### Case Study for Information Management 資訊管理個案

Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7)

1011CSIM4B07 TLMXB4B Thu 8, 9, 10 (15:10-18:00) B508

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http://mail. tku.edu.tw/myday/ 2012-10-25

### 課程大綱 (Syllabus)

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週次 日期 內容(Subject/Topics)
  101/09/13 Introduction to Case Study for
              Information Management
  101/09/20 Information Systems in Global Business:
              1. UPS, 2. The National Bank of Kuwait (Chap. 1)
  101/09/27 Global E-Business and Collaboration:
              NTUC Income (Chap. 2)
  101/10/04 Information Systems, Organization, and Strategy:
              Soundbuzz (Chap. 3)
  101/10/11 IT Infrastructure and Emerging Technologies:
              Salesforce.com (Chap. 5)
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101/10/18 Foundations of Business Intelligence: Lego (Chap. 6)

### 課程大綱 (Syllabus)

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週次 日期 內容(Subject/Topics)
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- 7 101/10/25 Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7)
- 8 101/11/01 Securing Information System:
  - 1. Facebook,
  - 2. European Network and Information Security Agency (ENISA) (Chap. 8)
- 9 101/11/08 Midterm Report (期中報告)
- 10 101/11/15 期中考試週
- 11 101/11/22 Enterprise Application:
  Border States Industries Inc. (BSE) (Chap. 9)
- 12 101/11/29 E-commerce:
  - 1. Facebook, 2. Amazon vs. Walmart (Chap. 10)

### 課程大綱 (Syllabus)

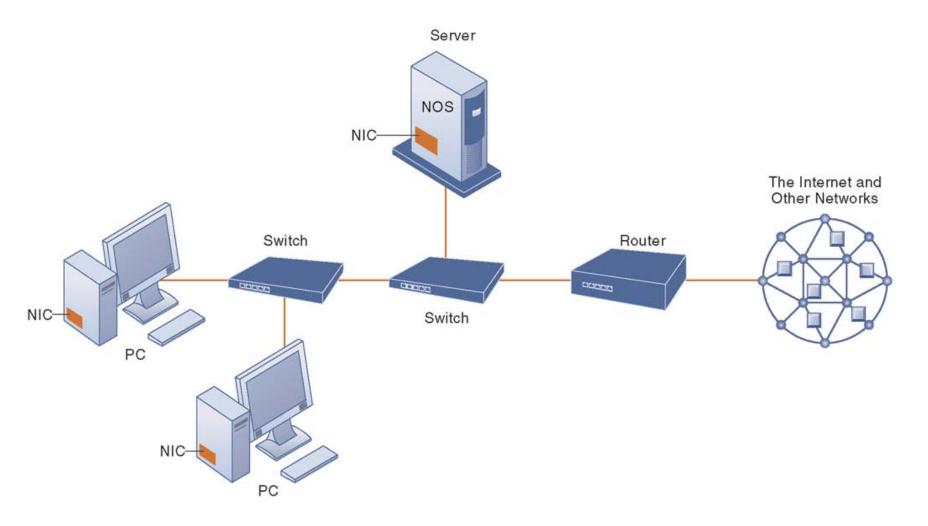
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週次 日期 內容(Subject/Topics)
13 101/12/06 Knowledge Management:
              Tata Consulting Services (Chap. 11)
   101/12/13 Enhancing Decision Making: CompStat (Chap. 12)
15 101/12/20 Building Information Systems:
              Electronic Medical Records (Chap. 13)
16 101/12/27 Managing Projects: JetBlue and WestJet (Chap. 14)
   102/01/03 Final Report (期末報告)
18 102/01/10 期末考試週
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Chap. 7
Telecommunications,
the Internet, and
Wireless Technology:
Google, Apple, and Microsoft

