

## CHAPTER 1

# Managing in the Digital World

### CHAPTER OBJECTIVES

After reading this chapter, you will be able to do the following:

1. Describe the characteristics of the digital world and the advent of the information age.
2. Define globalization, describe how it evolved over time, and describe the key drivers of globalization.
3. Explain what an information system is, contrasting its data, technology, people, and organizational components.
4. Describe the dual nature of information systems in the success and failure of modern organizations.
5. Describe how computer ethics impact the use of information systems and discuss the ethical concerns associated with information privacy and intellectual property.

### Preview

Today, organizations from Apple to Zales Jewelers use information systems to better manage their organizations in the digital world. These organizations use information systems to provide high-quality goods and services as well as to gain or sustain competitive advantage over rivals. In addition to helping organizations to be competitive, information systems have contributed to tremendous societal changes. Our objective for this chapter is to help you understand the role of information systems as we continue to move further into the digital world, and how they have helped fuel globalization. We then highlight what information systems are, how they have evolved to become a vital part of modern organizations, and why this understanding is necessary for you to become an effective manager in the digital world. We conclude by discussing ethical issues associated with the use of information systems.

### CHAPTER OUTLINE

#### PREVIEW

Managing in the Digital World: Apple

#### INFORMATION SYSTEMS TODAY

The Rise of the Information Age

BRIEF CASE Technology at Starbucks

Five IT Megatrends in the Information Age

WHO'S GOING MOBILE Wearable Technology

#### EVOLUTION OF GLOBALIZATION

The Rise of Outsourcing

Opportunities and Challenges of Operating in the Digital World

Opportunities for Reaching New Markets

Opportunities of a Global Workforce

## Challenges of Operating in the Digital World

KEY PLAYERS Wipro and Infosys—The Global Outsourcing Leaders

### INFORMATION SYSTEMS DEFINED

Data: The Root and Purpose of Information Systems

Data

Information

Knowledge

Hardware, Software, and Telecommunications Networks: The Components of Information Systems

People: The Builders, Managers, and Users of Information Systems

Careers in Information Systems

What Makes IS Personnel So Valuable?

Finding Qualified Personnel

You—The User

Organizations: The Context of Information Systems

Types of Information Systems

Organizing the IS Function

The Spread of Technology in Organizations

### THE DUAL NATURE OF INFORMATION SYSTEMS

Case in Point: An Information System Gone Awry: Computer Glitch Grounds Flights

Case in Point: An Information System That Works: FedEx

Information Systems for Competitive Advantage

WHEN THINGS GO WRONG Failure: The Path to Success?

### IS ETHICS

Information Privacy

COMING ATTRACTIONS Smart Shirts Saving Lives

Information Property on the Web

E-Mail Privacy

How to Maintain Your Privacy Online

Intellectual Property

ETHICAL DILEMMA The Human Cost of the Newest Gadgets

The Need for a Code of Ethical Conduct

Responsible Computer Use

INDUSTRY ANALYSIS Business Career Outlook

### Key Points Review

### Key Terms

### END-OF-CHAPTER CASES

Case 1: Bridging the Digital Divide

Case 2: You Tube

## TEACHING SUGGESTIONS

This introductory chapter provides an opportunity for the instructor to familiarize students with the basic definitions and concepts needed to understand IT in its organizational context. In addition to a basic lecture on these terms and concepts, the instructor may wish to consider conducting an extended discussion of the first case (Apple) in order to explore how IS can change the way people interact in the digital world with new emerging technologies.

For classes with appropriate prerequisite coursework, the instructor may wish to assign N. Carr's HBR article "IT Doesn't Matter." This article can be used as background, as the basis for discussion, or for full debate. Challenge the students to take a position and defend it. An interesting counter-position is to take a position similar to one of the responses in the HBR issue that followed the article's publication that "IT never mattered." Explore alternative assertions such as "It's not the IT that matters" or the question, "When does IT matter?" This article spawns a lot of good discussion. You might want to even assign teams to debate both sides of Carr's thesis.

