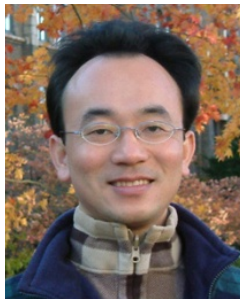


**Hot Issues of Information Management**  
**Telecommunications, the Internet, and**  
**Wireless Technology:**  
**Google, Apple, and Microsoft (Chap. 7)**

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Thu 7,8 (14:10-16:00) B702



Min-Yuh Day

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2017-11-30; 2017-12-07



# 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 Information Management
2	2017/09/28	Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)
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	IT Infrastructure and Emerging Technologies: Amazon and Cloud Computing (Chap. 5) (pp. 234-236)
8	2017/11/09	Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262)
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	Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7) (pp.318-320)
12	2017/12/07	Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7) (pp.318-320)

# 課程大綱 (Syllabus)

週次	日期	內容 (Subject/Topics)
13	2017/12/14	Enterprise Applications: Summit and SAP (Chap. 9) (pp.396-398)
14	2017/12/21	E-commerce: Zagat (Chap. 10) (pp.443-445)
15	2017/12/28	Enhancing Decision Making: Zynga (Chap. 12) (pp.512-514)
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)

# Management Information Systems: Managing the Digital Firm

**1** Organization, Management, and the  
Networked Enterprise

**2** Information Technology Infrastructure

**3** Key System Applications for the  
Digital Age

**4** Building and Managing Systems

**Chap. 7**

**Telecommunications, the Internet,  
and Wireless Technology:  
Google, Apple, and Microsoft**

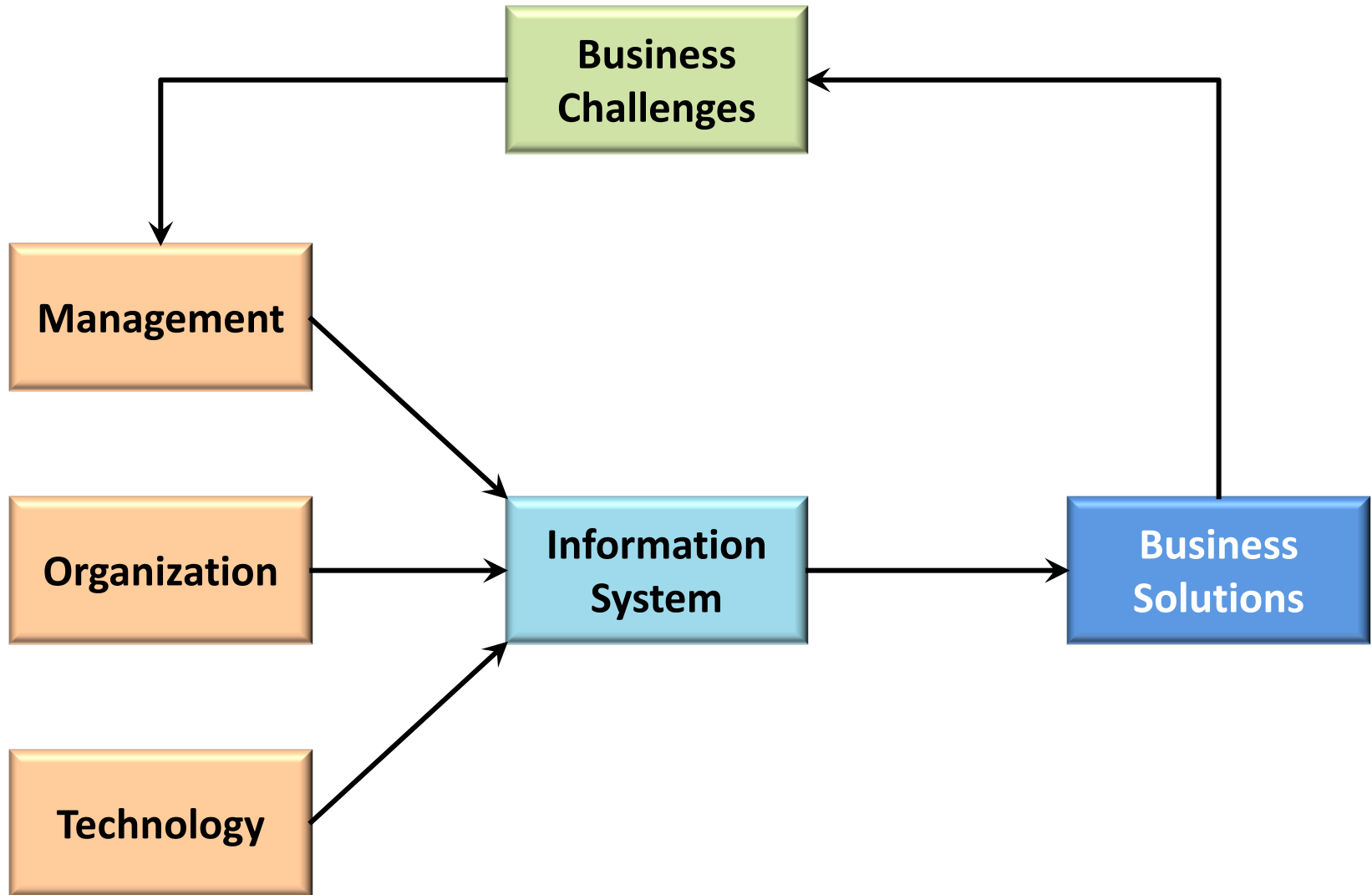
# Case Study:

## Google, Apple, and Microsoft (Chap. 7) (pp. 318-320)

### Apple, Google, and Microsoft Battle for Your Internet Experience

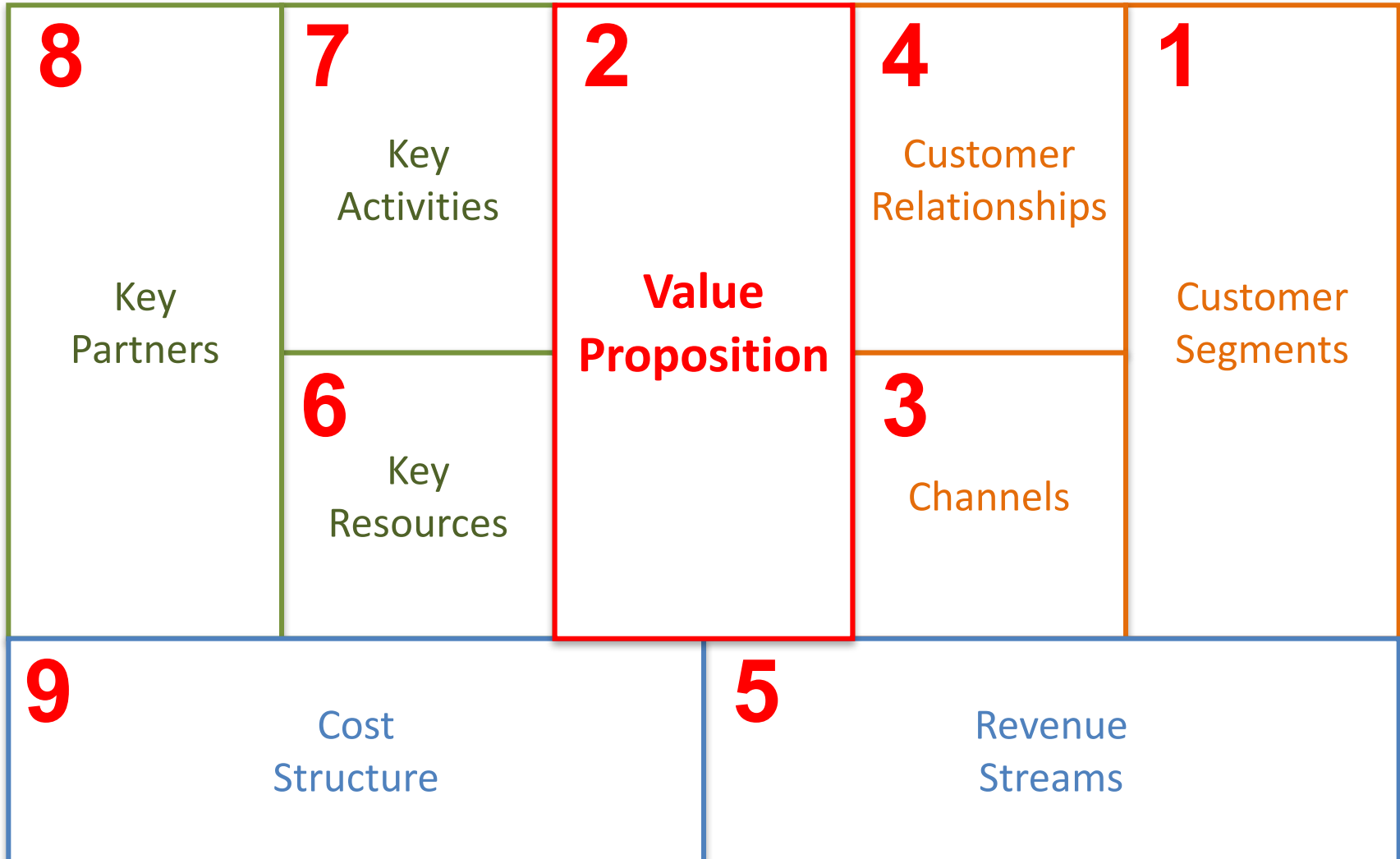
1. Define and compare the business models and areas of strength of Apple, Google, and Microsoft.
2. Why is mobile computing so important to these three firms? Evaluate the mobile platform offerings of each firm.
3. What is the significance of applications and app stores, and closed vs. open app standards 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 a business or to an individual consumer if Apple, Google, or Microsoft dominated the Internet experience? Explain your answer.

