Tamkang University
淡江大學

資訊管理專題

Tamkang University

Hot Issues of Information Management

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

1061IM4B08
TLMXB4B (M0842)
Wed 8,9 (15:10-17:00) B702

Min-Yuh Day
戴敏育
Assistant Professor
專任助理教授

Dept. of Information Management, Tamkang University
淡江大學 資訊管理學系

http://mail. tku.edu.tw/myday/

2017-12-13

課程大綱 (Syllabus)

週次 (Week)	日期 (Date)	內容 (Subject/Topics)
1	2017/09/20	Introduction to Case Study for Hot Issues of Information Management
2	2017/09/27	Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)
3	2017/10/04	Mid-Autumn Festival (Day off) (中秋節) (放假一天)
4	2017/10/11	Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85)
5	2017/10/18	Information Systems, Organization, and Strategy: Starbucks (Chap. 3) (pp.129-130)
6	2017/10/25	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)
7	2017/11/01	IT Infrastructure and Emerging Technologies: Amazon and Cloud Computing (Chap. 5) (pp. 234-236)
8	2017/11/08	IT Infrastructure and Emerging Technologies: Amazon and Cloud Computing (Chap. 5) (pp. 234-236)
9	2017/11/15	Midterm Report (期中報告)
10	2017/11/22	Midterm Exam Week (期中考試週)
11	2017/11/29	Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262)
12	2017/12/06	Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262)

課程大綱 (Syllabus)

週次	日期	內容（Subject/Topics）
13	2017/12/13	Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7) (pp.318-320)
14	2017/12/20	Enterprise Applications: Summit and SAP (Chap. 9) (pp.396-398)
15	2017/12/27	E-commerce: Zagat (Chap. 10) (pp.443-445)
16	2018/01/03	Final Report I (期末報告 I)
17	2018/01/10	Final Report II (期末報告 II)
18	2018/01/17	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

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

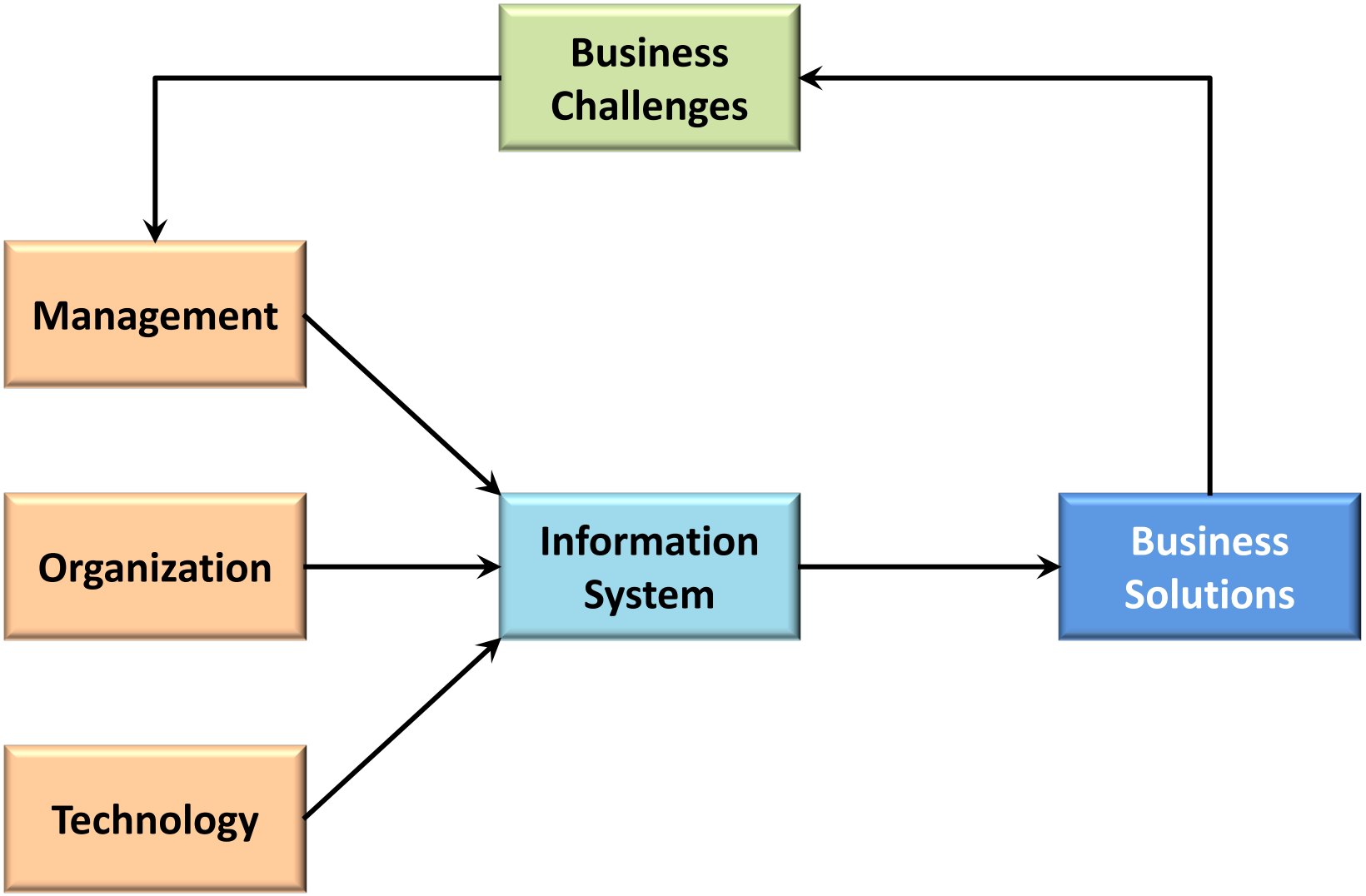
Case Study:

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

Apple, Google, and Microsoft Battle for Your Internet Experience

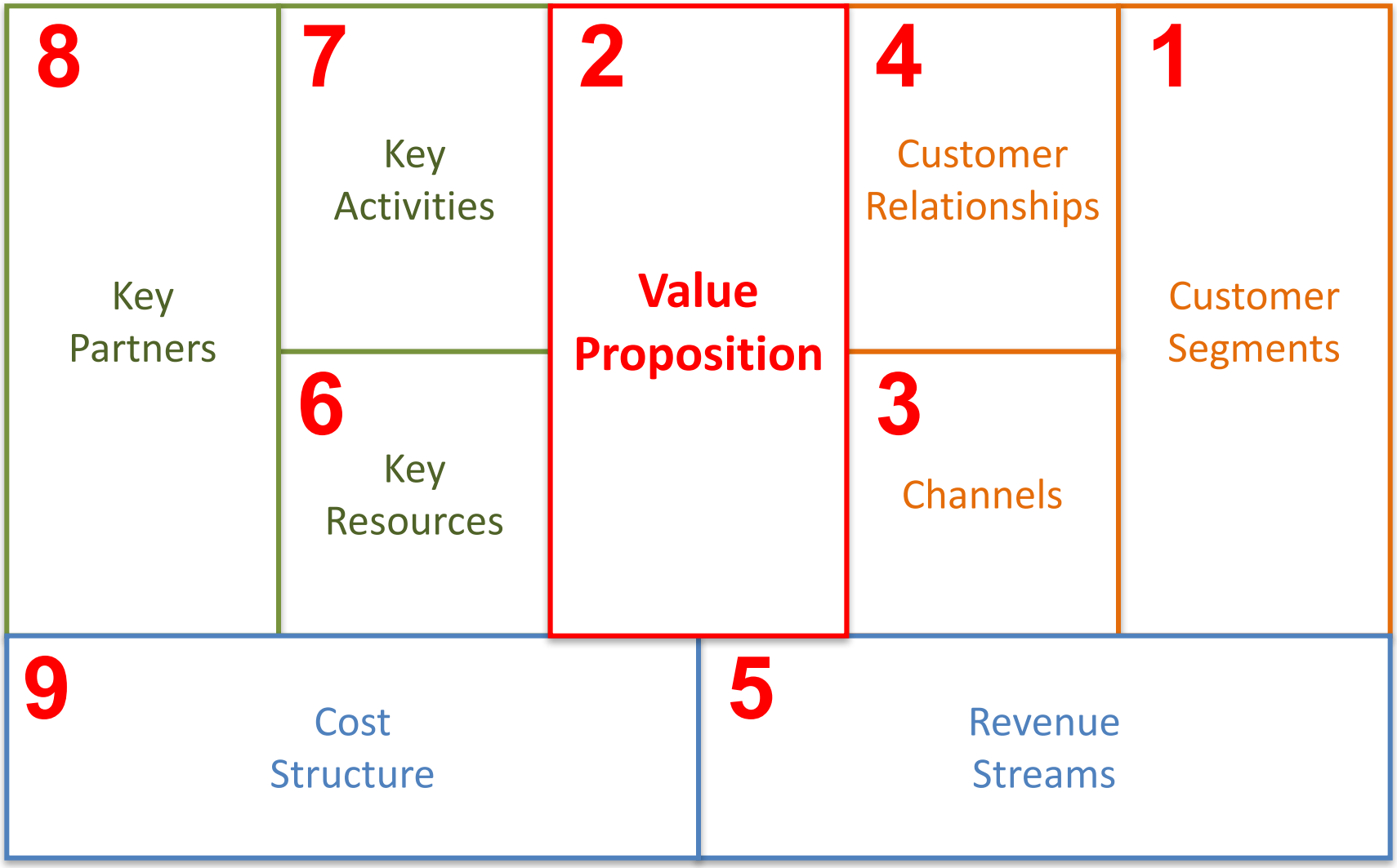
1. Define and compare the business models and areas of strength of Apple, Google, and Microsoft.
2. Why is mobile computing so important to these three firms? Evaluate the mobile platform offerings of each firm.
3. What is the significance of applications and app stores, and closed vs. open app standards 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