Looking at what is an IT/IS career is also a good starting point for this class. Most students will have a misconception of what IT/IS is, including what jobs are available and the salaries for these jobs. It is important that communication skills are emphasized for IT/IS careers. Further, by understanding the IT hierarchy in a typical organization, the students will be able to see who is making the decisions, who is developing the systems, and who is managing the systems.

This chapter also provides an overview of globalization and the opportunities and challenges organizations face when operating in a digital world. Further, it introduces business and information systems strategies organizations use when going global. In addition to a basic lecture on globalization, the instructor may wish to consider conducting an extended discussion of the benefits and drawbacks of globalization. A possible exercise is to have students go through their closets and find out where their clothes have been produced; this can be contrasted with the origin of other consumer goods, such as computers/electronics. This should show the extent of globalization, and should serve as a foundation to discuss how different countries/areas specialize in certain goods/product categories.

When discussing globalization, the focus could be on the effects of globalization on the individual student. Many students will voice that globalization may negatively influence their career outlooks; in such cases, the instructor should stress that all industries are affected by globalization (not only IS/IT jobs, but also jobs in accounting, human resources, and so on). Further, the instructor should highlight that only certain job types are being outsourced, and that there is still (and will be) high demand for well-trained IS employees who possess a well-balanced skill set.

*An Information System Gone Awry: Computer Glitch Grounds Flights* is a good example of how reliant organizations are on their computer systems. A simple "glitch" in American Airlines' computerized reservation system resulted in not being able to check in passengers, thus requiring them to have the Federal Aviation Administration (FAA) halt all flights while it attempted to fix the system. This resulted in over 700 flight delays and affected 125,000 customers. Understanding the importance of successful information systems would be a good take-away for students.

*Case in Point: FedEx* is a good contrast to the *Computer Glitch Grounds Flights* case. This case examines how FedEx has created unique competitive advantage in its industry by implementing superior and flexible information technology. FedEx is one of the exemplary companies in demonstrating how to create competitive advantage with information technology/systems.

## ANSWERS TO REVIEW QUESTIONS

1-1. What is the “post-PC era”?

**Answer:**

It is referred to as a digital world where wireless mobile devices allow novel ways of interacting with information systems. Although PCs will not go away any time soon, a new age of technology will see devices such as wearable computers, augmented reality devices, and surface computers become reality.

LO: 1—Describe the characteristics of the digital world and the advent of the information age.

AACSB: Reflective Thinking Skills

1-2. Define the term “knowledge worker.” Who coined the term?

**Answer:**

Peter Drucker first used the term in 1959. It is generally taken to refer to workers who use, create, modify, and/or synthesize knowledge as a fundamental part of their jobs.

LO: 1—Describe the characteristics of the digital world and the advent of the information age.

AACSB: Reflective Thinking Skills

1-3. Name your two favorite mobile devices. For each device, discuss how it has influenced your work or personal life.

1-4. Describe how cloud computing can improve your personal productivity.

1-5. List and describe several reasons why companies are choosing to outsource business activities.

**Answer:**

Companies are choosing to outsource business activities for a variety of reasons; the most important reasons include the following (King, 2003):

- To reduce or control costs
- To free up internal resources
- To gain access to world-class capabilities
- To increase the revenue potential of the organization
- To reduce time to market
- To increase process efficiencies
- To be able to focus on core activities
- To compensate for a lack of specific capabilities or skills

LO: 2—Define globalization, describe how it evolved over time, and describe the key drivers of globalization.

AACSB: Reflective Thinking Skills

1-6. List and contrast several challenges of operating in the digital world.