# Overview of Fundamental MIS Concepts

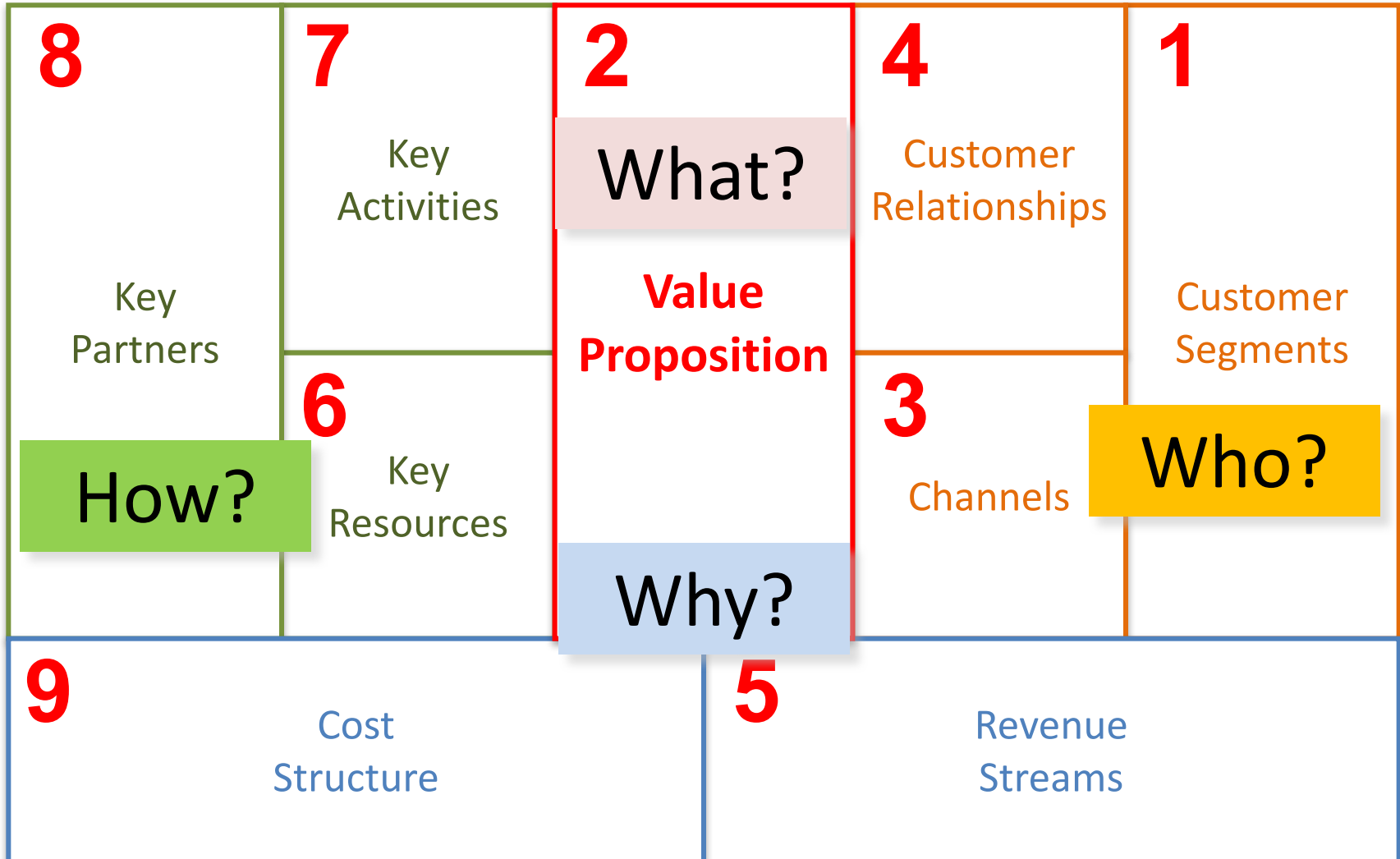




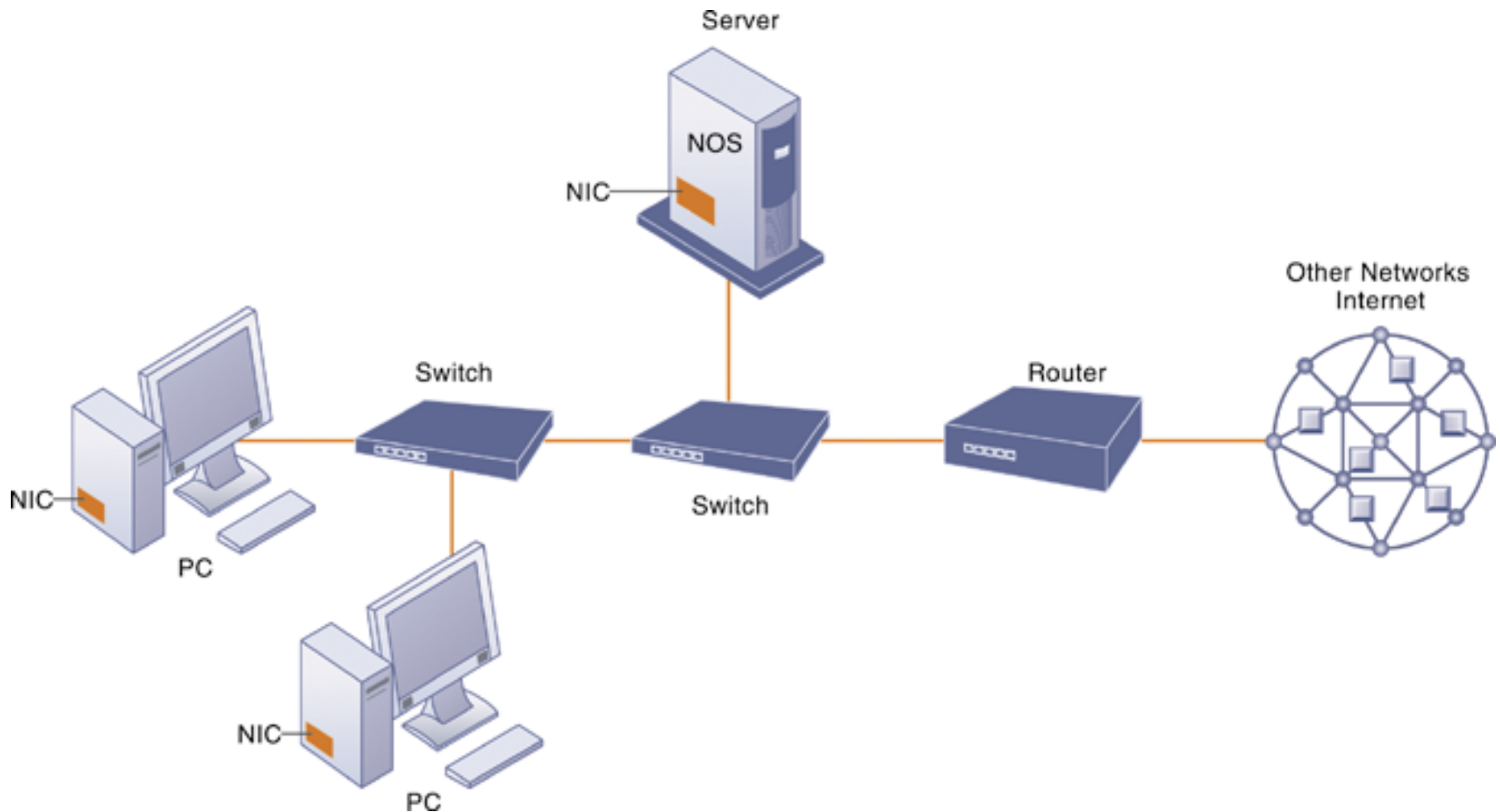