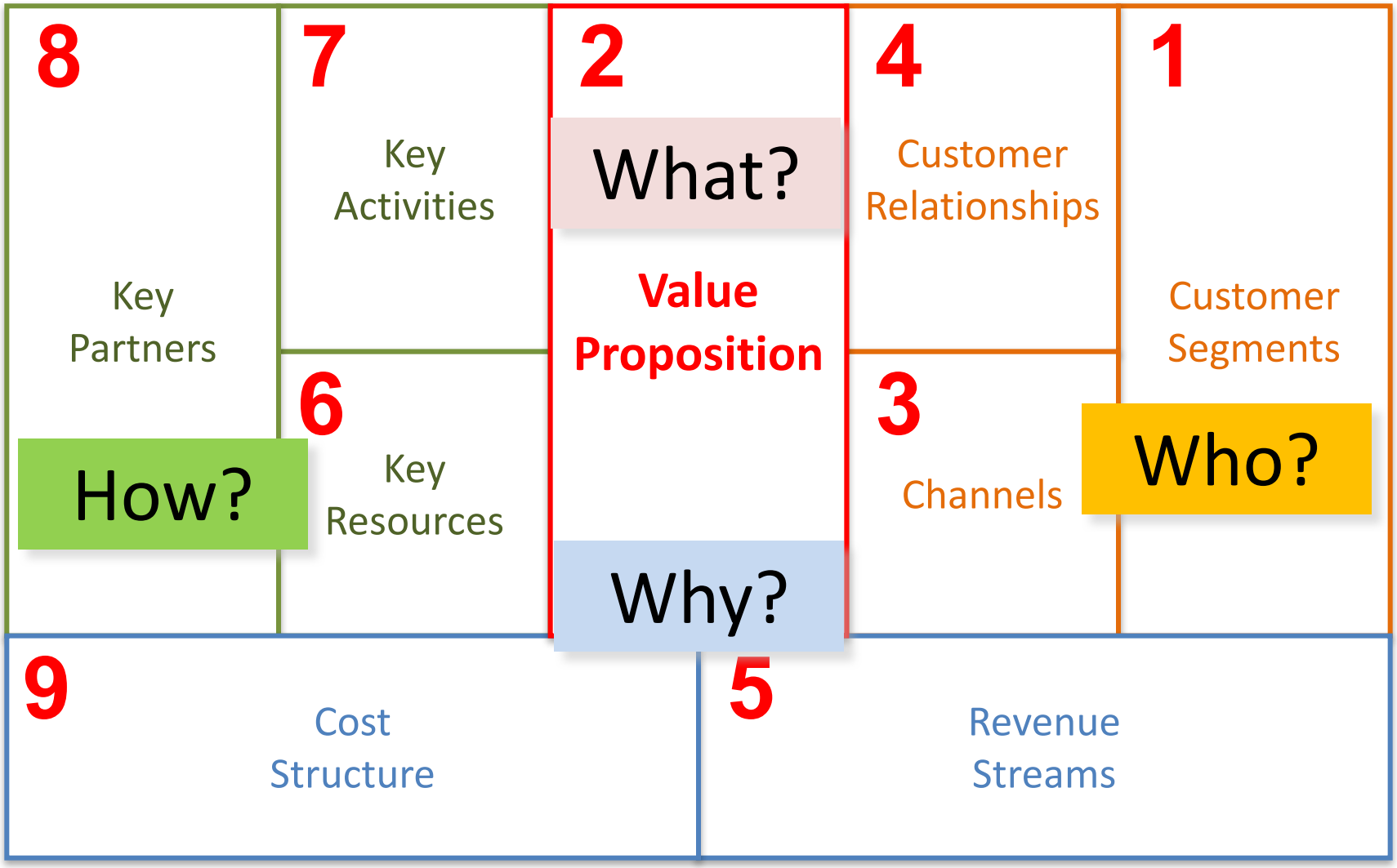
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Business Model



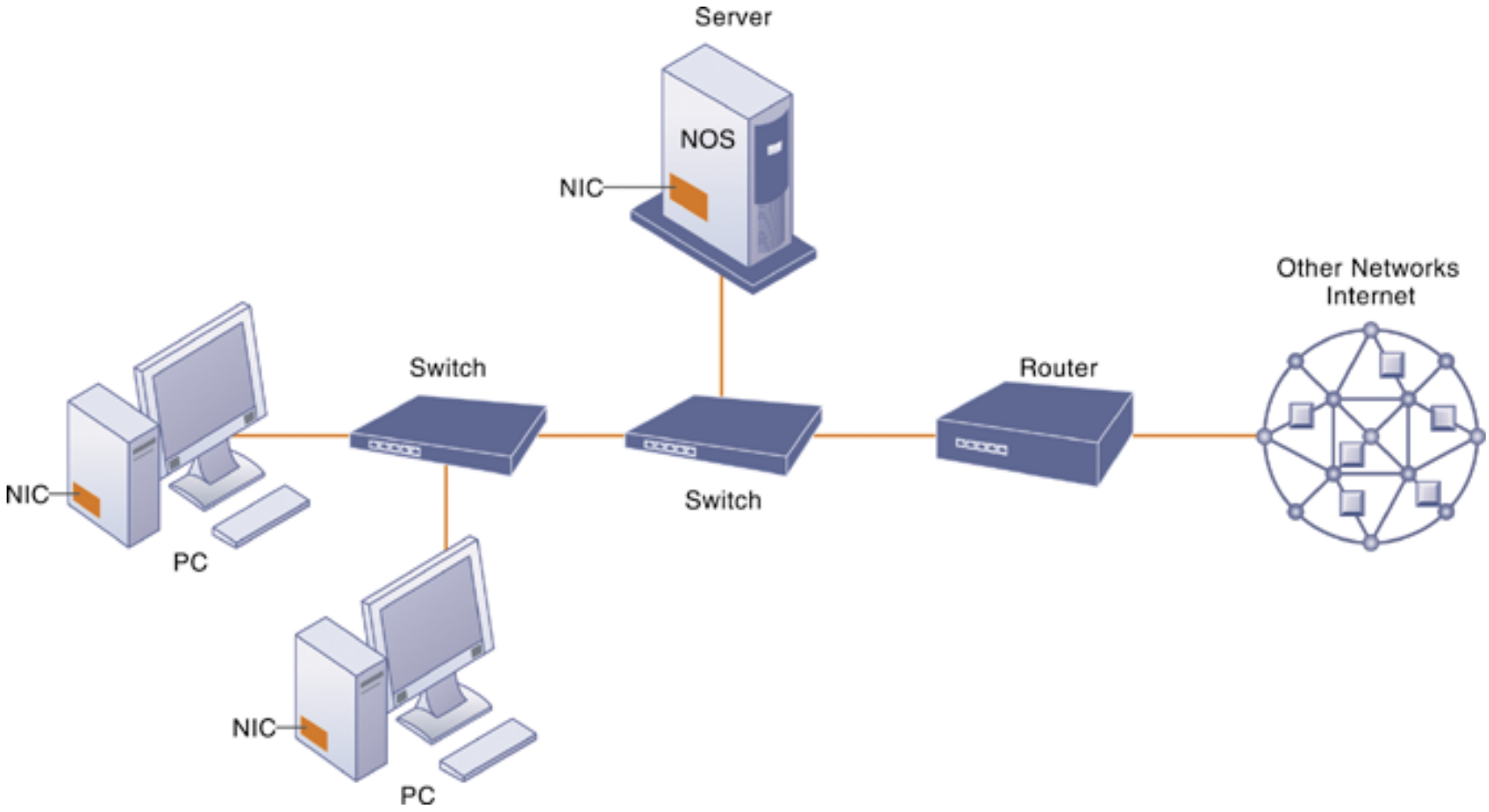
Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