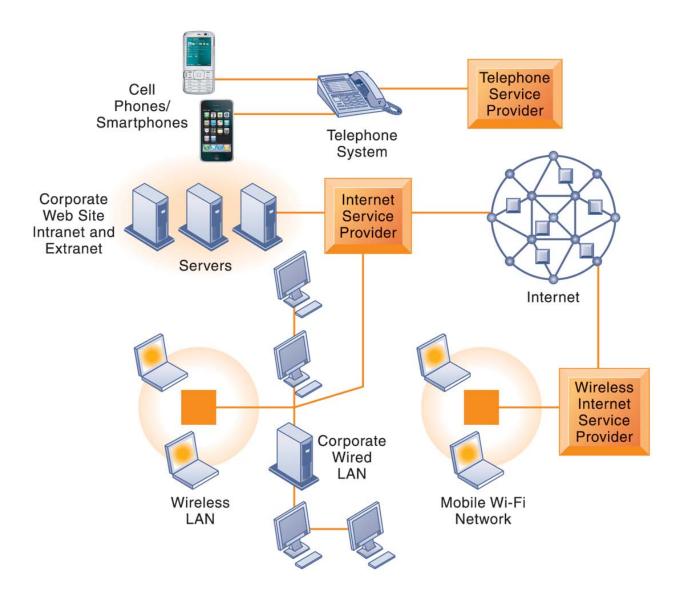
# Case Study: Google, Apple, and Microsoft (Chap. 7) Google, Apple, and Microsoft struggle for Your Internet Experience

- 1. Define and compare the business models and areas of strength of Apple, Google, and Microsoft.
- 2. Why is mobile computing so important to these three firms? Evaluate the mobile platform offerings of each firm.
- 3. What is the significance of applications and app stores to the success or failure of mobile computing?
- 4. Which company and business model do you believe will prevail in this epic struggle? Explain your answer.
- 5. What difference would it make to you as a manager or individual consumer if Apple, Google, or Microsoft dominated the Internet experience? Explain your answer.

### COMPONENTS OF A SIMPLE COMPUTER NETWORK



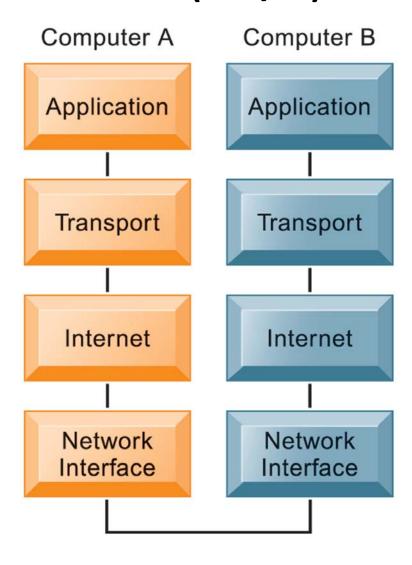
#### **CORPORATE NETWORK INFRASTRUCTURE**



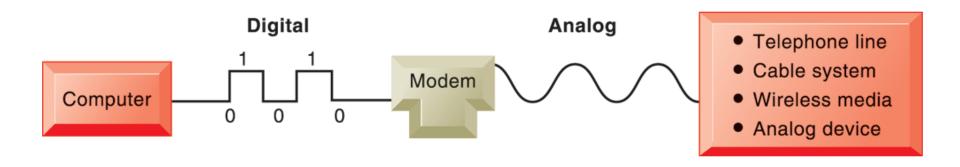
### PACKED-SWITCHED NETWORKS AND PACKET COMMUNICATIONS

Packet Number Message Number Destination Data Packet 1 Message Reassembled Message Packet 2 Packet 3