# Business Model



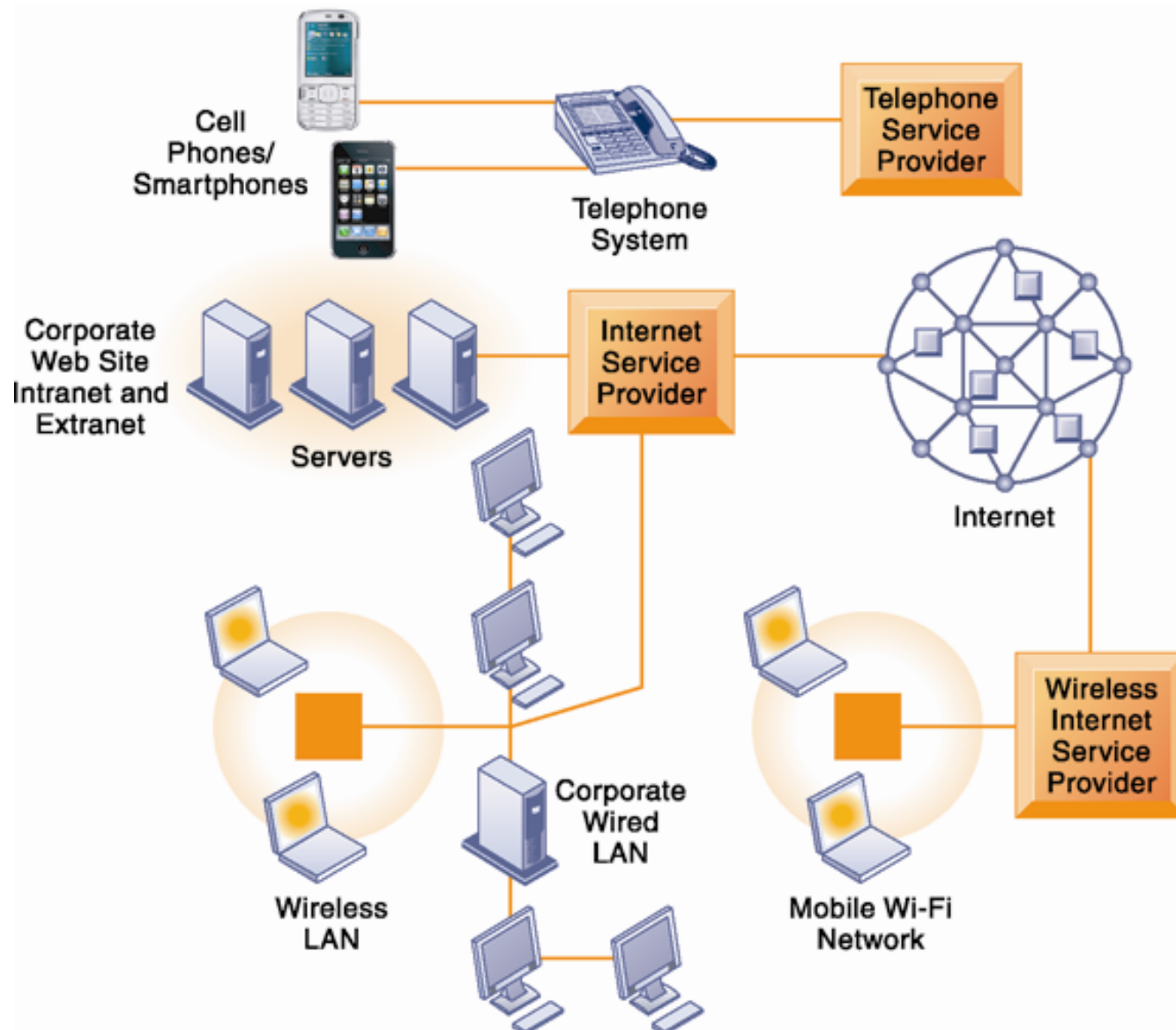
# Business Model



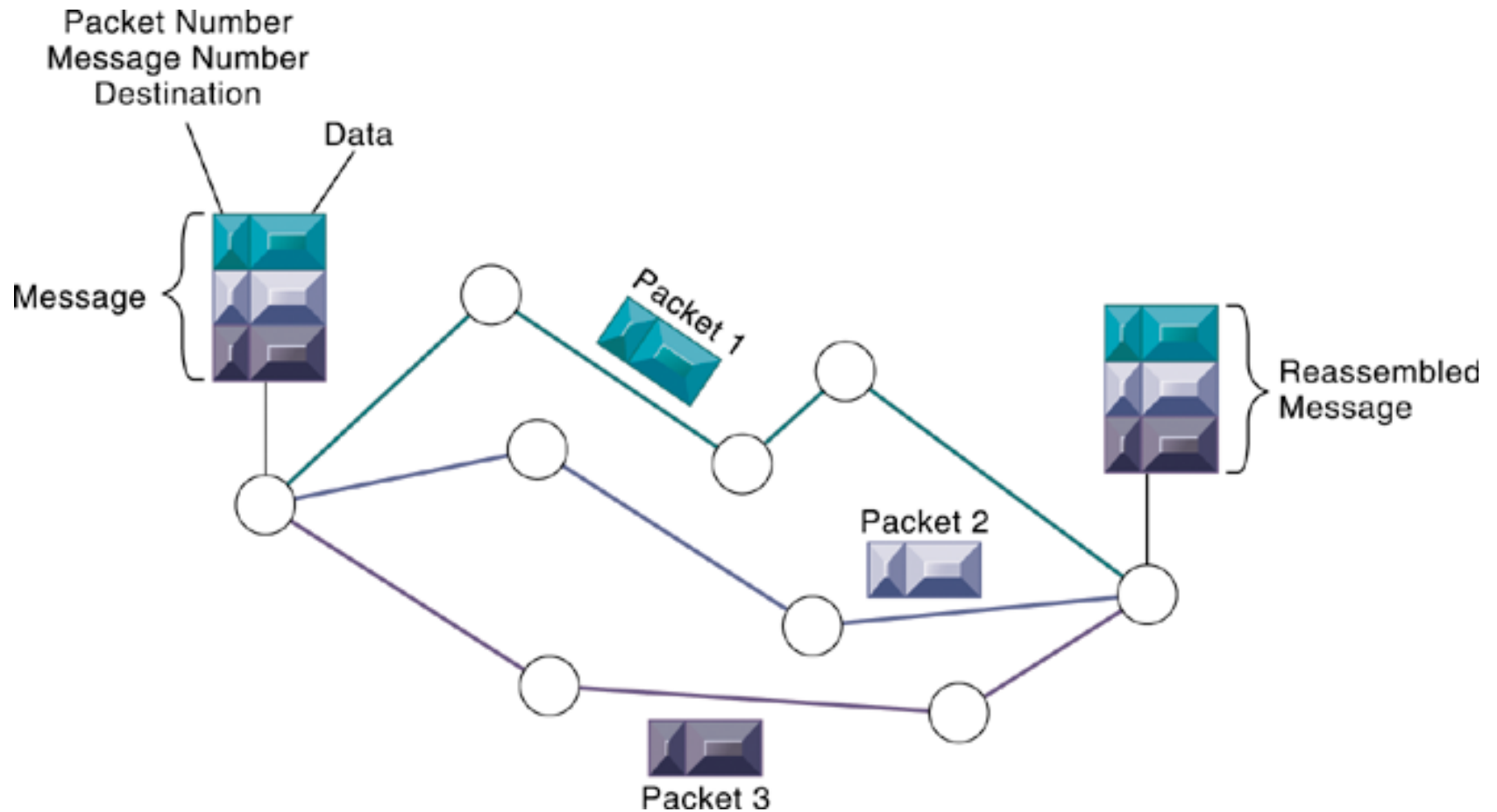
# Components of a Simple Computer Network