Business Model



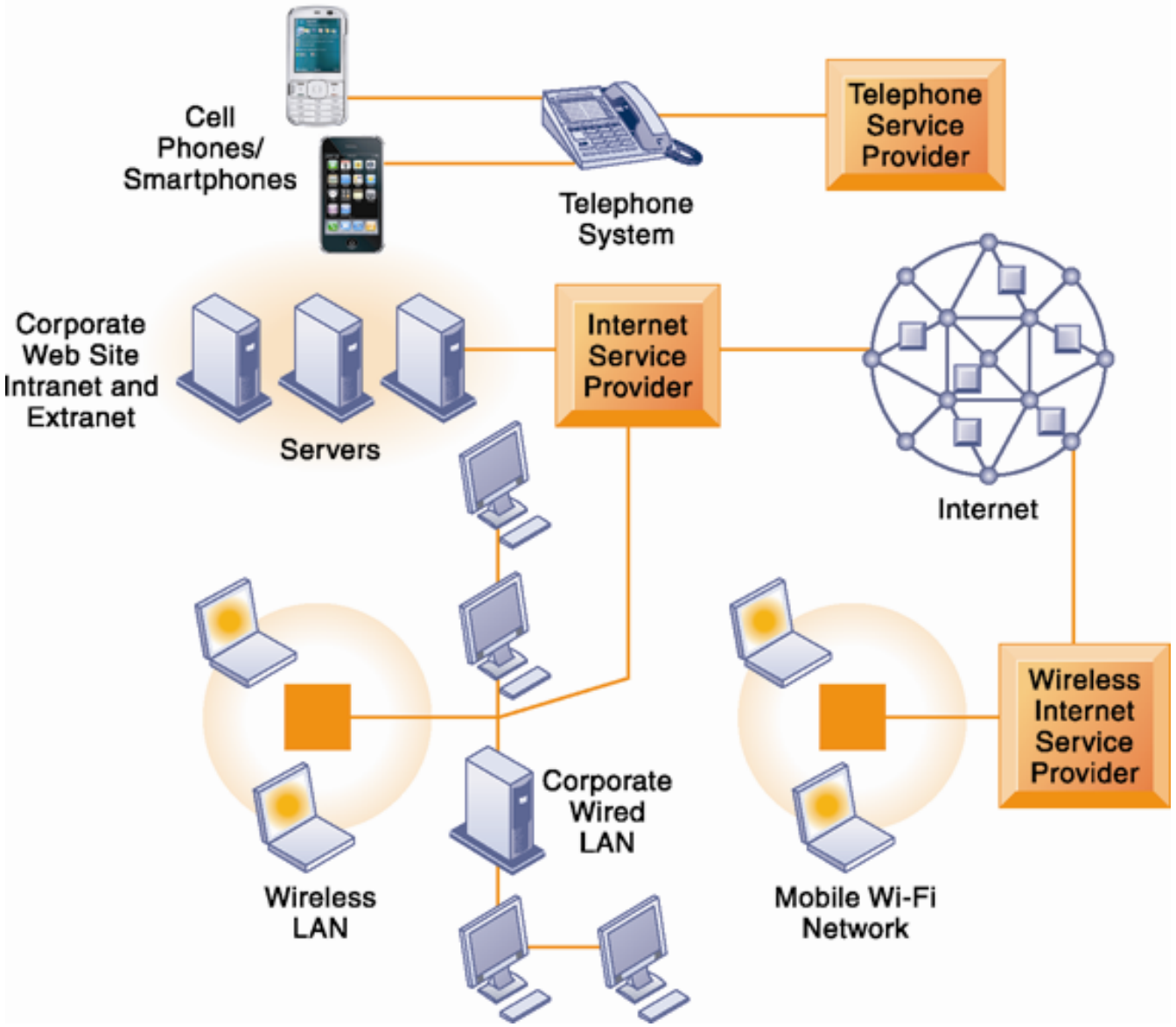
Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

Components of a Simple Computer Network



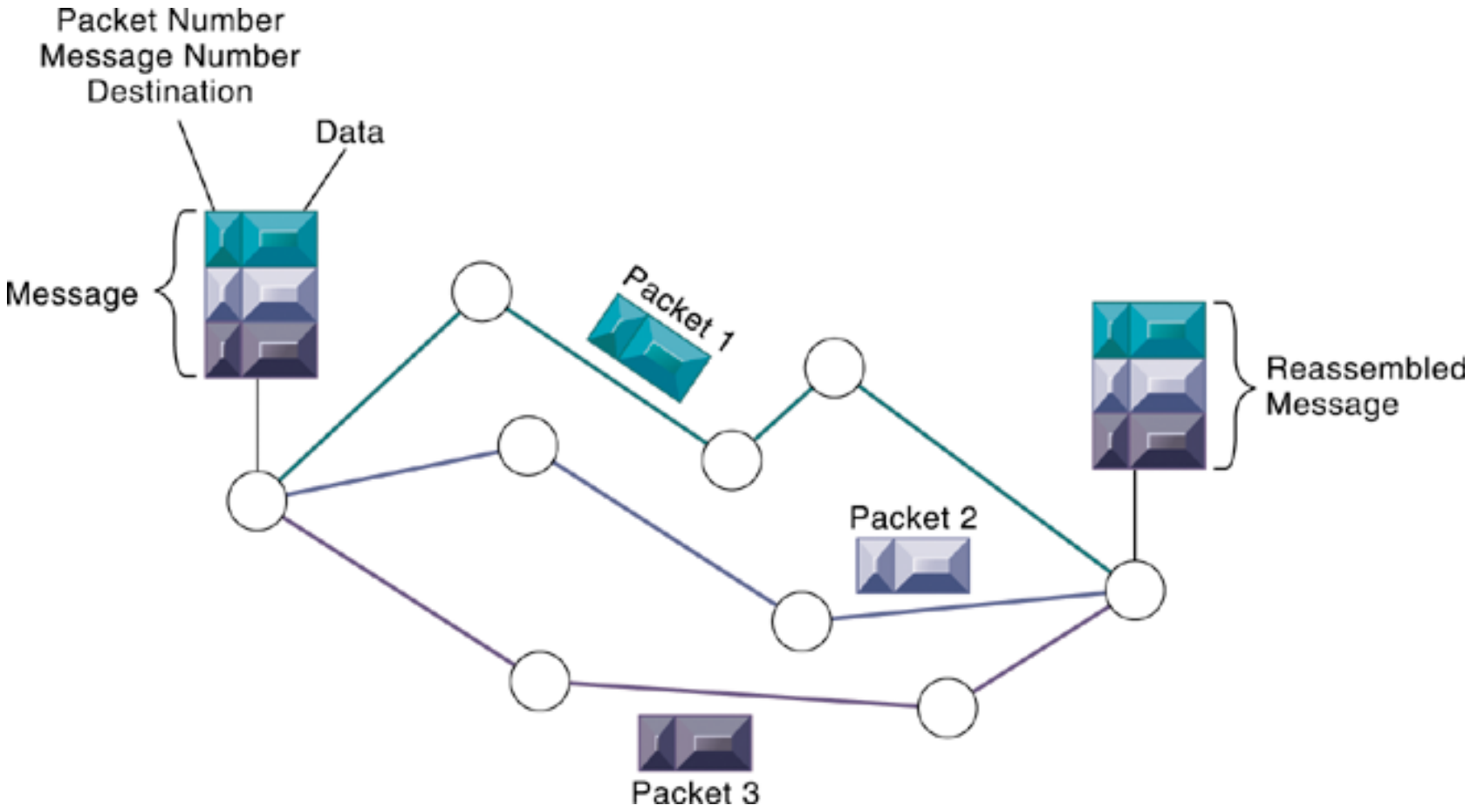
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Corporate Network Infrastructure