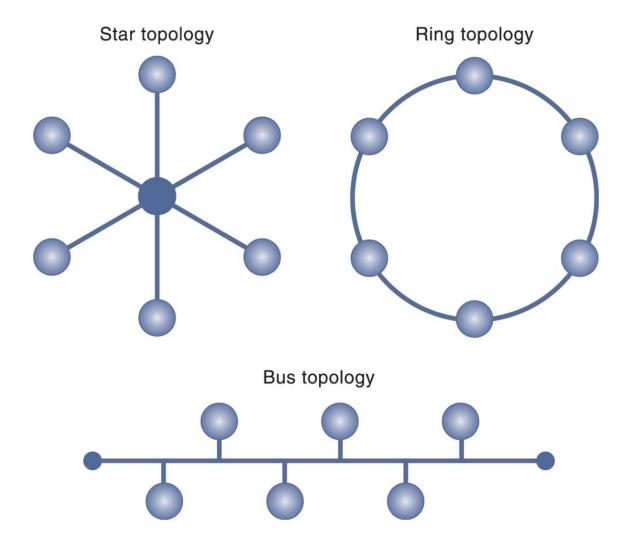
### THE TRANSMISSION CONTROL PROTOCOL/ INTERNET PROTOCOL (TCP/IP) REFERENCE MODEL