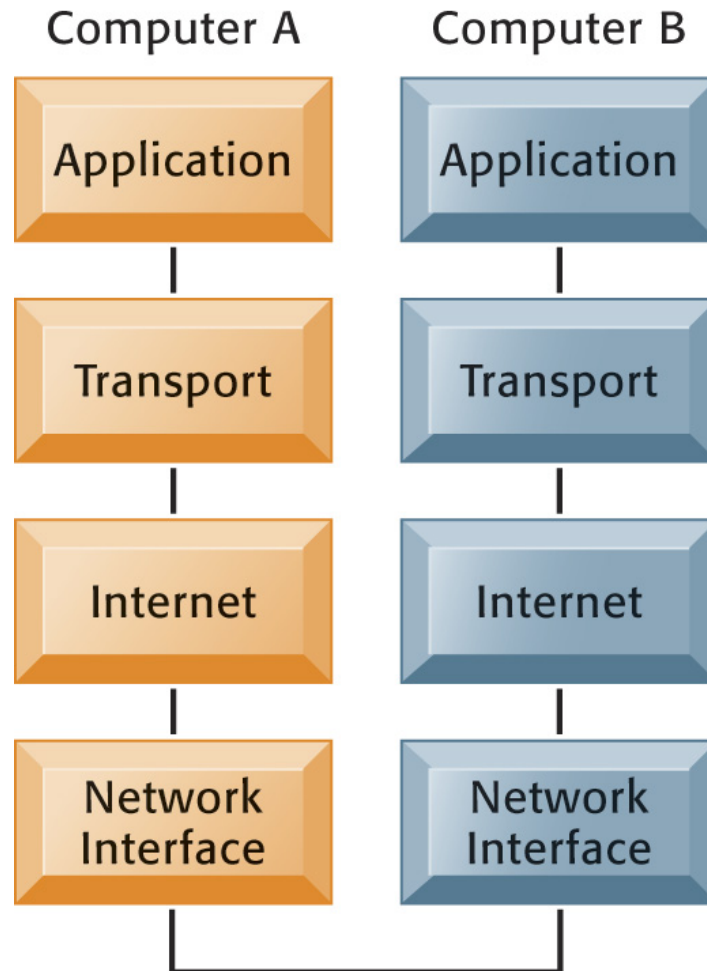
# Corporate Network Infrastructure



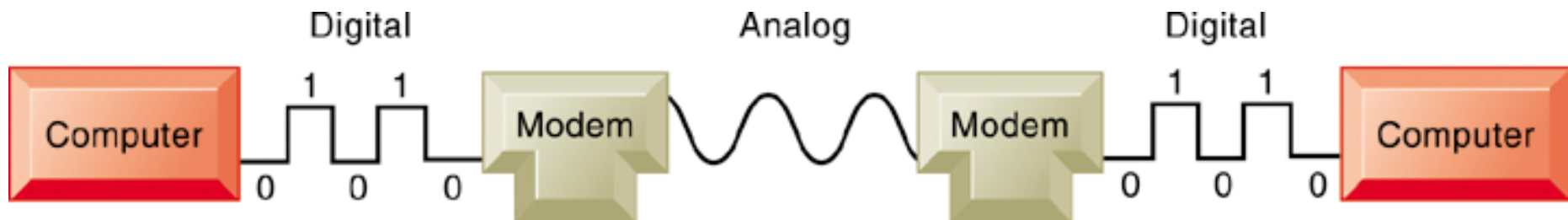
# Packet-Switched Networks and Packet Communications



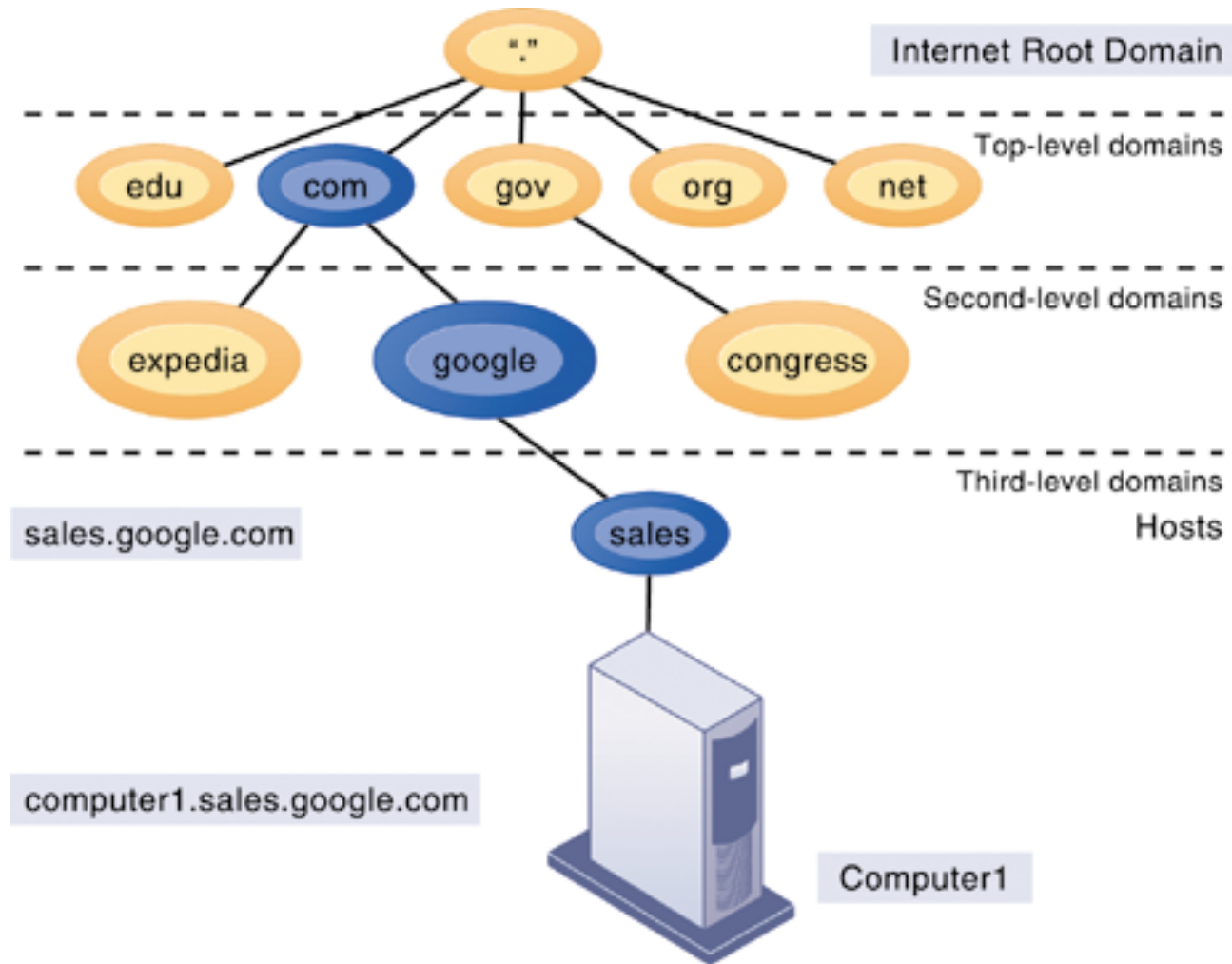
# The Transmission Control Protocol/Internet Protocol (TCP/IP) Reference Model