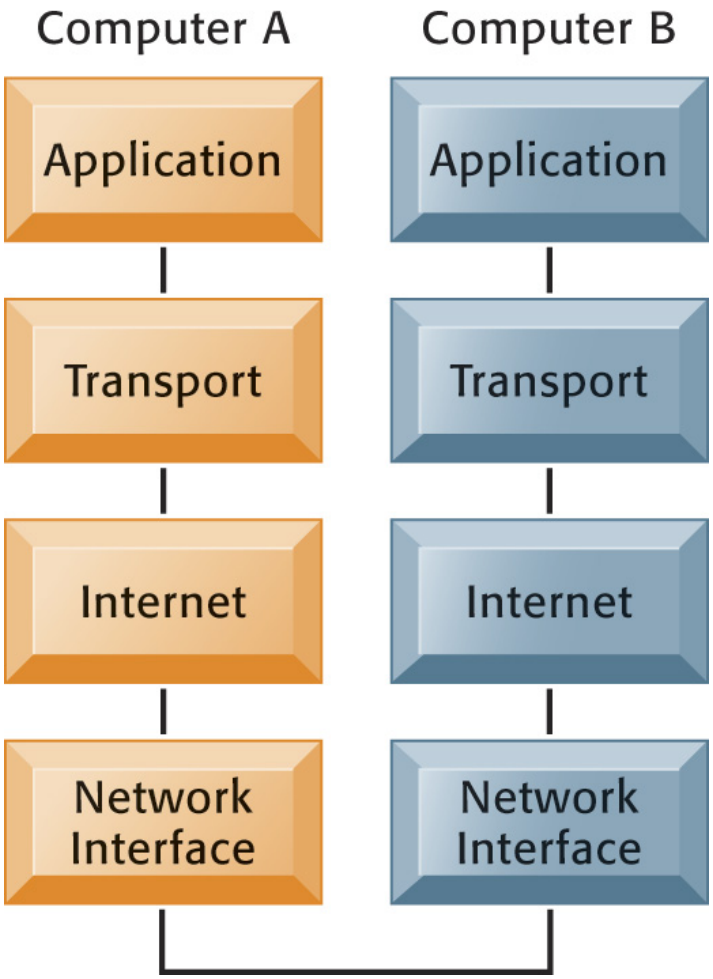
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Packet-Switched Networks and Packet Communications



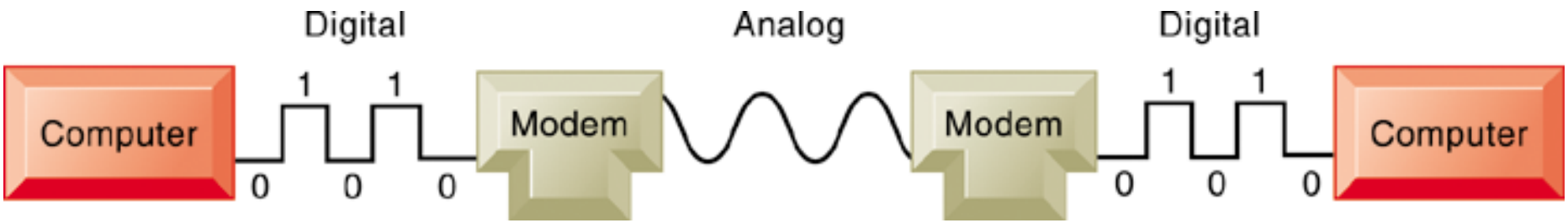
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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



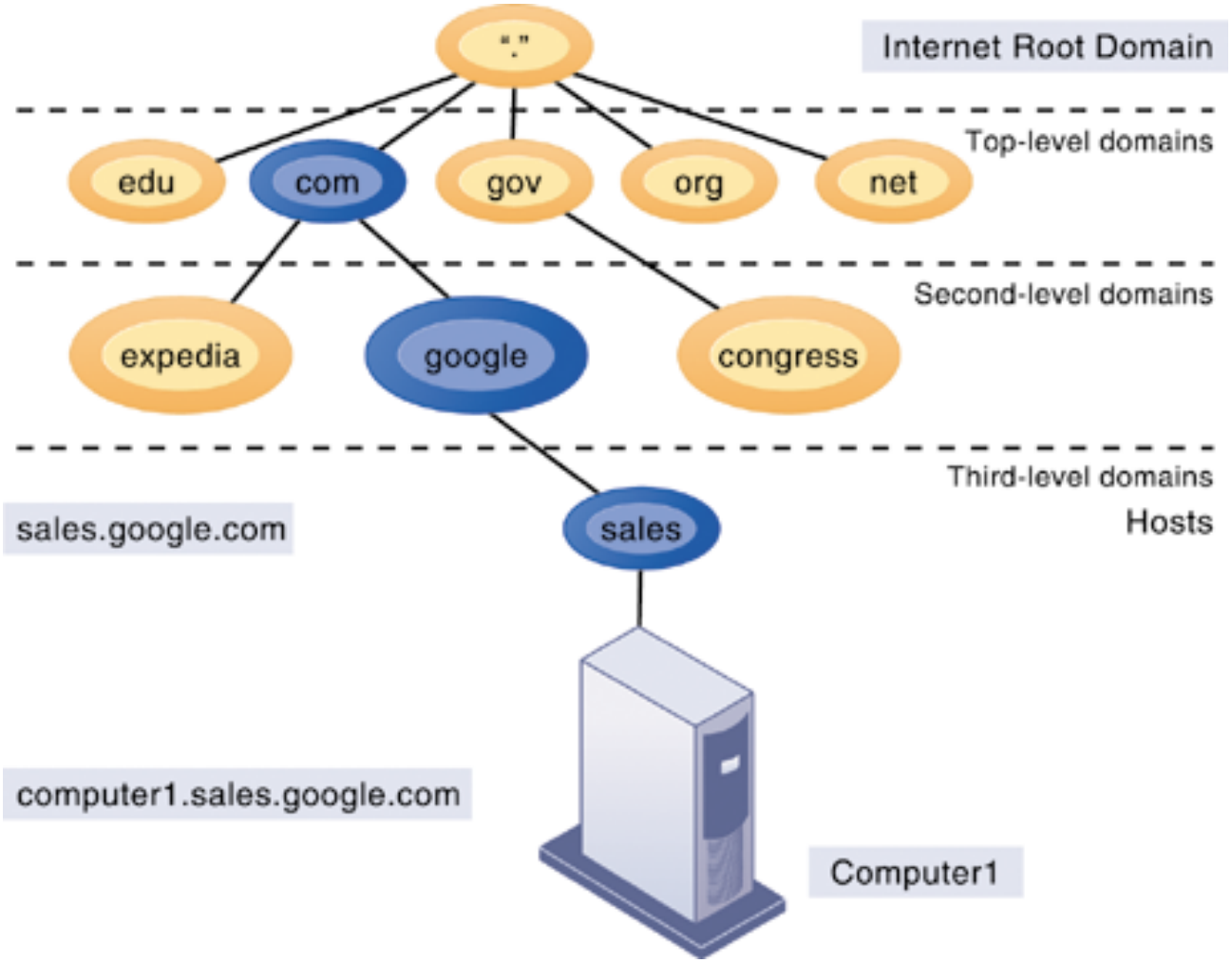
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Functions of the Modem



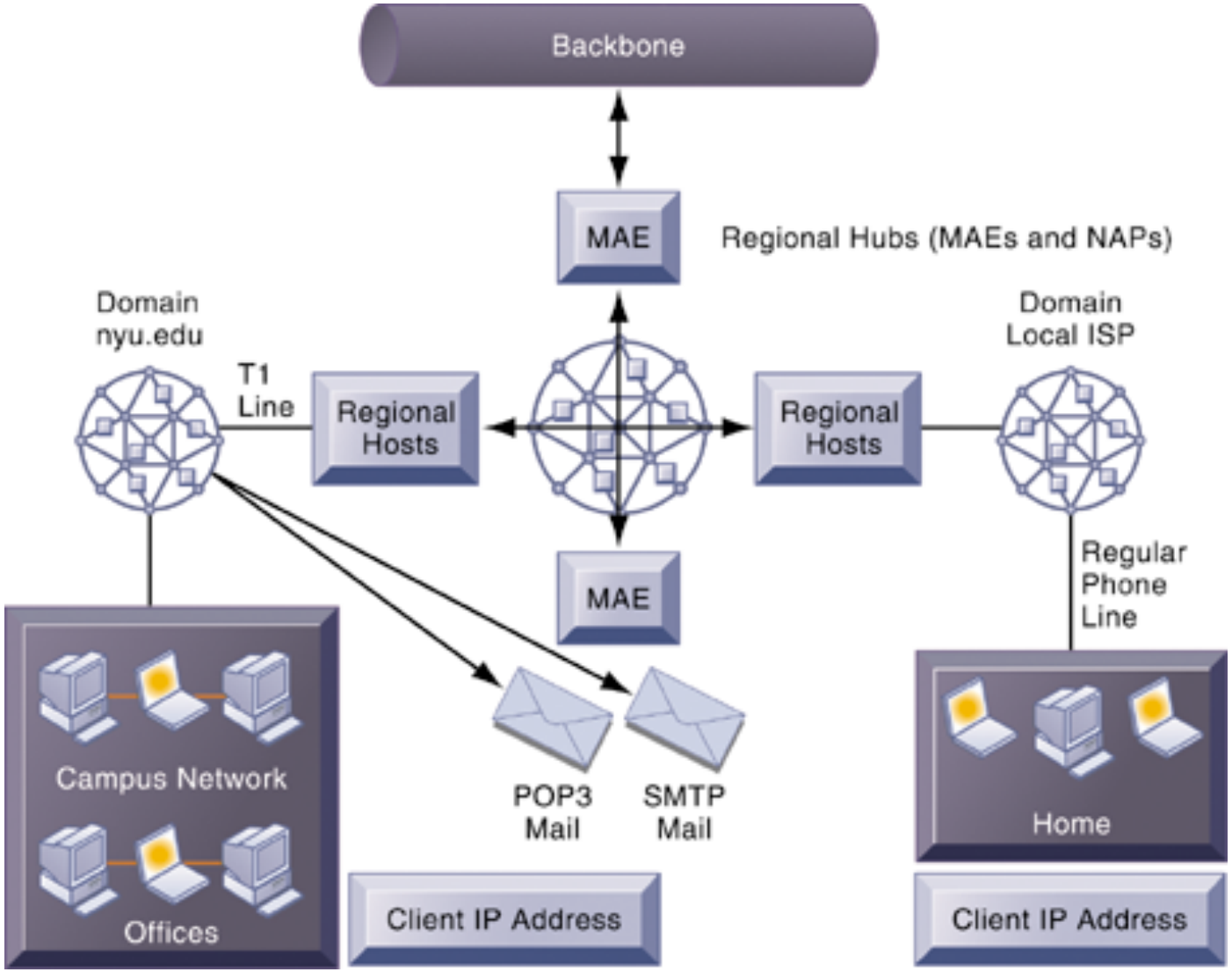
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

