HOW COOKIES IDENTIFY WEB VISITORS



- The Web server reads the user's Web browser and determines the operating system, browser name, version number, Internet address, and other information.
- The server transmits a tiny text file with user identification information called a cookie, which the user's browser receives and stores on the user's computer hard drive.
- 3. When the user returns to the Web site, the server requests the contents of any cookie it deposited previously in the user's computer.
- **4.** The Web server reads the cookie, identifies the visitor, and calls up data on the user.

#### Internet challenges to privacy

- The United States allows businesses to gather transaction information and use this for other marketing purposes.
  - Opt-out vs. opt-in model
- Online industry promotes self-regulation over privacy legislation.
- However, extent of responsibility taken varies:
  - Complex/ambiguous privacy statements
  - Opt-out models selected over opt-in
  - Online "seals" of privacy principles

#### Technical solutions for privacy

- E-mail encryption
- Anonymity tools
- Anti-spyware tools
- Browser features
  - "Private" browsing
  - "Do not track" options
- Overall, few technical solutions

#### Property rights: Intellectual property

- Intellectual property: intangible property of any kind created by individuals or corporations
- Three main ways that intellectual property is protected:
  - Trade secret: intellectual work or product belonging to business, not in the public domain
  - Copyright: statutory grant protecting intellectual property from being copied for the life of the author, plus 70 years
  - Patents: grants creator of invention an exclusive monopoly on ideas behind invention for 20 years

#### Challenges to intellectual property rights

- Digital media different from physical media (e.g., books)
  - Ease of replication
  - Ease of transmission (networks, Internet)
  - Difficulty in classifying software
  - Compactness
  - Difficulties in establishing uniqueness
- Digital Millennium Copyright Act (DMCA)
  - Makes it illegal to circumvent technology-based protections of copyrighted materials

#### Accountability, liability, control

- Computer-related liability problems
  - If software fails, who is responsible?
    - If seen as part of machine that injures or harms, software producer and operator may be liable.
    - If seen as similar to book, difficult to hold author/publisher responsible.
    - What should liability be if software seen as service?
       Would this be similar to telephone systems not being liable for transmitted messages?

# System quality: Data quality and system errors

- What is an acceptable, technologically feasible level of system quality?
  - Flawless software is economically unfeasible.
- Three principal sources of poor system performance:
  - Software bugs, errors
  - Hardware or facility failures
  - Poor input data quality (most common source of business system failure)

#### Quality of life: Equity, access, boundaries

- Negative social consequences of systems
  - Balancing power: although computing power
     decentralizing, key decision making remains centralized
  - Rapidity of change: businesses may not have enough time to respond to global competition
  - Maintaining boundaries: computing, Internet use lengthens work-day, infringes on family, personal time
  - Dependence and vulnerability: public and private organizations ever more dependent on computer systems

#### Quality of life: Equity, access, boundaries

- Computer crime and abuse
  - Computer crime: commission of illegal acts through use of computer or against a computer system—computer may be object or instrument of crime
  - Computer abuse: unethical acts, not illegal
    - Spam: high costs for businesses in dealing with spam
- Employment:
  - Reengineering work resulting in lost jobs
- Equity and access—the digital divide:
  - Certain ethnic and income groups in the United States less likely to have computers or Internet access

#### Quality of life: Equity, access, boundaries

- Health risks
  - Repetitive stress injury (RSI)
    - Largest source is computer keyboards
    - Carpal tunnel syndrome (CTS)
  - Computer vision syndrome (CVS)
    - Eyestrain and headaches related to screen use
  - Technostress
    - Aggravation, impatience, fatigue

#### **Case Study:**

### Amazon and Cloud Computing (Chap. 5) (pp. 234-236) Should Businesses Move to the Cloud?

- 1. What business benefits do cloud computing services provide? What problems do they solve?
- 2. What are the disadvantages of cloud computing?
- 3. How do the concepts of capacity planning, scalability, and TCO apply to this case? Apply these concepts both to Amazon and to subscribers of its services.
- 4. What kinds of businesses are most likely to benefit from using cloud computing? Why?

#### 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: 週四 7,8 (14:10-16:00) B702

#### 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