# Functions of the Modem

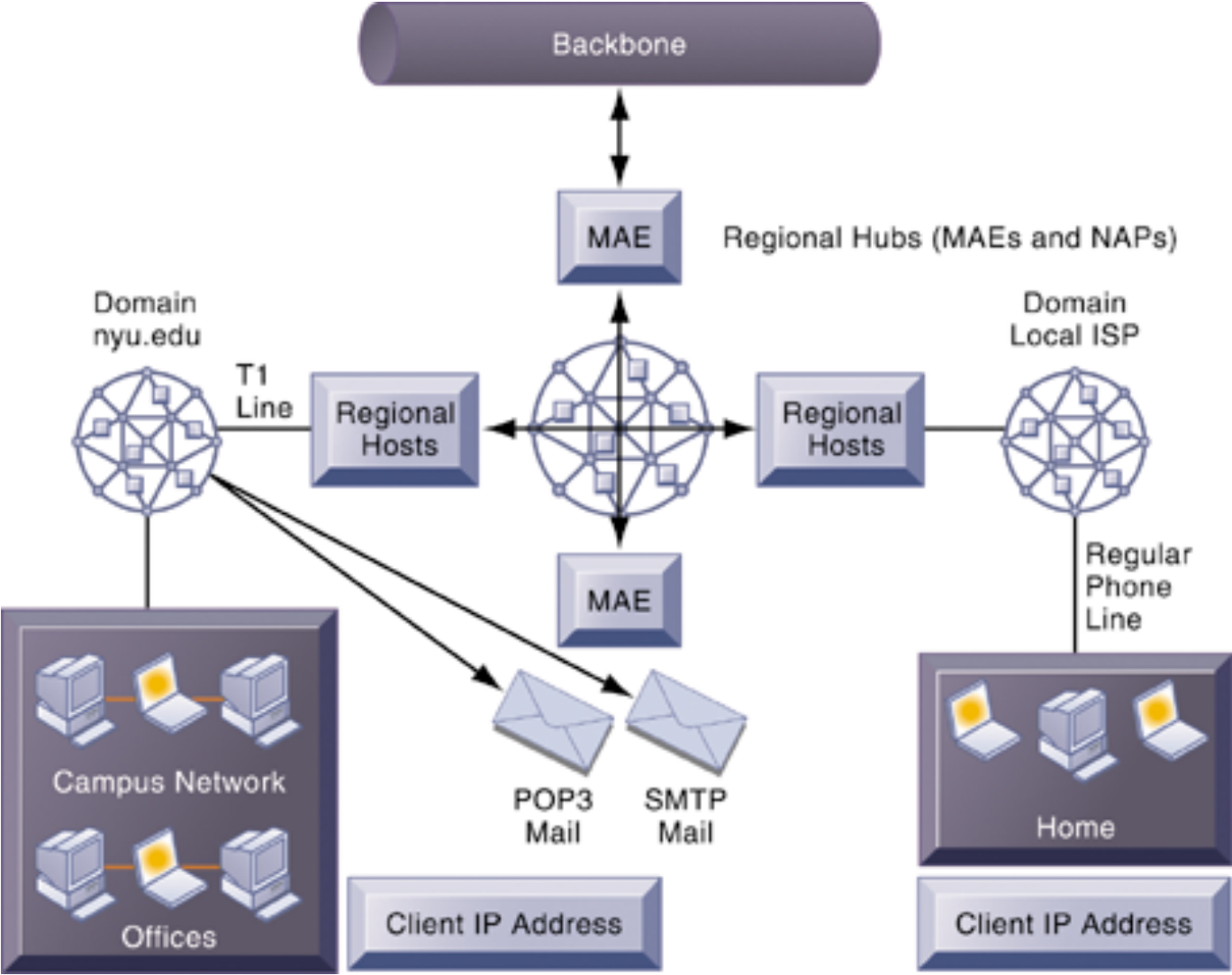


# The Domain Name System

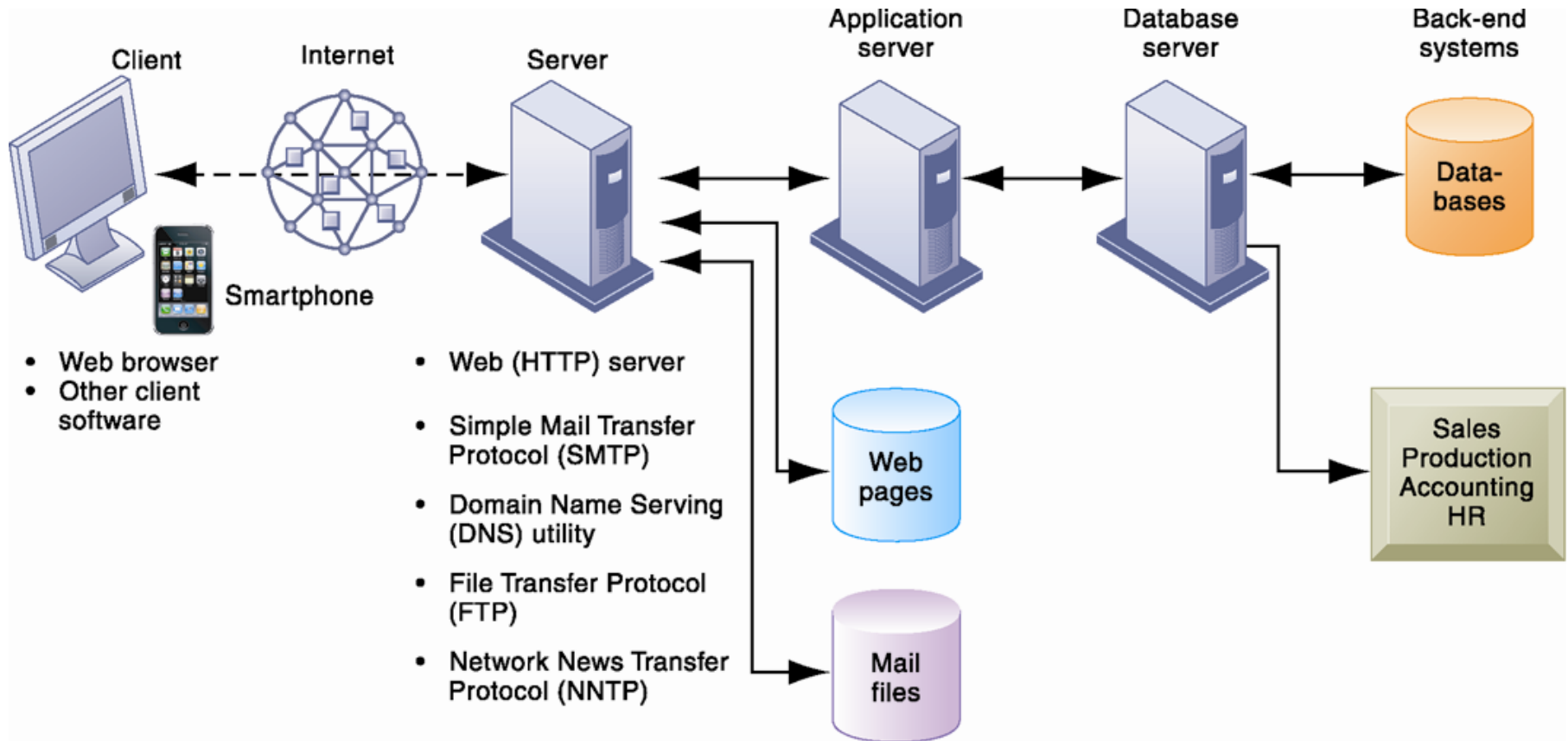




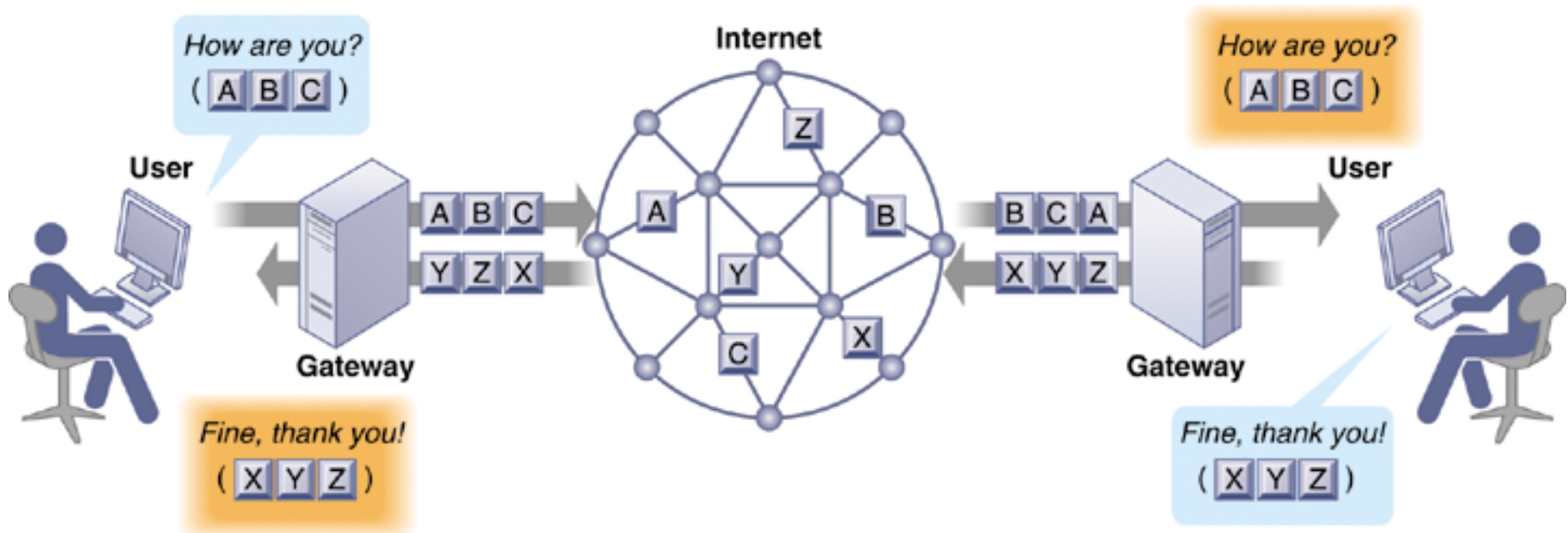
# Internet Network Architecture



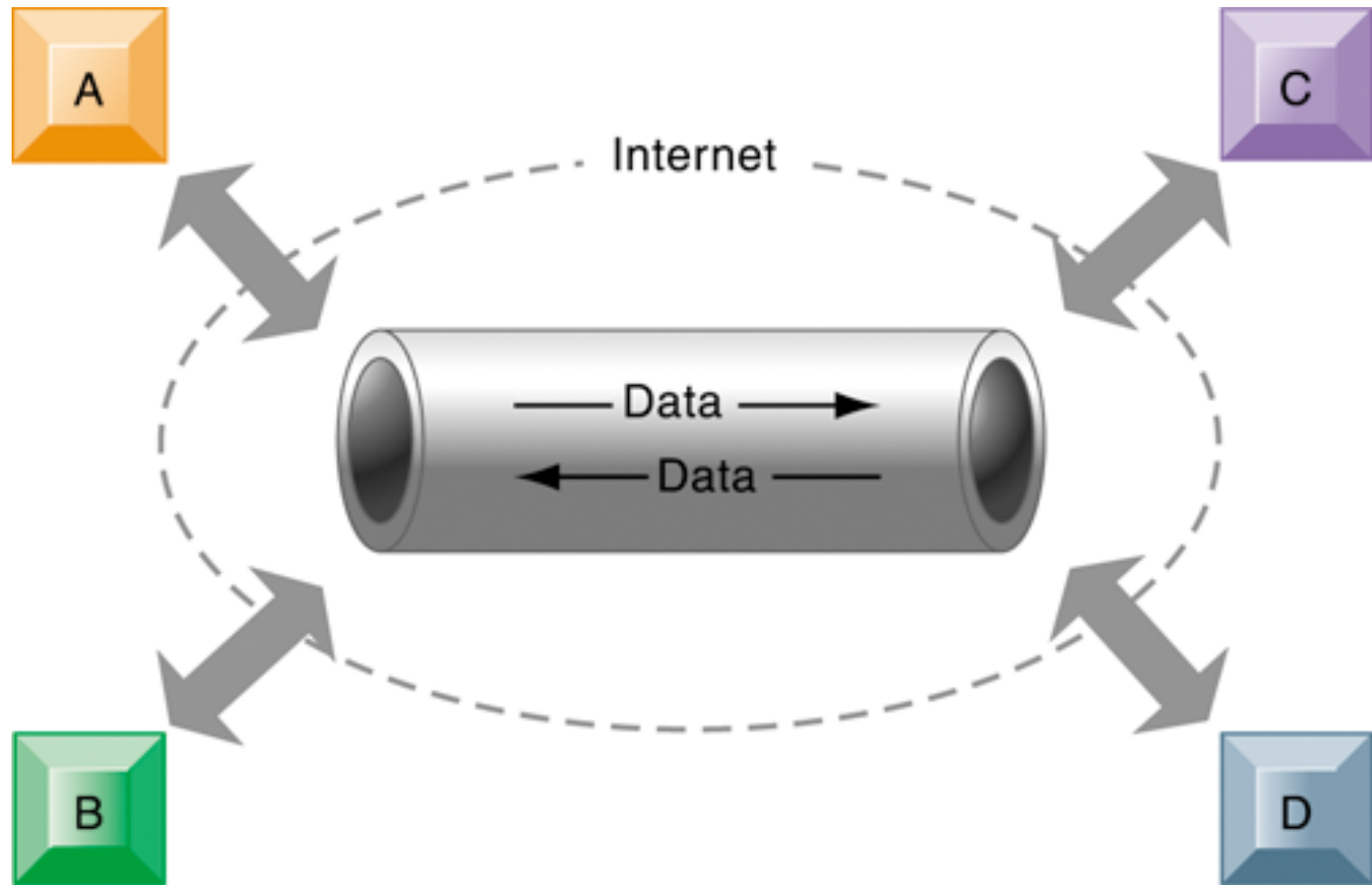
# Client/Server Computing on the Internet



# How Voice over IP Works



# A Virtual Private Network Using the Internet



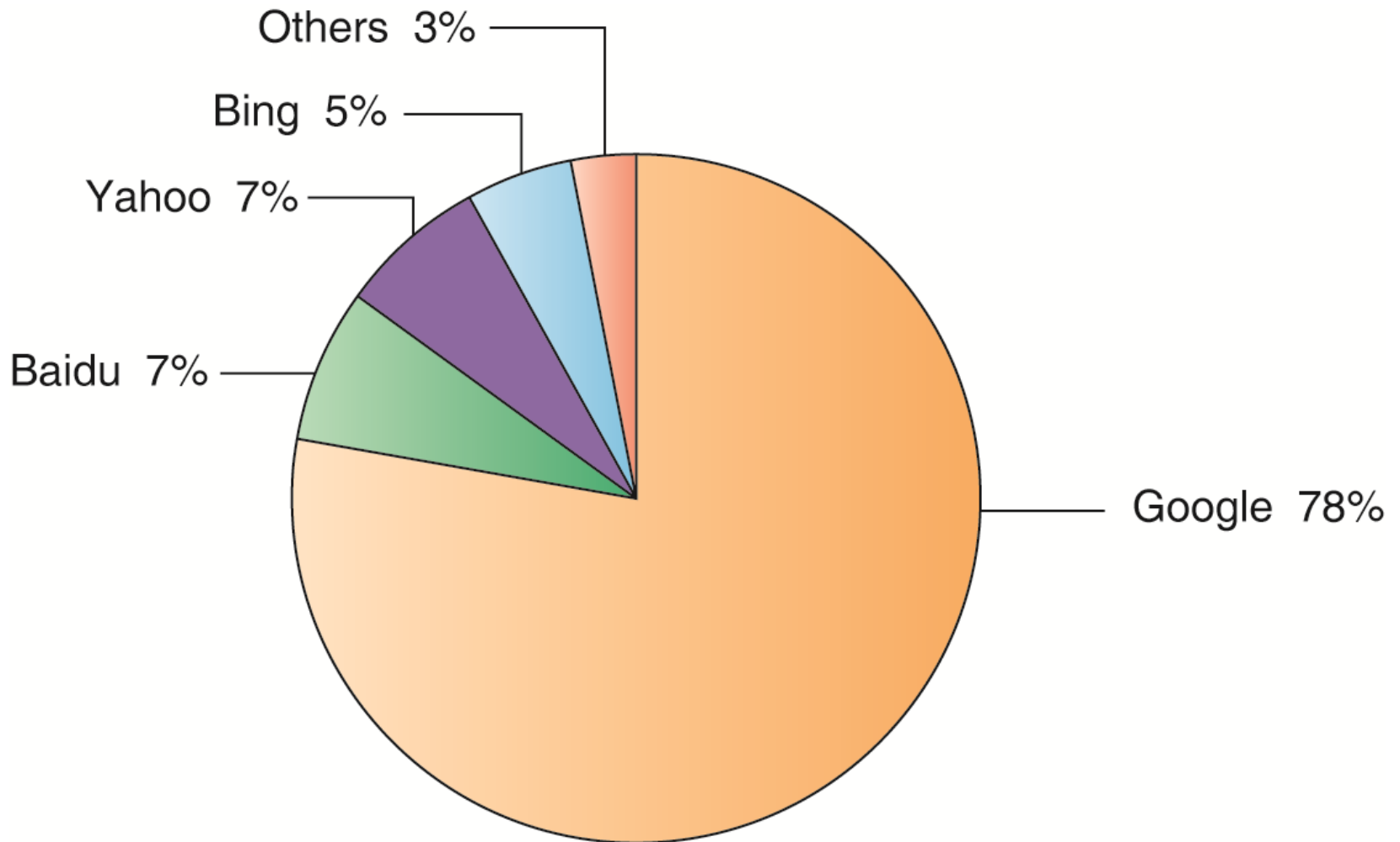
# The Global Internet

- Search engines
  - Started as simpler programs using keyword indexes
  - Google improved indexing and created page ranking system
- Mobile search: 20% of all searches in 2012
- Search engine marketing
  - Major source of Internet advertising revenue
- Search engine optimization (SEO)
  - Adjusting Web site and traffic to improve rankings in search engine results