The Domain Name System



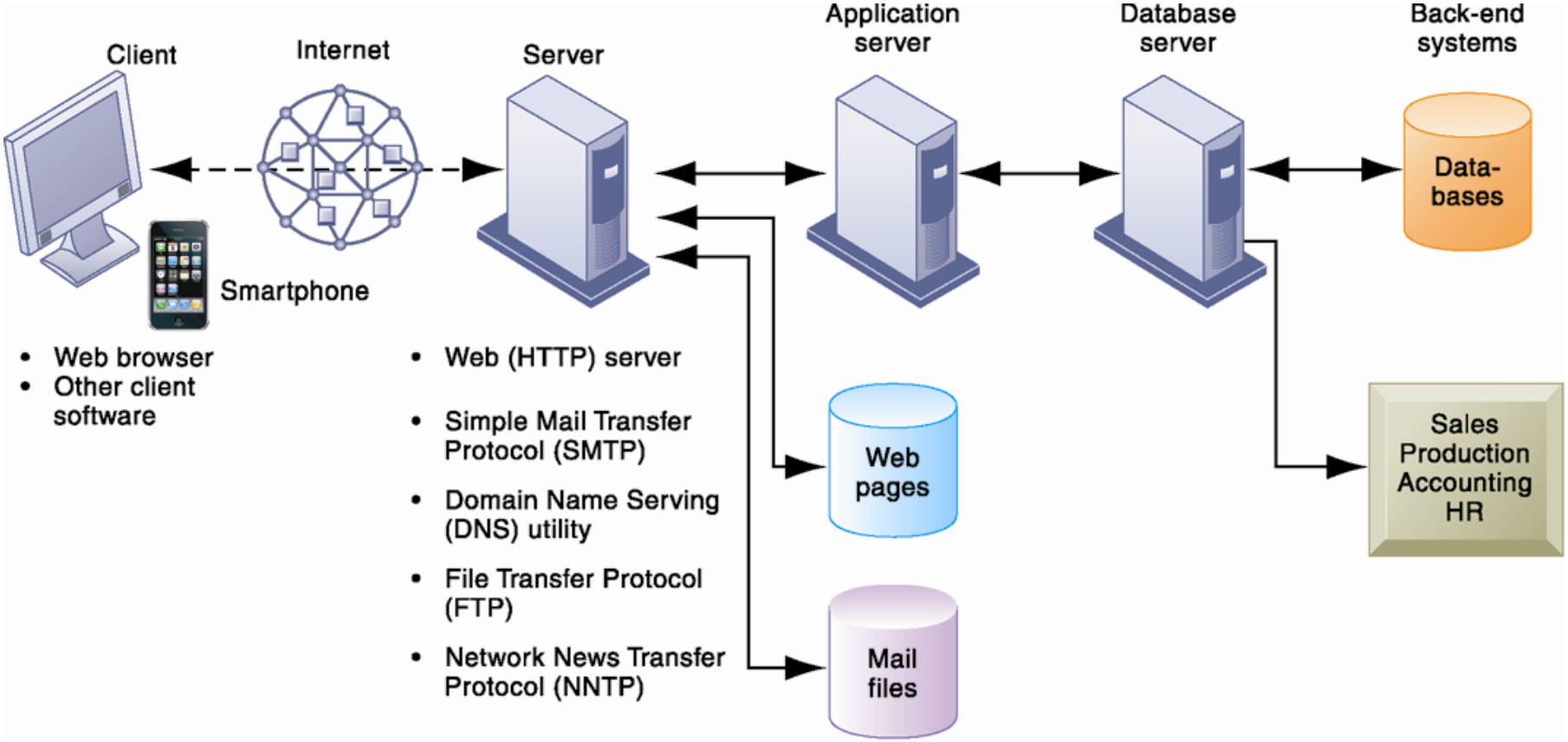
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Internet Network Architecture



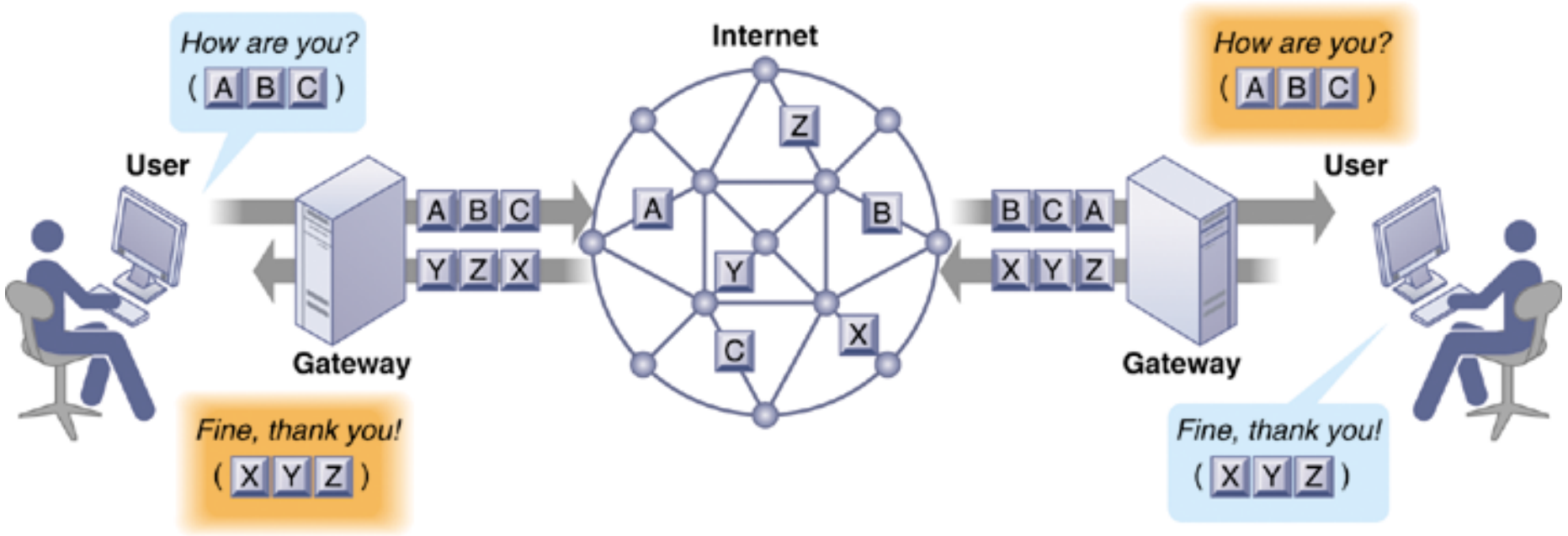
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Client/Server Computing on the Internet



