Better Business
2nd Edition
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Learning Objectives

1. What are the functions of a company’s chief information officer (CIO) and information technology (IT) department?
2. How are IT, information systems, information, and data interrelated within a business?
3. How are major types of hardware, software, and networks used in business?
4. What are the benefits and risks of technology in the workplace, taking into account safety, creativity, communication, productivity, privacy, and ethics?
5. What is the impact of technology on the international business environment based on offshoring, outsourcing, and alternative methods of communication?
The Role of the Chief Information Officer

Figure 10.1
The Many Functions of a CIO
Because technology is spread across all divisions and major functions of a modern business, a CIO requires excellent leadership and organizational skills.
IT Department Tasks

- Ensuring security
- Handling emergency recovery
- Keeping equipment operational and current
- Managing the design of networks and databases
- Selecting appropriate software
- Providing training to employees
- Sometimes creating custom software
- Managing mobile computing
- Implementing remote access to computing resources
Information Systems

• Management Information Systems
• Data vs. information
• Decision Support Systems (DSSs)
• Executive Information Systems (EISs)
• Business Intelligence Software
• Database Management Systems (DBMSs)
  - Data warehouses
  - Data marts
  - Data mining
Computer Systems in Business: Hardware

- Substantial hard disk storage
- Advanced processing power
- Large capacity of memory
- RAID hard disk backup design
- Mobile devices
  - Smartphones
  - GPS
  - Projectors & printers

<table>
<thead>
<tr>
<th>Table 10.1</th>
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<tr>
<td><strong>Common Ranges for Business Computing Components</strong></td>
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<td>Component</td>
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<tr>
<td>CPU speed</td>
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<td>RAM</td>
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<td>Hard Disk Storage</td>
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Software

• Analytical software
  - Spreadsheet programs
  - Database programs
  - Online Analysis Packages (OLAPs)

• Business management software applications
  - Accounting packages such as Quickbooks
  - Human resource management like PeopleTrak

• Business communication technology
  - Voice Over Internet Protocol (VOIP) like Skype
  - Remote conferencing
  - Marketing technologies and services
Networks

- Intranets
- Extranets
- LANs
  - WLANs
- WANs
- VPNs
- Internet
- World Wide Web
The Benefits & Challenges of Technology

Benefits:

• May increase productivity
• Robots have relieved humans of dangerous and monotonous tasks
• Allows for anonymous whistle-blowing
• Provides an online presence for the company
The Benefits & Challenges of Technology

Challenges:

- May decrease productivity
- Breakdowns in personal communication
- Boundary between work and home has blurred
- Intellectual property and copyright laws evolving
- Ethics and stress of electronic monitoring
Challenges for Management

• Service blackouts
• Security
  - Protection from hackers
• Financial burden of keeping pace with changes in technology
• Upgrade decisions
• Securing the online business environment
  - Debating the use of cookies
The Global Impact of Business Technology

- Increase in offshoring
- Increase in near-shoring
- Impact
  - U.S. will see slower wage growth
  - Higher demand for products
  - Coordinated 24/7 global work efforts
The International Business Environment

• Allows every company with a Web site to advertise to the world
  - In what language(s)?
  - With content adapted to what culture(s)?

• Facilitates global design cooperation
  - Shifting production and design centers
Technology Creates a Global Village

• Where will the next generation of workers live?
• What skills will be expected in the global workplace?
• How does an understanding of digital culture help in business?
Chapter Summary

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