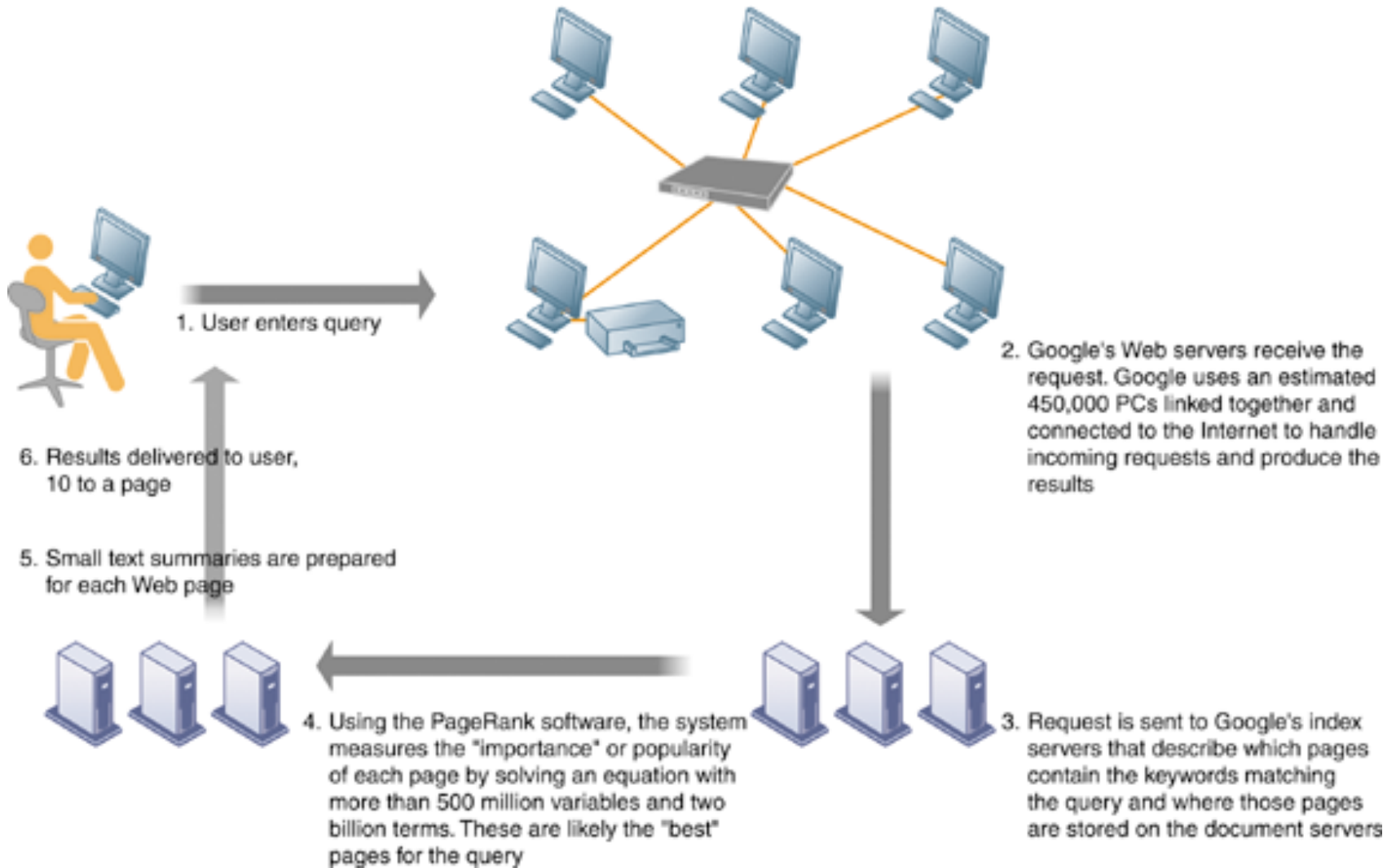
# The Global Internet

- Social search
  - Google +1, Facebook Like
- Semantic search
  - Anticipating what users are looking for rather than simply returning millions of links
- Intelligent agent shopping bots
  - Use intelligent agent software for searching Internet for shopping information

# Top U.S. Web Search Engines



# How Google Works





# Web 2.0

- Second-generation services
- Enabling collaboration, sharing information, and creating new services online
- Features
  - Interactivity
  - Real-time user control
  - Social participation (sharing)
  - User-generated content

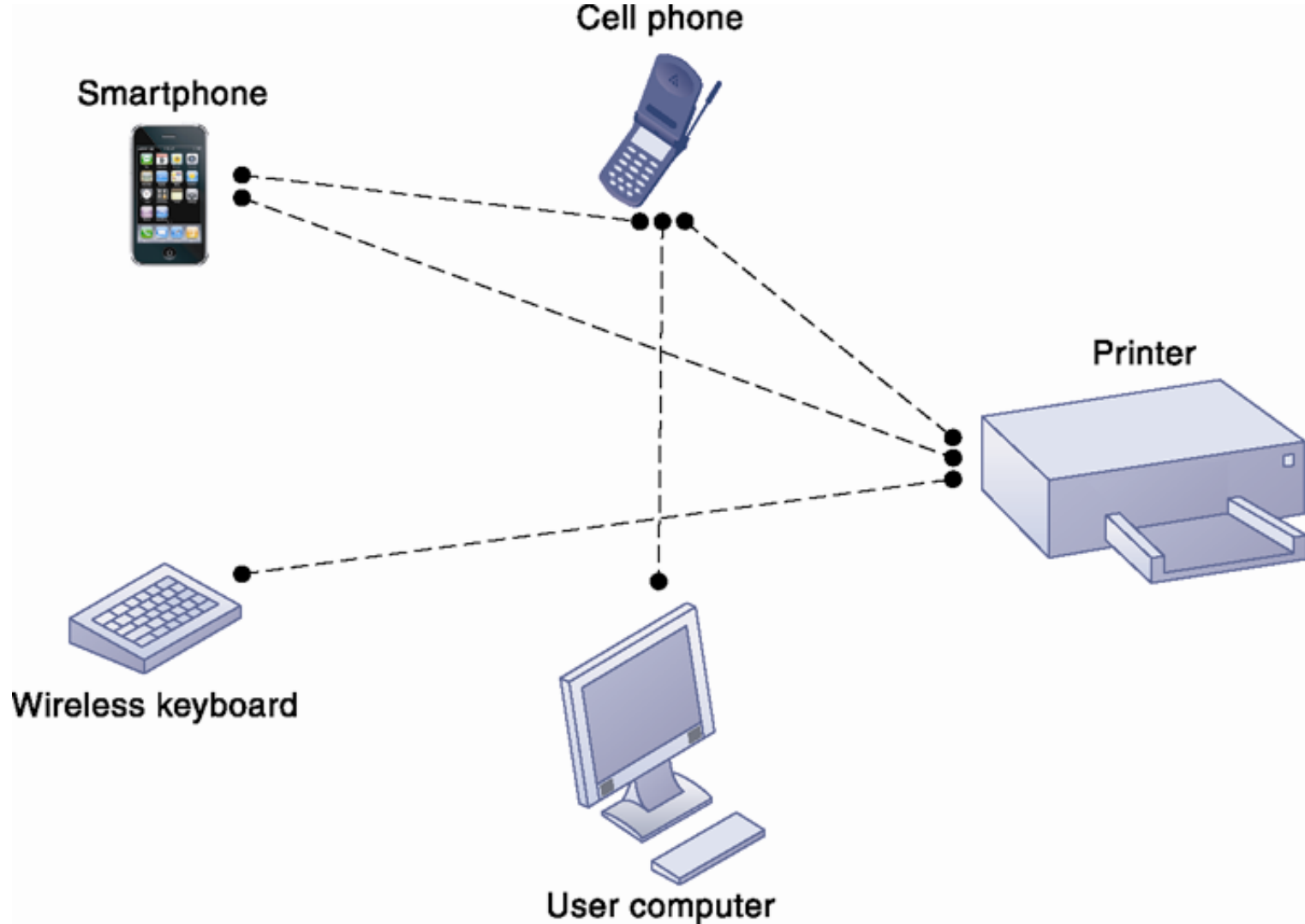
# Web 2.0 services and tools

- **Blogs:** chronological, informal Web sites created by individuals
  - RSS (Really Simple Syndication): syndicates Web content so aggregator software can pull content for use in another setting or viewing later
  - Blogosphere
  - Microblogging
- **Wikis:** collaborative Web sites where visitors can add, delete, or modify content on the site
- **Social networking sites:** enable users to build communities of friends and share information

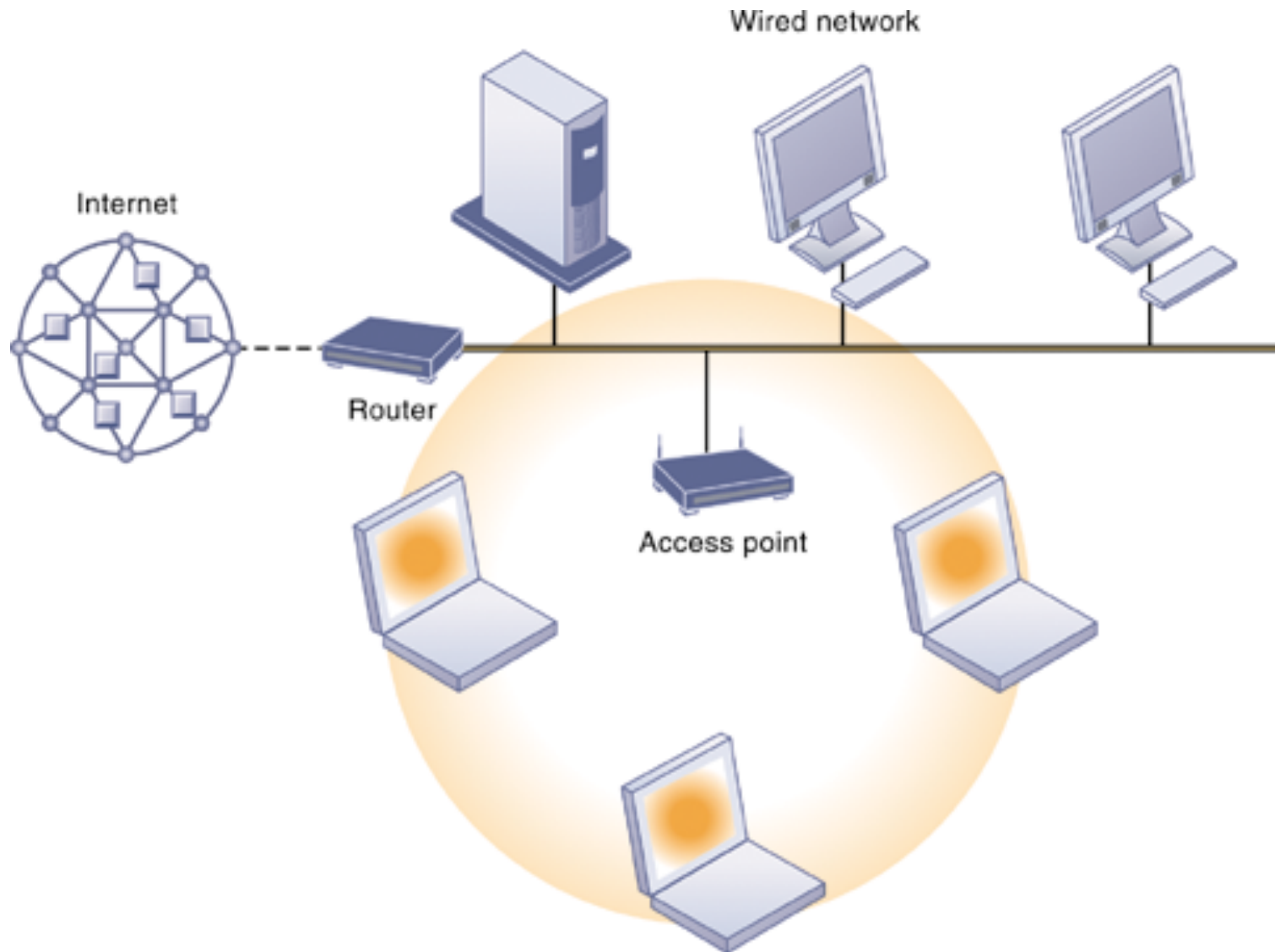
# Web 3.0: The “Semantic Web”