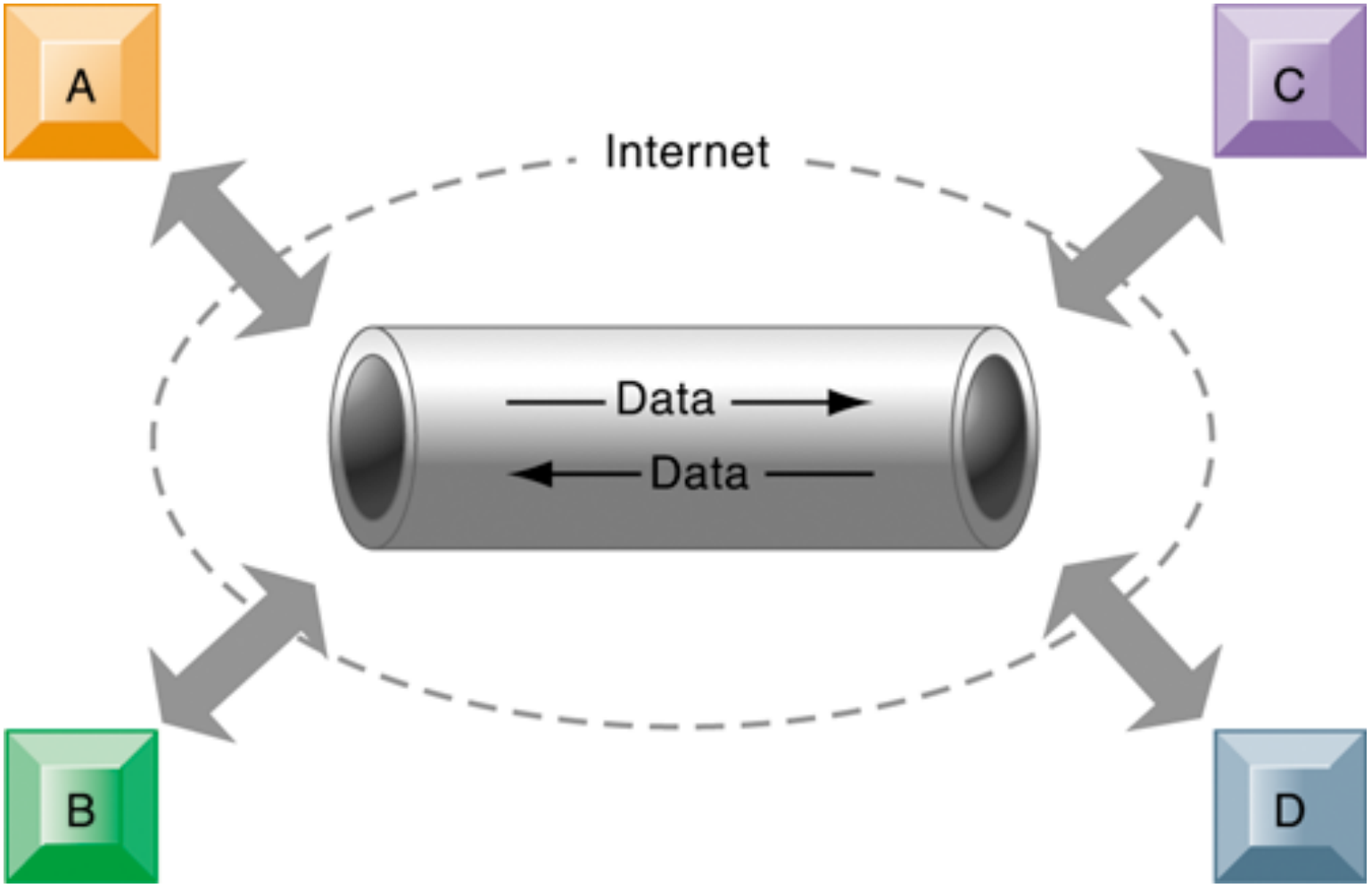
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