**Answer:**

| Broad Challenges | Specific Challenges | Examples                                          |
|------------------|---------------------|---------------------------------------------------|
| Governmental     | Political system    | Market vs. planned economy; political instability |

|             |                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                          |
|-------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | Regulatory<br>Data sharing<br>Standards<br><br>Internet access and individual freedom                                         | Taxes and tariffs; embargoes; import and export regulations<br>European Union Data Protection Directive<br>Differences in measurement units, bar code standards, address conventions, academic degrees, and so on<br>Internet censorship in various countries                                                                                                            |
| Geoeconomic | Time zone differences<br>Infrastructure-related reliability<br><br>Differences in welfare<br><br>Demographic<br><br>Expertise | Videoconferences across different time zones<br>Differences in network infrastructures throughout the world<br>Migration and political instability caused by welfare differences between rich and poor countries<br>Aging population in the United States and Western Europe; younger workforce in other countries<br>Availability of labor force and salary differences |
| Cultural    | Working with different cultures<br><br><br><br>Challenges of offering products or services in different cultures              | Differences in power; distance; uncertainty avoidance; individualism/collectivism; masculinity/femininity; concept of time, and life focus; differences in languages, perceptions of aesthetics, beliefs, attitudes, religion, or social organizations<br>Naming and advertising for products; intellectual property                                                     |

LO: 2—Define globalization, describe how it evolved over time, and describe the key drivers of globalization.

AACSB: Analytic Skills

- 1-7. Define and contrast data, information, and knowledge.

**Answer:**

*Data* are raw symbols, such as words and numbers. Data have no meaning in and of themselves, and are of little value until processed.

*Information* is a representation of reality, and can help to answer questions about who, what, where, and when.

*Knowledge* is the ability to understand information, form opinions, and make decisions or predictions based on the information.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Analytic Skills

- 1-8. Describe three or four types of jobs and career opportunities in information systems and in related fields.

**Answer:**

There are a large number of different career opportunities. Likely to be mentioned are some from the following list.

| IS Activity | Job Title          | Job Description                                                                                        |
|-------------|--------------------|--------------------------------------------------------------------------------------------------------|
| Develop     | Systems analyst    | Analyze business requirements and select information systems that meet those needs                     |
|             | Software developer | Code, test, debug, and install programs                                                                |
|             | Systems consultant | Provide IS knowledge to external clients                                                               |
| Maintain    | IS auditor         | Audit information systems and operating procedures for compliance with internal and external standards |

|        |                                 |                                                                                                                                                                       |
|--------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manage | Database administrator          | Manage database and database management software use                                                                                                                  |
|        | Webmaster                       | Manage the firm's Web site                                                                                                                                            |
|        | IS manager                      | Manage existing information system                                                                                                                                    |
|        | IS security manager             | Manage security measures and disaster recovery                                                                                                                        |
|        | Chief information officer (CIO) | Highest-ranking IS manager; oversee strategic planning and IS use throughout the firm                                                                                 |
| Study  | Chief digital Officer (CDO)     | Executive focused on converting traditional "analog" businesses to digital; oversees operations in rapidly changing digital sectors like mobile apps and social media |
|        | University professor            | Teach undergraduate and graduate students; study the use of information systems in organizations and society                                                          |
|        | Government scientist            | Perform research and development of information systems for homeland security, intelligence, and other related applications.                                          |

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

- 1-9. List and define four of the systems knowledge and/or skills core competencies.

**Answer:**

| Systems Knowledge and Skills |                                                                                                             |
|------------------------------|-------------------------------------------------------------------------------------------------------------|
| Systems integration          | Connectivity, compatibility, integrating subsystems and systems                                             |
| Development methodologies    | Steps in systems analysis and design, systems development life cycle, alternative development methodologies |
| Critical thinking            | Challenging one's and others' assumptions and ideas                                                         |
| Problem solving              | Information gathering and synthesis, problem identification, solution formulation, comparison, and choice   |

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

- 1-10. List and define five types of information systems used in organizations.