- A collaborative effort led by W3C to add layer of meaning to the existing Web
- Goal is to reduce human effort in searching for and processing information
- Making Web more “intelligent” and intuitive
- Increased communication and synchronization with computing devices, communities
- “Web of things”
- Increased cloud computing, mobile computing

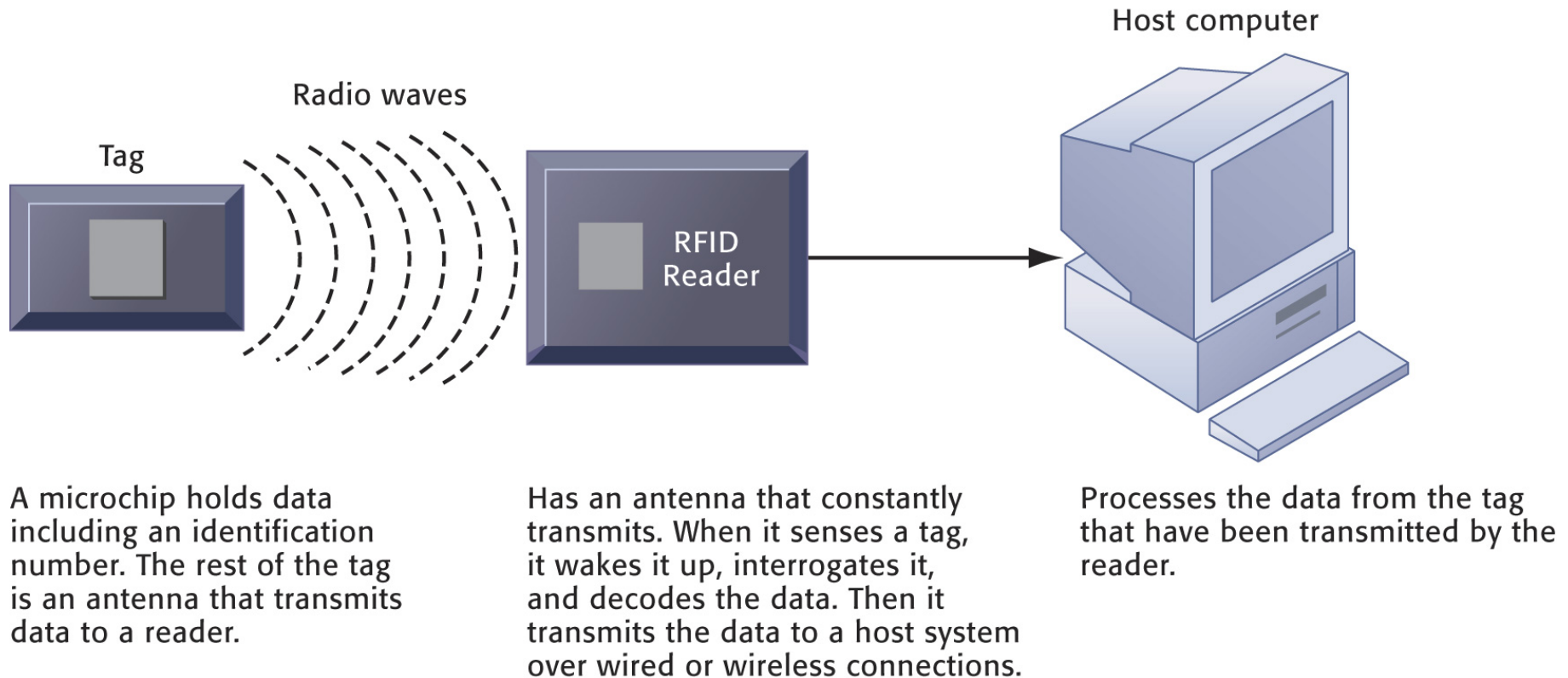
# A Bluetooth Network (PAN)



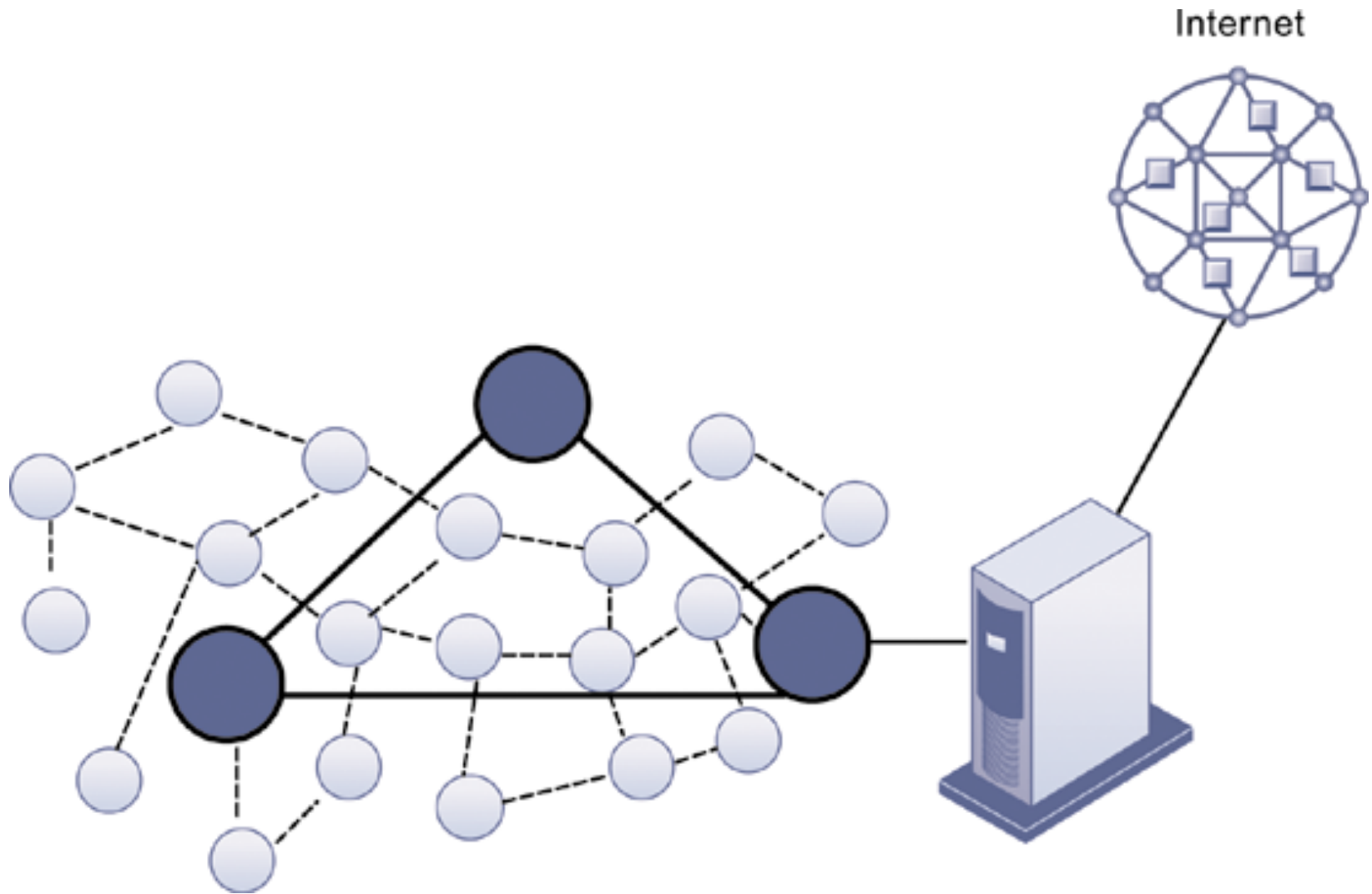
# An 802.11 Wireless LAN



# How RFID Works



# A Wireless Sensor Network



# Case Study:

## Summit and SAP (Chap. 9) (pp. 396-398)

### Summit Electric Lights Up with a New ERP System

1. Which business processes are the most important at Summit Electric Supply? Why?
2. What problems did Summit have with its old systems? What was the business impact of those problems?
3. How did Summit's ERP system improve operational efficiency and decision making? Give several examples.
4. Describe two ways in which Summit's customers benefit from the new ERP system.
5. Diagram Summit's old and new process for handling chargebacks.



# 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