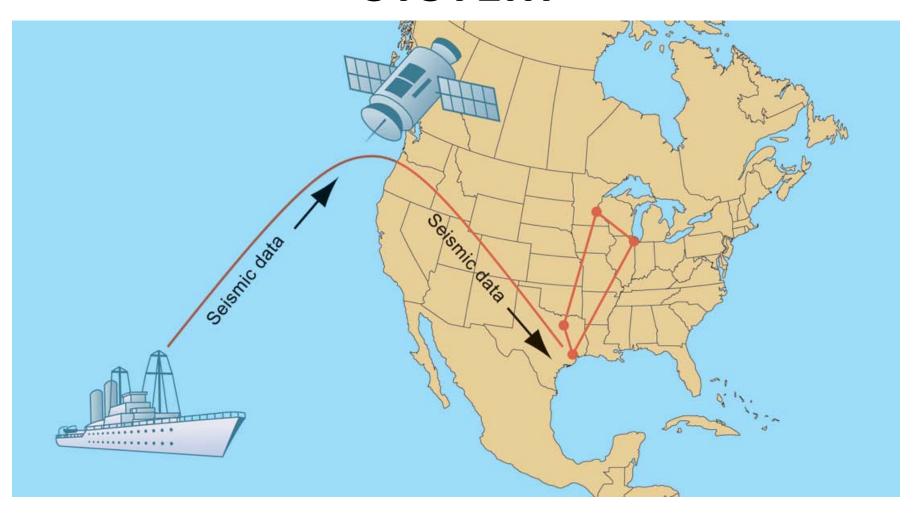
#### **FUNCTIONS OF THE MODEM**



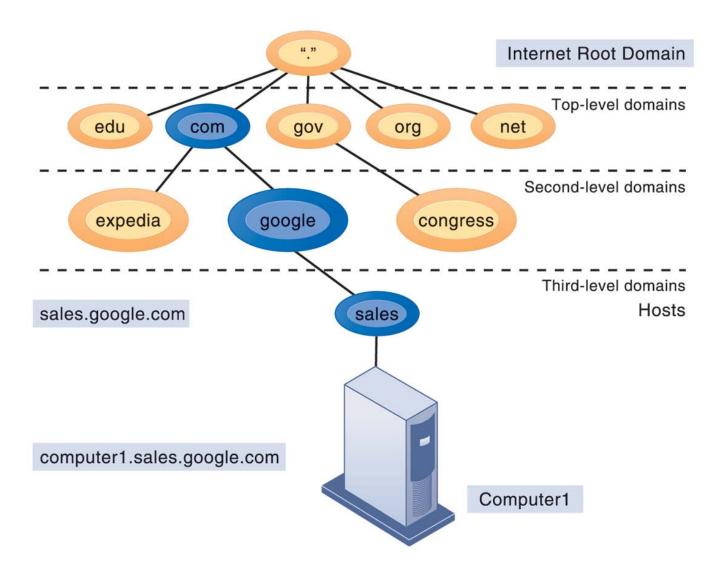
### **NETWORK TOPOLOGIES**



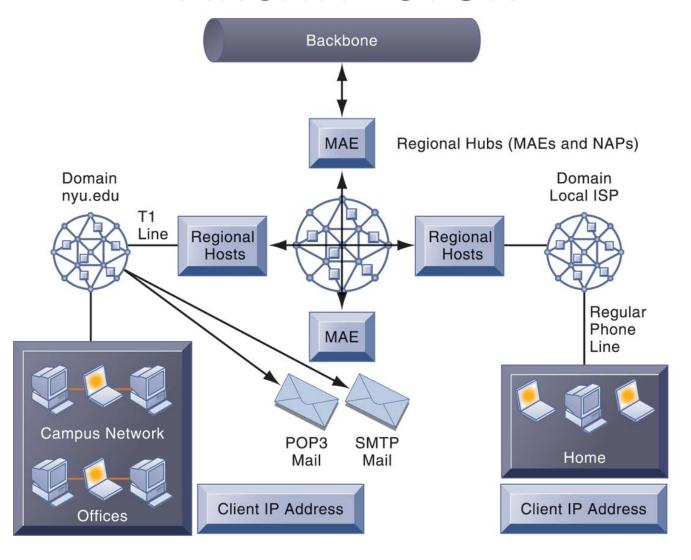
## BP'S SATELLITE TRANSMISSION SYSTEM