**Answer:**

| Type of Systems               | Purpose                                                                                         | Sample Application                                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Transaction processing system | Process day-to-day business event data at the operational level of the organization             | Grocery store checkout cash register with connection to network, student registration system |
| Management information system | Produce detailed information to help manage a firm or a part of the firm                        | Inventory management and planning system, student enrollment by major and by course          |
| Decision support system       | Provide analysis tools and access to databases in order to support quantitative decision making | Product demand forecasting system, loan and investment analysis                              |
| Intelligent system            | Emulate or enhance human capabilities                                                           | Automated system for analyzing bank loan applications, evaluating complex medical data       |

| Type of Systems                                           | Purpose                                                                                                             | Sample Application                                                         |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Business intelligence system                              | Methods and systems for analyzing data warehouses to better understand various aspects of a business                | Online Analytical Processing (OLAP) system                                 |
| Office automation system (personal productivity software) | Support a wide range of predefined day-to-day work activities of individuals and small groups                       | Word processor, spreadsheet, presentation software, electronic mail client |
| Collaboration system                                      | Enable people to communicate, collaborate, and coordinate with one another                                          | Electronic mail system with automated, shared calendar                     |
| Knowledge management system                               | Collection of technology-based tools to enable the generation, storage, sharing, and management of knowledge assets | Knowledge portal for finding answers to common questions                   |
| Social software                                           | Facilitates collaboration and knowledge sharing                                                                     | Social network, connecting colleagues and friends                          |
| Geographical information system                           | Create, store, analyze, and manage spatial data                                                                     | Site selection for new shopping mall                                       |
| Functional area information system                        | Support the activities within a specific functional area of the firm                                                | System for planning for personnel training and work assignments            |
| Customer relationship management (CRM) system             | Support interaction between the firm and its customers                                                              | Sales force automation, lead generation                                    |
| Enterprise resource planning (ERP) system                 | Support and integrate all facets of the business, including planning, manufacturing, sales, marketing, and so on    | Financial, operations, and human resource management                       |
| Supply chain management system                            | Support the coordination of suppliers, product or service production, and distribution                              | Procurement planning                                                       |
| Electronic commerce system                                | Enable customers to buy goods and services from a firm's Web site                                                   | Amazon.com, eBay.com, Nordstrom.com                                        |

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

1-11. Discuss the issues surrounding information privacy, and how you can protect yourself.

1-12. How are the digital divide and computer literacy related?

**Answer:**

*Computer literacy* refers to the ability to use information technologies. The *digital divide* refers to the idea that those with access to information technology have great advantage over those without access to information technology. The gap is rapidly shrinking, but some challenges still exist—for example, people in rural communities, the elderly, people with disabilities, and minorities still lag behind the national average for internet access and usage.

LO: 5—Describe how computer ethics impact the use of information systems and discuss the ethical concerns associated with information privacy and intellectual property.

AACSB: Analytic Skills

**NOTE:** Self-Study questions and answers 1-13 through 1-21 can be found in the text.

## ANSWERS TO PROBLEMS AND EXERCISES

1-22. Match the following terms with the appropriate definitions:

|                                         |                                           |
|-----------------------------------------|-------------------------------------------|
| <u>  b  </u> <b>Information</b>         | <u>  c  </u> <b>Globalization</b>         |
| <u>  e  </u> <b>Internet of Things</b>  | <u>  g  </u> <b>Outsourcing</b>           |
| <u>  f  </u> <b>Information systems</b> | <u>  i  </u> <b>Digital divide</b>        |
| <u>  h  </u> <b>Information privacy</b> | <u>  j  </u> <b>Intellectual property</b> |
| <u>  d  </u> <b>Computer fluency</b>    | <u>  a  </u> <b>Computer ethics</b>       |

1-23. Of the several information systems listed in the chapter, how many do you have experience with? What systems would you like to work with? What types of systems do you encounter at the university you are attending? The Web is also a good source for additional information.