How Voice over IP Works



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

A Virtual Private Network Using the Internet



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

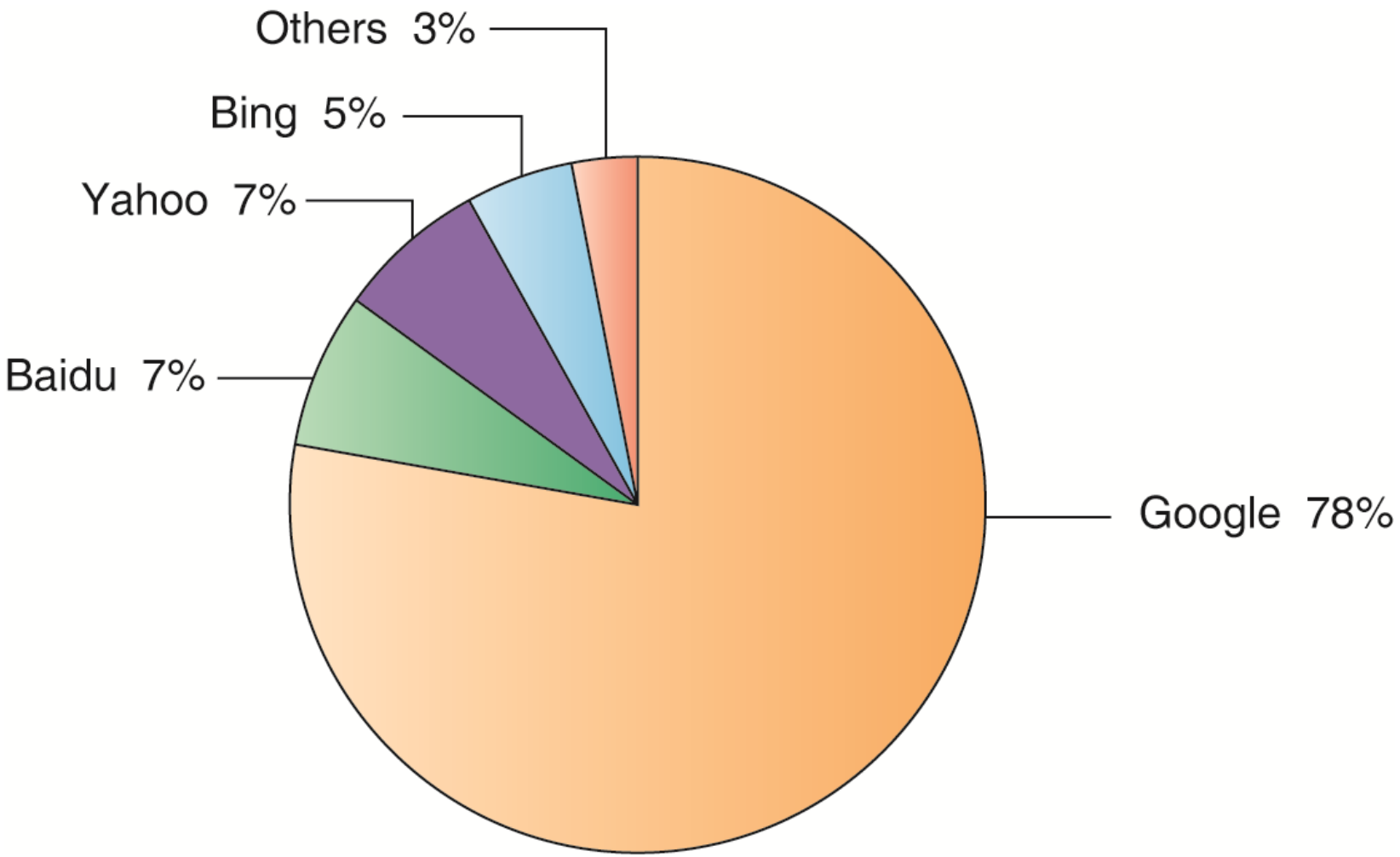
The Global Internet

- 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

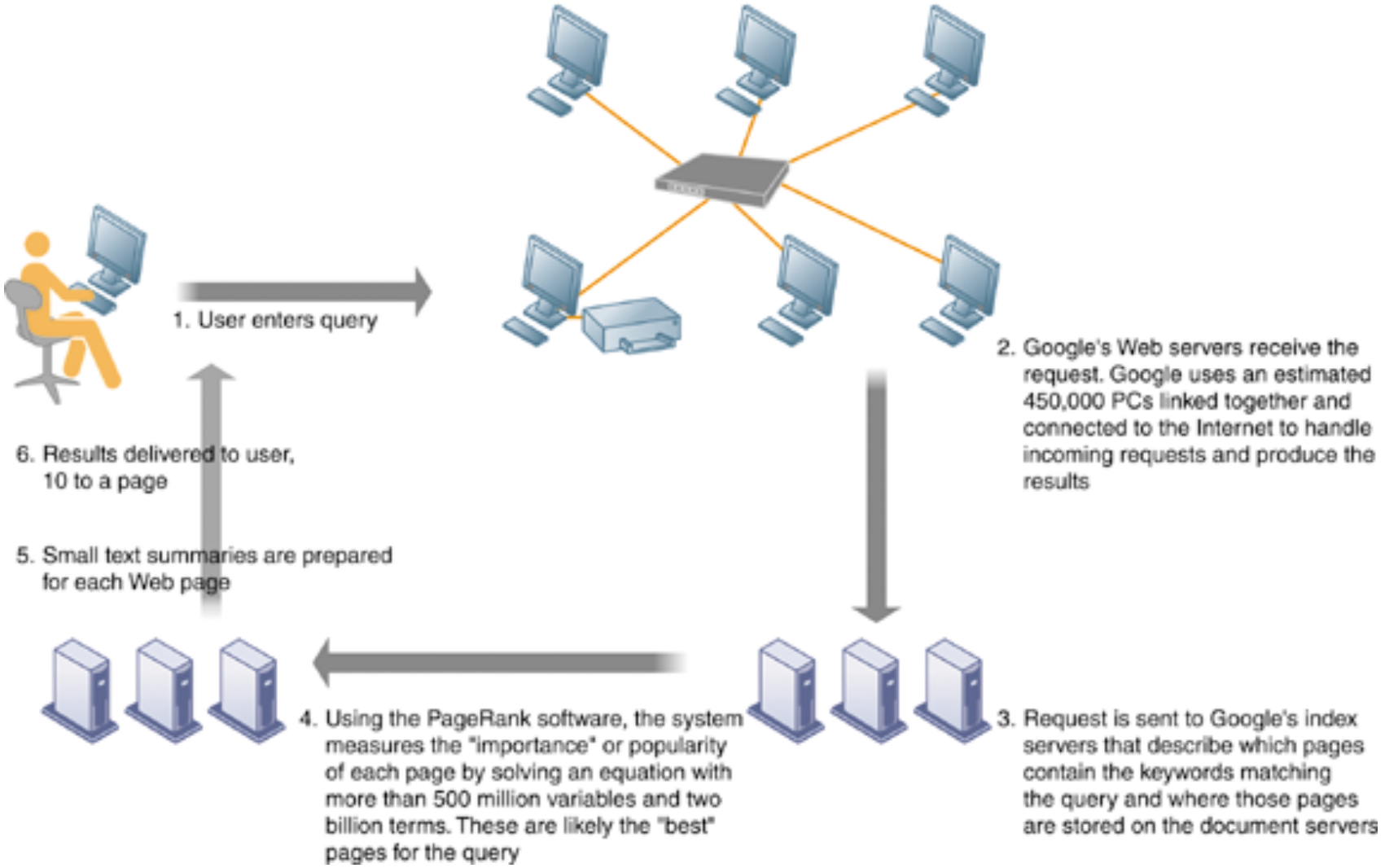
- Social search
  - Google +1, Facebook Like
- Semantic search
  - Anticipating what users are looking for rather than simply returning millions of links
- Intelligent agent shopping bots
  - Use intelligent agent software for searching Internet for shopping information

Top U.S. Web Search Engines



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

How Google Works



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

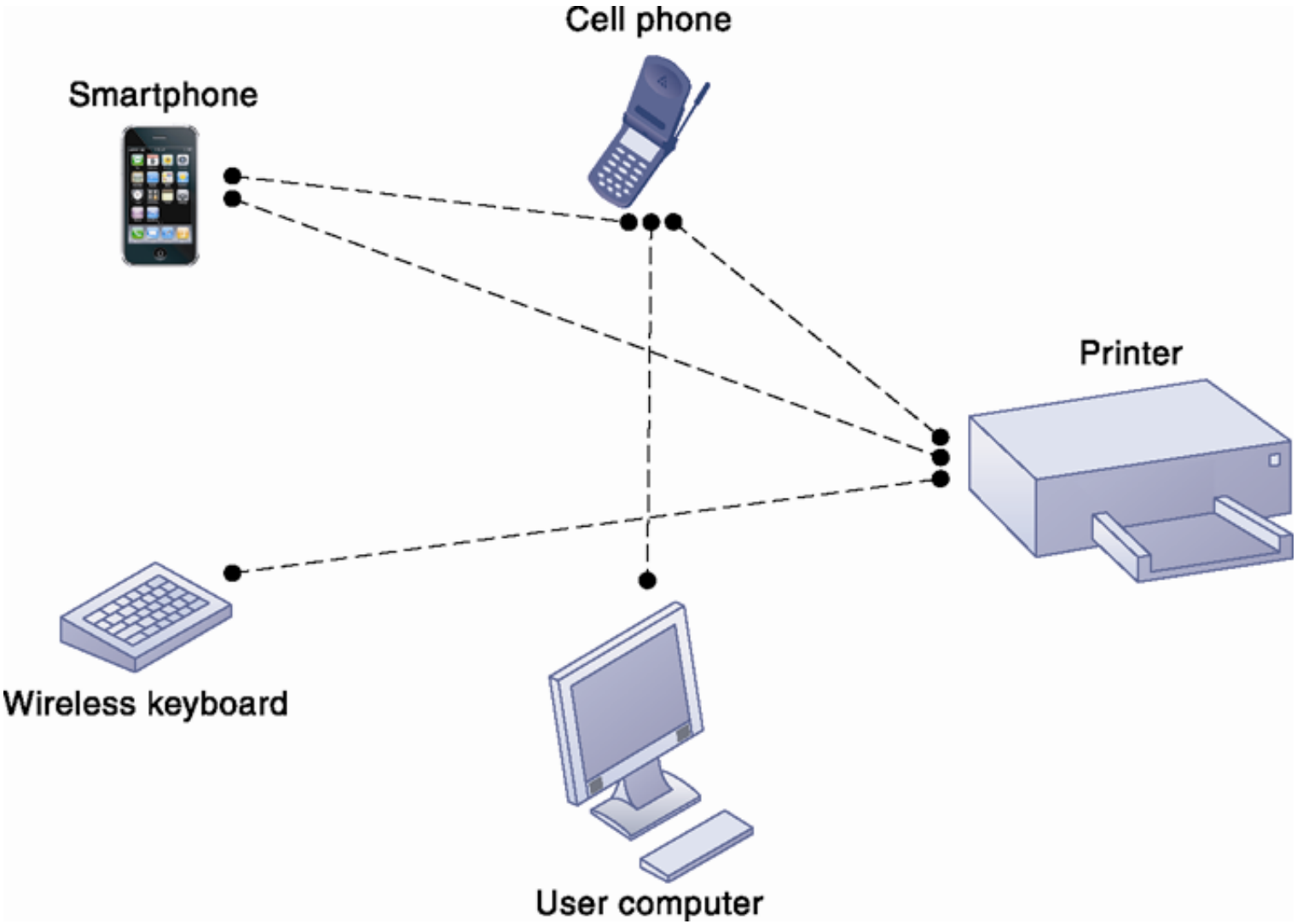
Web 2.0 services and tools

- **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"

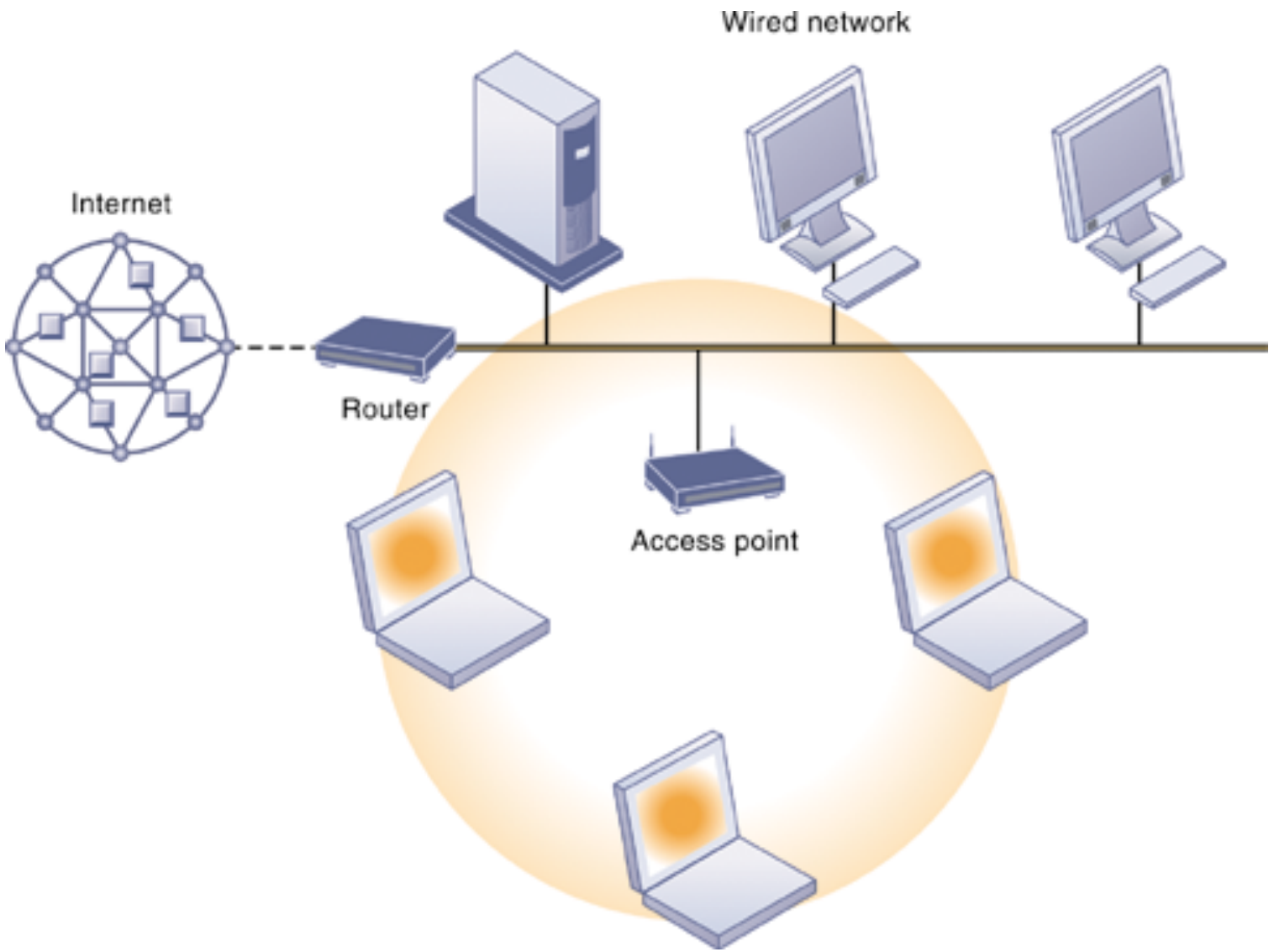
- A collaborative effort led by W3C to add layer of meaning to the existing Web
- Goal is to reduce human effort in searching for and processing information
- Making Web more "intelligent" and intuitive
- Increased communication and synchronization with computing devices, communities
- "Web of things"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