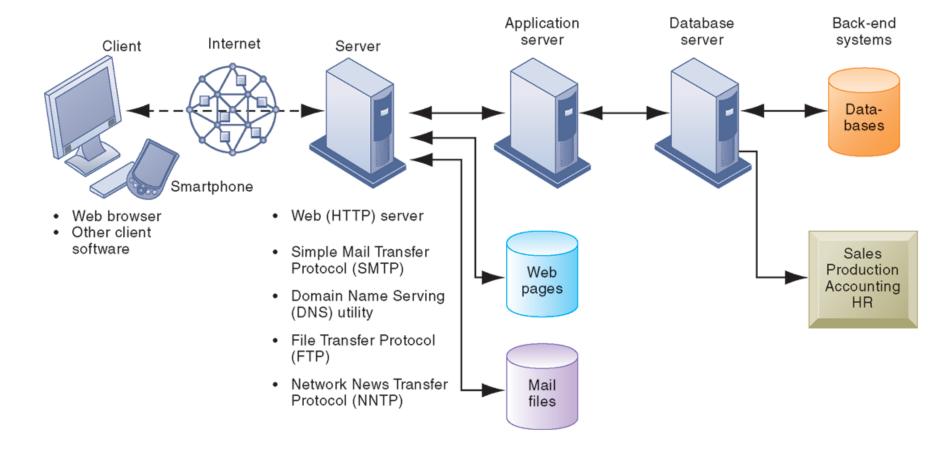
#### THE DOMAIN NAME SYSTEM



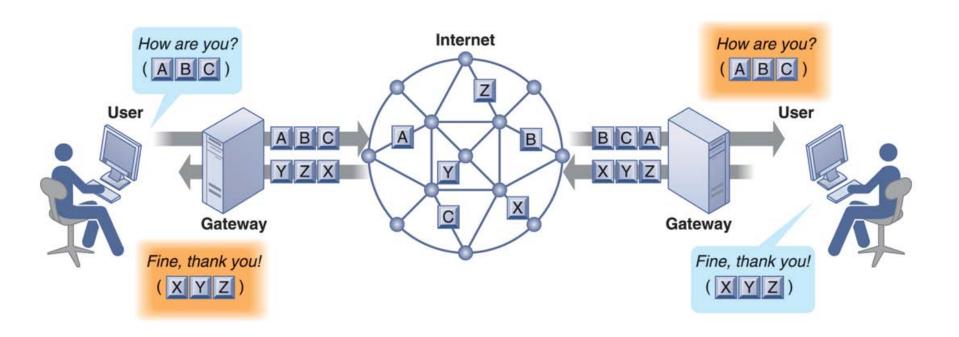
### INTERNET NETWORK ARCHITECTURE



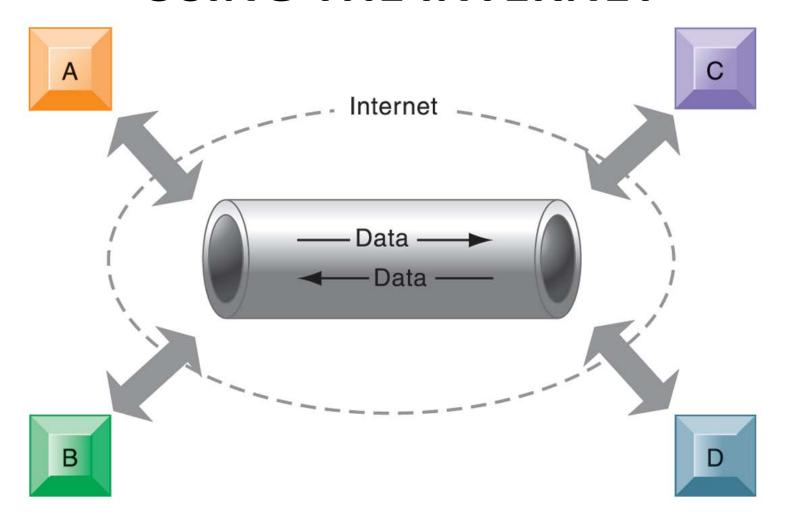
### CLIENT/SERVER COMPUTING ON THE INTERNET