**Answer:**

Answers will vary.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Use of Information Technology

1-24. Identify someone who works within the field of information systems as an IS instructor, professor, or practitioner (e.g., as a systems analyst or systems manager). Find out why this individual got into this field and what this person likes and dislikes about working within the field of information systems. What advice can this person offer to someone entering the field?

**Answer:**

Answers will vary.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

1-25. As a small group, conduct a search on the Web for job placement services. Pick at least four of these services and find as many IS job titles as you can. You may want to try monster.com or careerbuilder.com. How many did you find? Were any of them different from those presented in this chapter? Could you determine the responsibilities of these positions based on the information given to you?

**Answer:**

Answers will vary, but some of the services that students might find would include Headhunters and Manpower in addition to the ones mentioned in the question.

LO: 3— Explain what an information system is, contrasting its data, technology, people, and organizational components.

1-26. Visit Walmart China ([www.wal-martchina.com/english/index.htm](http://www.wal-martchina.com/english/index.htm)). Compare and contrast [www.walmart.com](http://www.walmart.com) with Walmart China's site. What is the focus of Walmart China's Web site? Discuss how the focus differs from [www.walmart.com](http://www.walmart.com). What are possible reasons for the differences?



**Answer:**

In China, Walmart primarily operates stores of the Walmart Supercenter and Sam's Club brands. Both Walmart China and Walmart USA procure a wide selection of their goods from China; so whereas in the United States many of the products sold are imported, Walmart China has strong ties with the local business communities.

LO: 2—Define globalization, describe how it evolved over time, and describe the key drivers of globalization.

AACSB: Multicultural and Diversity Understanding, Dynamics of the Global Economy

- 1-27. What are potential costs and benefits of using your own devices in the workplace? How can organizations balance costs and benefits?

**Answer:**

When new technologies arrive it is usually consumers who will try them first, followed by organizations. A potential benefit to the organization is the ability of the employee to communicate quickly in areas such as customer relationship management and enterprise resource planning. One concern of organizations is the security of data when using multiple technologies. Some benefits include increased productivity, higher retention rates of talented employees, and higher customer satisfaction.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Use of Information Technology

- 1-28. What is the impact of mobility and social networks on your personal life? On the Web, find statistics about these topics. How does your own behavior compare to the statistics you found?

**Answer:**

Answers will vary, but students will probably mention networking through Facebook and Google+, with the ability to use portable devices such as cell phones and iPads to accomplish this.

LO: 1—Describe the characteristics of the digital world and the advent of the information age.

AACSB: Reflective Thinking Skills

- 1-29. As a small group, brainstorm what different types of data make up "Big Data" for a company like Amazon.com. What data are easiest/hardest to analyze? What data are least/most important? Justify your answers.

**Answer:**

Answers will vary.

LO: 1—Describe the characteristics of the digital world and the advent of the information age.

AACSB: Analytic Skills

- 1-30. Compare and contrast the data privacy statements of three different e-commerce Web sites. What are the similarities and differences? Which business would you be least/most willing to do business with? Why?

**Answer:**

Answers will vary.

LO: 5—Describe how computer ethics impact the use of information systems and discuss the ethical concerns associated with information privacy and intellectual property.

AACSB: Analytic Skills

- 1-31. Global outsourcing appears to be here to stay. Use the Web to identify a company that is providing low-cost labor from some less developed part of the world. Provide a short report that explains who the company is, where it is located, who its customers are, what services and capabilities it provides, how long it has been in business, and any other interesting information you can find in your research.

**Answer:**

Answers will vary.

LO: 2—Define globalization, describe how it evolved over time, and describe the key drivers of globalization.

AACSB: Dynamics of the Global Economy

- 1-32. The Electronic Frontier Foundation ([www.eff.org](http://www.eff.org)) has a mission of protecting rights and promoting freedom in the “electronic frontier.” The organization provides additional advice on how to protect your online privacy. Review its suggestions, and provide a summary of what you can do to protect yourself.