A Bluetooth Network (PAN)



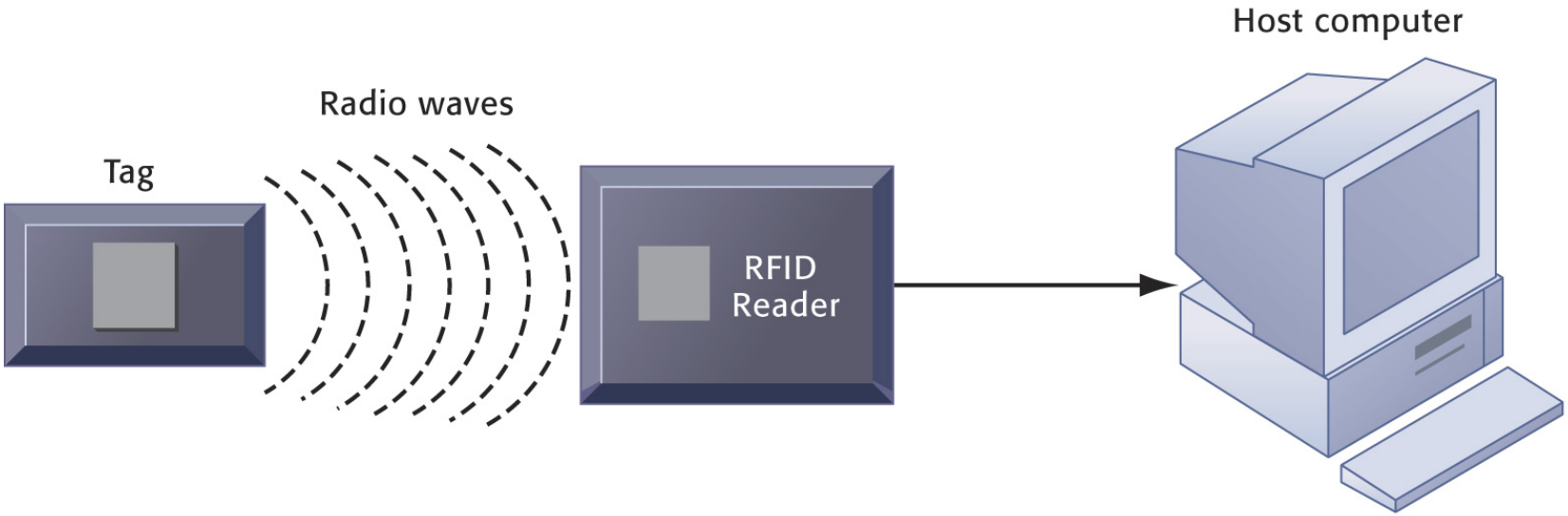
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

An 802.11 Wireless LAN



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

How RFID Works



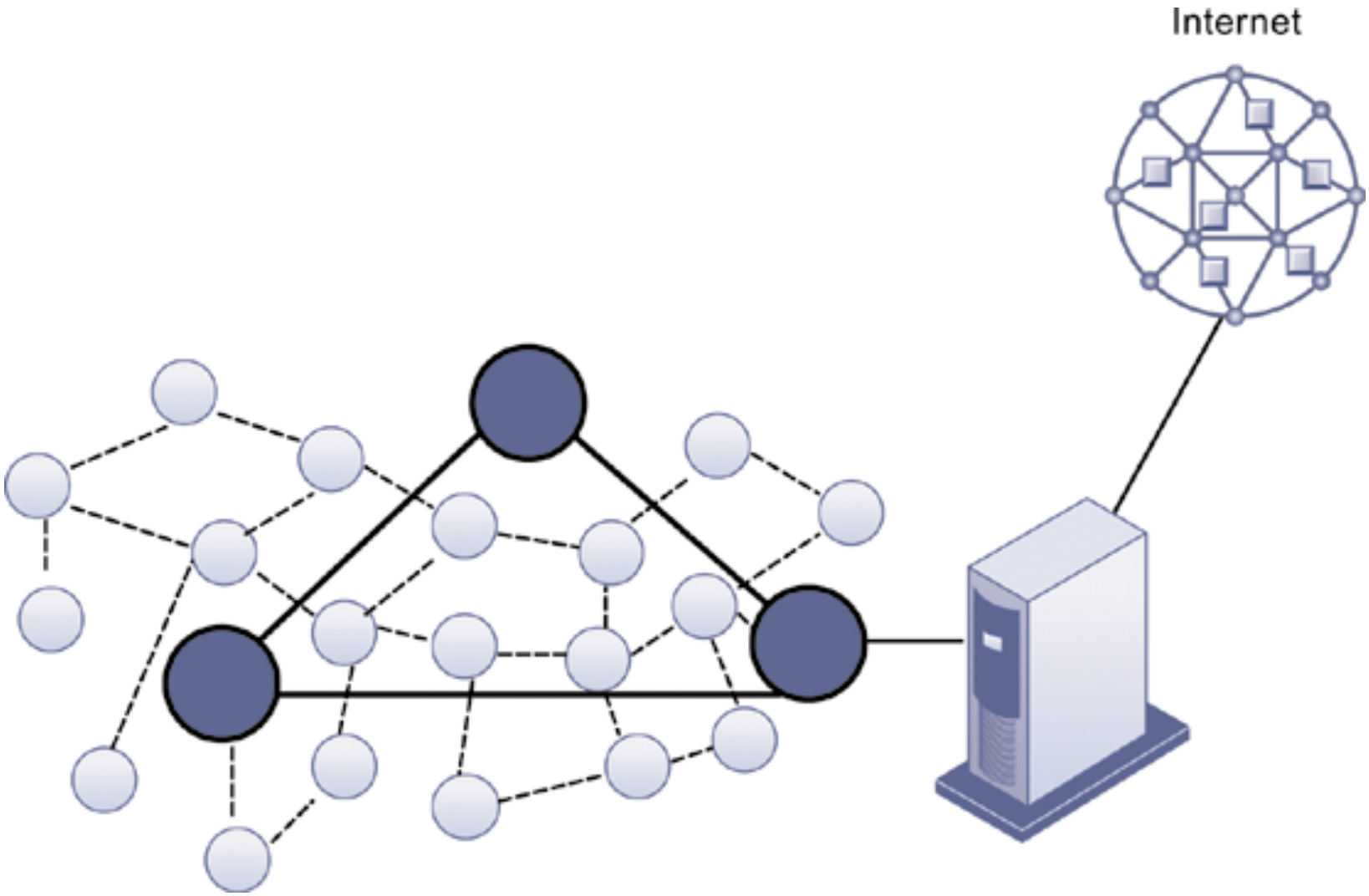
A microchip holds data including an identification number. The rest of the tag is an antenna that transmits data to a reader.

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.

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

A Wireless Sensor Network



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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：
   週三 8,9 (15:10-17:00) 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