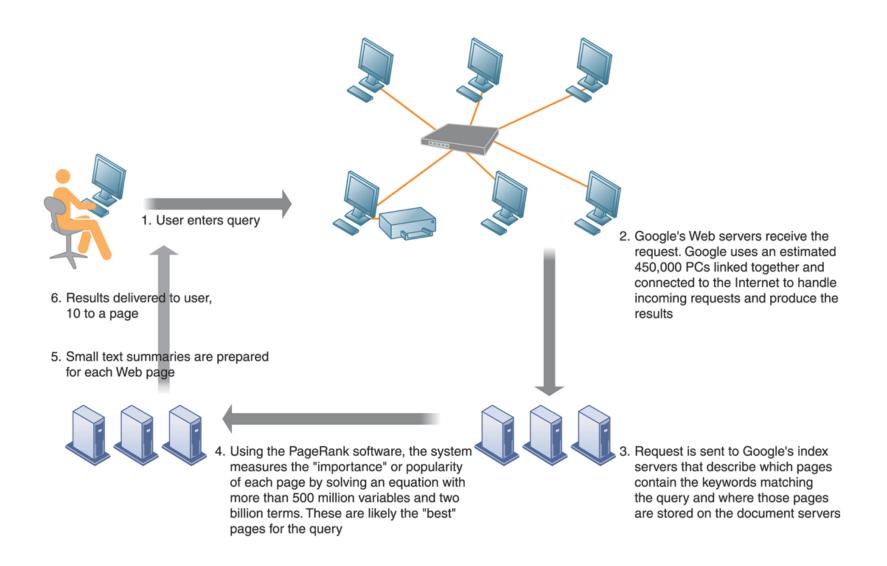
#### **HOW VOICE OVER IP WORKS**



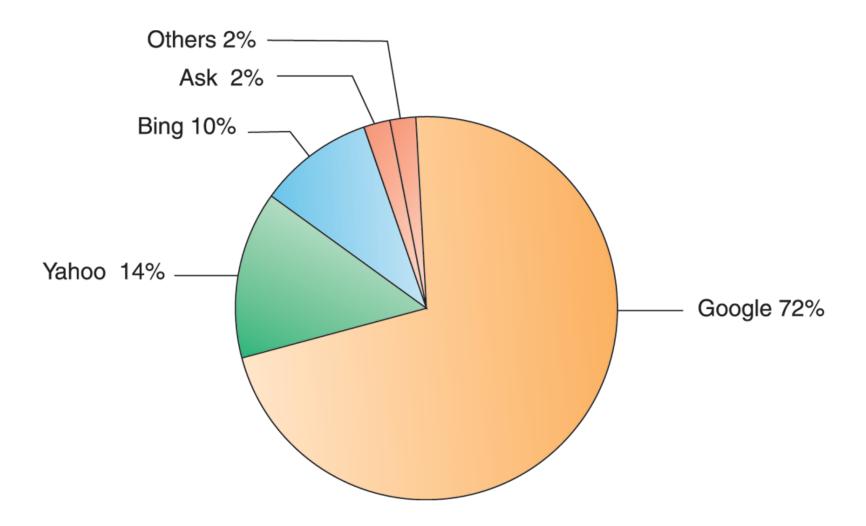
### A VIRTUAL PRIVATE NETWORK USING THE INTERNET



### **HOW GOOGLE WORKS**



#### **TOP U.S. WEB SEARCH ENGINES**



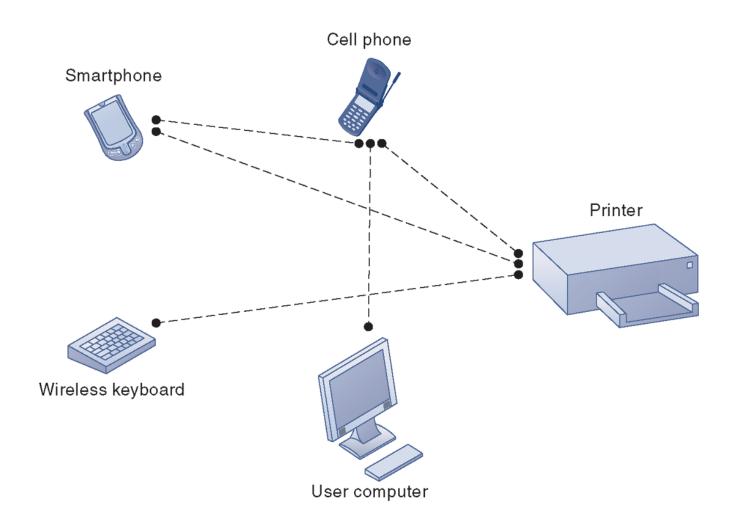
### Web 2.0

- Four defining features
  - 1. Interactivity
  - Real-time user control
  - 3. Social participation
  - 4. User-generated content
- Technologies and services behind these features
  - Cloud computing
  - Blogs/RSS
  - Mashups & widgets
  - Wikis
  - Social networks