**Answer:**

Answers will vary. This is a large and complex site. Student answers will vary depending on site contents and lead articles at the time of access. The purpose of this site is to “Defend Your Rights in the Digital World,” as the EFF slogan indicates.

LO: 5—Describe how computer ethics impact the use of information systems and discuss the ethical concerns associated with information privacy and intellectual property.

AACSB: Reflective Thinking Skills

- 1-33. Find your school’s guidelines for ethical computer use on the Internet and answer the following questions: Are there limitations as to the type of Web sites and material that can be viewed (e.g., pornography)? Are students allowed to change the programs on the hard drives of the lab computers or download software for their own use? Are there rules governing personal use of computers and e-mail?

**Answer:**

Answers will vary widely. Some schools have general guidelines, others are quite specific, whereas still others lack such guidelines entirely.

LO: 5—Describe how computer ethics impact the use of information systems and discuss the ethical concerns associated with information privacy and intellectual property.

AACSB: Ethical Understanding and Reasoning Abilities

## ANSWERS TO APPLICATION EXERCISES

The Solution Files to accompany these exercises are available within the Instructor Resource Center. The Student Files to accompany these exercises are available for download at: [www.pearsonhighered.com/valacich](http://www.pearsonhighered.com/valacich). Please refer to the Data File Guide for file names.

## ANSWERS TO TEAM WORK EXERCISE

### Net Stats: Worldwide Internet Usage

In May 2014, there were almost 2.9 billion people worldwide who had access to the Internet at home (i.e., Internet users). Since its inception, the number of users has seen tremendous growth, from only around 14 million users in 1993 to 1 billion users in 2005, 2 billion users in 2010, and 3 billion users by the end of 2014 (forecast). Having grown exponentially in the early years, the growth in user numbers has slowed to less than 10 percent per year, as worldwide Internet penetration has surpassed 40 percent. In July 2013, almost 10 percent of the world's Internet users were located in the United States, with an Internet penetration of 84 percent. However, other countries are catching up. In 2013, China, with an Internet penetration of 46 percent (and much room to grow), accounted for over 23 percent of worldwide Internet users; similarly, only 16 percent of India's population had access to the Internet, accounting for 7 percent of worldwide Internet users (Table 1.8).

1-36. Search the Web for the most up-to-date statistics.

**Answer:**

Answers will vary.

AACSB: Analytic Skills

1-37. As a team, interpret these numbers. What is striking/important about these statistics?

**Answer:**

Answers will vary.

AACSB: Analytic Skills

1-38. As a team, discuss how these numbers will look in 5 years and 10 years. What will the changes mean for globalization? What issues/opportunities do you see arising?

**Answer:**

Answers will vary.

AACSB: Analytic Skills

1-39. Using your spreadsheet software of choice, create a graph/figure most effectively visualizing the statistics/ changes you consider most important.

**Answer:**

Answers will vary.

AACSB: Analytic Skills

## **ANSWERS TO OPENING CASE—MANAGING IN THE DIGITAL WORLD: Apple**

1. Given the pace at which technology is converging (e.g., phones, music players, cameras, and so on), what do you think is next in the post-PC era?

**Answer:**

Answers will vary, although many of Apple's products should be clearly within the consumer electronics domain. Possible topics could include Apple TV, Apple videos, cloud storage of data and so on.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Reflective Thinking Skills

2. How have Apple's products influenced the way we work and socialize?

**Answer:**

Apple is now a stable consumer electronics business with a variety of successful products.

Apple's diverse line of products serving many different markets from personal and social to the businesses storing data "in the cloud" is changing the way in which users work and play.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Reflective Thinking Skills

3. What are the ethical concerns associated with storing and analyzing user data?

**Answer:**

The biggest concern is keeping data private. When data are personal, organizations have to protect that data from both accidental and intended disclosure. This requires very strict control over who can access the data. Employees who are in charge of sensitive data must be screened and expected to act ethically. Several organizations are now hiring people for positions such as chief data officer, chief safety officer, or chief privacy officer to address the ethical concerns of storing data.

## ANSWERS TO BRIEF CASE—Technology at Starbucks

1. What are other ways in which Starbucks could use technology to connect with its customers?

**Answer:**

One way is to have a corporate office dedicated to monitoring all the new technologies that come out to see if any of them can be used for customer communications, growth, and retention.

Another way might be to have customer data available globally so that anywhere customers visit a Starbucks, they have the same customer data stored that can be used to greet and service them.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Reflective Thinking Skills

2. To what extent do such innovations influence your choice of coffee shops? What would make you switch to another store? Why?

**Answer:**

Answers will vary, but one response that will appear is that if customers have a negative experience, they would tend to visit a competitor on their next visit.

LO: 4—Describe the dual nature of information systems in the success and failure of modern organizations.

AACSB: Reflective Thinking Skills

## ANSWERS TO END-OF-CHAPTER CASES

## Case 1: Bridging the Digital Divide

1-40. Why does the digital divide matter to children and their families?

**Answer:**

The digital divide is one of the major ethical challenges facing society today when you consider the strong linkage between computer literacy and a person's ability to compete in the Information Age. For example, access to raw materials and money fueled the Industrial Revolution, "but in the informational society, the fuel, the power, is knowledge," emphasized John Kenneth Galbraith, an American economist who specialized in emerging trends in the U.S. economy. "One has now come to see a new class structure divided by those who have information and those who must function out of ignorance. This new class has its power not from money, not from land, but from knowledge."

LO: 5—Describe how computer ethics impact the use of information systems and discuss the ethical concerns associated with information privacy and intellectual property.

AACSB: Ethical Understanding and Reasoning Abilities

1-41. What will the rise in mobile devices in the developing world mean for the OLPC project?

**Answer:**

The vast increase of applications and programs using mobile devices such as the iPad, Ultrabook, and other devices will lessen the need for PCs distributed by the OLPC project. In fact, the focus may vary within that project to transition to mobile devices for the changing technology world.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Reflective Thinking Skills

1-42. Identify and discuss what you feel is the major challenge for making the OLPC a success. How can this challenge be overcome?

**Answer:**

Answers will vary, but discussion could include the high minimums required for purchases of laptops per order and the teaching application of each student once they have the computers. One major challenge is finding a way to increase the test scores of those who have access to the OLPC computers in order to justify the program.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Reflective Thinking Skills

## Case 2: You Tube

1-43. Do you use YouTube? If so, what is your favorite type of content? If not, why not? What other video-sharing sites do you use? Why?

**Answer:**

Answers will vary depending on student interests. Other video-sharing sites that may be mentioned include Flickr, Photobucket, Daily Motion, Metacafe, Videojug, Vimeo, iRackIt, and Tumblr.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Reflective Thinking Skills

- 1-44. How can businesses use YouTube to promote a good brand image? Have you seen any “good” campaigns on YouTube? If so, what made them appealing?

**Answer:**

Answers will vary, but organizations can use YouTube for distributing product information in a video format at no cost to promote sales and interest.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Reflective Thinking Skills

- 1-45. What potential dangers for a business's reputation can arise from user-generated content posted on sites such as YouTube? How can a business react to such dangers?

**Answer:**

Answers will vary, but if a business does not treat its customers honestly then there is the potential for those customers to create negative posts on YouTube that can result in long-term damage in sales.

LO: 3—Explain what an information system is, contrasting its data, technology, people, and organizational components.

AACSB: Reflective Thinking Skills

## MyMISLab

- 1-46. How do the five megatrends influence how people work and interact?

**Answer:**

Visit MyMISLab for suggested answers.

- 1-47. Describe and contrast the economic, cultural, and technological changes occurring in the digital world.

**Answer:**

Visit MyMISLab for suggested answers.

For an example illustrating the concepts found in this chapter, view the videos in [mymislab.com](http://mymislab.com).