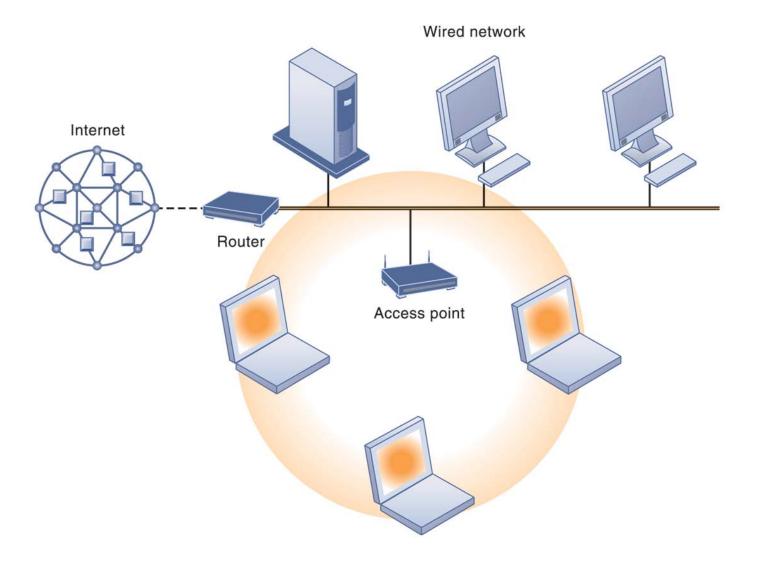
### Web 3.0: The Future Web

- Web 3.0 the Semantic Web
  - Effort of W3C to add meaning to existing Web
  - Make searching more relevant to user
- Other visions
  - More "intelligent" computing
  - 3D Web
  - Pervasive Web
  - Increase in cloud computing, SaaS
  - Ubiquitous connectivity between mobile and other access devices
  - Make Web a more seamless experience

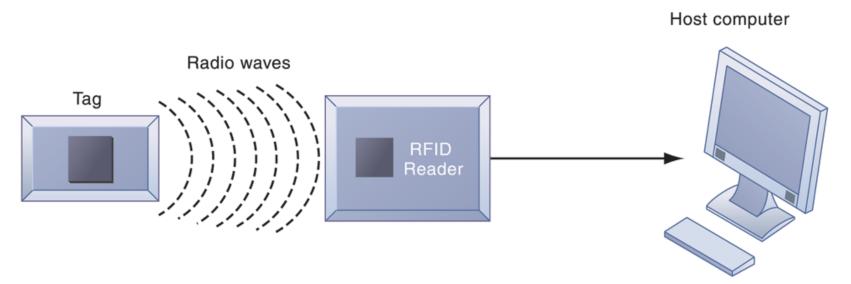
### A BLUETOOTH NETWORK (PAN)



### **AN 802.11 WIRELESS LAN**



#### **HOW RFID WORKS**

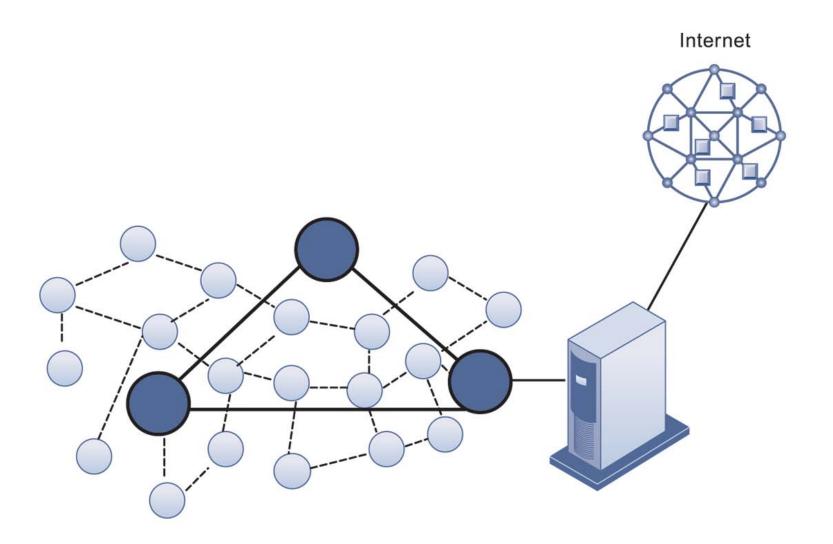


A microchip holds data including an identification number. The rest of the tag is an antenna that transmits data to a reader.

Has an antenna that constantly transmits. When it senses a tag, it wakes it up, interrogates it, and decodes the data. Then it transmits the data to a host system over wired or wireless connections.

Processes the data from the tag that have been transmitted by the reader.

### A WIRELESS SENSOR NETWORK



### 資訊管理個案 (Case Study for Information Management)

- 1. 請同學於資訊管理個案討論前 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 先繳交個案研究問題書面報告。

### References

- Kenneth C. Laudon & Jane P. Laudon (2012),
   Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.
- 周宣光 譯 (2011), 資訊管理系統—管理數位化公司, 第12版,東華書局