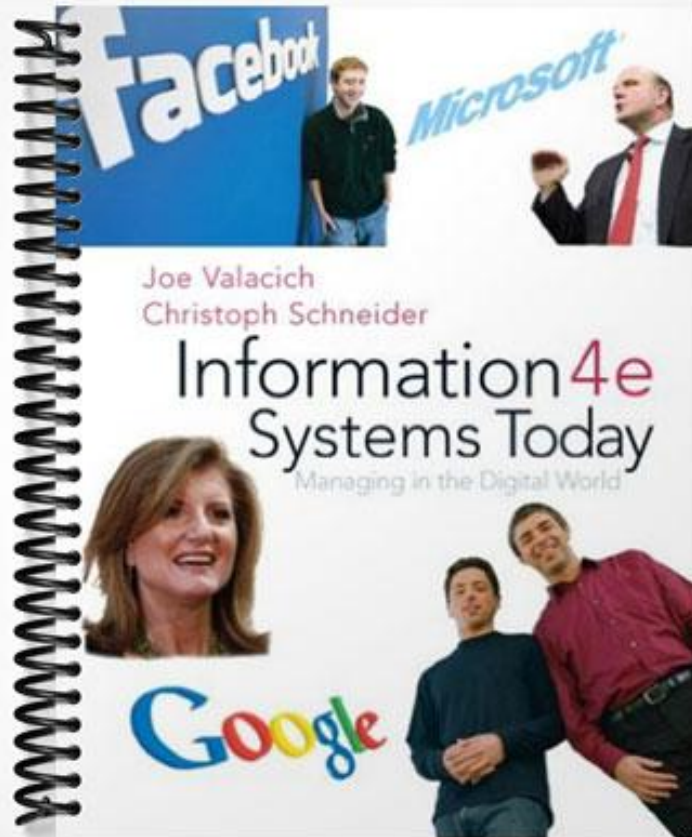


# SOLUTIONS MANUAL



## **CHAPTER 2—Fueling Globalization Through Information Systems**

### **CHAPTER OBJECTIVES**

1. Define globalization, describe how it evolved over time, and describe the key drivers of globalization.
2. Describe the emerging opportunities for companies operating in a digital world.
3. Explain the factors companies have to consider when operating in the digital world.
4. Describe international business and information systems strategies used by companies operating in the digital world.

### **CHAPTER OVERVIEW**

This chapter provides a discussion of how globalization evolved, and what opportunities globalization presents for organizations. Using examples, such as Infosys Technologies Ltd., the student will understand the factors organizations have to consider when operating in the digital world. Finally, the chapter presents different business and information systems strategies for companies operating in a digital world.

### **CHAPTER OUTLINE**

- Evolution of Globalization
  - Globalization 1.0
  - Globalization 2.0
  - Globalization 3.0
  - *Powerful Partnerships: Netscape's James H. Clark and Mark Andreessen*
  - *Net Stats: Online Searching*
  - The Rise of Outsourcing
  - *Change Agents: Niklas Zennström, Cofounder and Chief Executive Officer of Skype*
- Opportunities of Operating in a Digital World
  - *Brief Case: IT Globalization: Accenture in India*
  - Opportunities of Reaching New Markets
  - Opportunities of a Global Workforce
- Challenges of Operating in a Digital World
  - Governmental Challenges
  - Goeconomic Challenges
  - *Ethical Dilemma: Underground Gaming Economy*
  - Demographic Challenges
  - Cultural Challenges
  - *Coming Attractions: Learning Languages in Context*
  - *When Things Go Wrong: e-Waste*
- Going Global: International Business Strategies in a Digital World
  - Home-Replication Strategy
  - Global Business Strategy
  - Transnational Business Strategy

- *Industry Analysis: The Automobile Industry*
- End-of-Chapter Cases
  - Case 1: *Global Picture Sharing with Flickr*
  - Case 2: *e-Enabling the Air Transport Industry: Globalization of the Airline Industry*

## TEACHING SUGGESTIONS

This chapter 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 closet 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.

**Optional videos:** Before discussing the chapter, the instructor may wish to show one of the following videos about Friedman's bestseller *The World Is Flat*.

<http://mitworld.mit.edu/video/266/> Thomas Friedman at MIT (Running time: 1:15 hours)

<http://info.worldbank.org/etools/bspan/PresentationView.asp?PID=1466&EID=732> Thomas Friedman at the World Bank (Running time: 1:30 hours)

<http://video.google.com/videoplay?docid=-5750722555540659594> Thomas Friedman on The Charlie Rose Show (Running time 57 minutes)

<http://www.youtube.com/watch?v=jQaHrcwKsoc> Thomas Friedman and Outsourcing on The Discovery Channel (Running time: 45 minutes)

(URLs current as of March, 2009)

## ANSWERS TO REVIEW QUESTIONS

1. List the 10 factors that led to Globalization 3.0.

**Answer:**

Enabler	Event or Trend	Description
1	November 9, 1989	The fall of the Berlin Wall and the fall of communism opened up new markets for talent and products

2	August 9, 1995	Netscape went public; the company introduced the first mainstream Web browser
3	Work flow software	Standards and de facto standards enabling computers to “talk to each other” and facilitate collaboration
4.	Uploading	The ability of individuals and companies to actively participate in content generation on the Web
5	Outsourcing	The moving of business processes or tasks (such as accounting or security) to another company
6	Offshoring	Companies moving business functions to different countries (often overseas) to reduce costs
7	Supply chaining	The use of information systems to tightly integrate retailers, their suppliers, and their customers
8	In-sourcing	The delegation of a company’s logistics operations to a subcontractor that specializes in that operation
9	In-forming	Individuals’ use of powerful search engines on the Internet, such as Google, Yahoo!, or MSN, to build their “own personal supply chain of information, knowledge, and entertainment” (Friedman, 2007, p. 178)
10	The Steroids	Technologies amplifying the other flatteners by making things digital, mobile, virtual, and personal

2. 2. How did the fall of the Berlin Wall flatten the world according to Friedman?

**Answer:**

The fall of the Berlin Wall, and thereby the downfall of communism, is one of the key events flattening the world. The fall of the Berlin Wall marked the end of the Cold War between communist and capitalist countries and the breakup of the Eastern bloc, freeing millions of people. At once, people in many former communist countries could enjoy greater freedoms. For many companies, this meant a tremendous increase in potential customers as well as access to a huge, talented labor pool in the former Eastern bloc countries.

Around the same time, Microsoft released the first version of the Windows operating system, which over time became the de facto world standard in PC operating systems, enabling people from all over the world to use a common computing platform.

3. Describe work flow software. How did this technology drive the flattening of the world?

**Answer:**

Work flow software is a variety of software applications that allows people worldwide to communicate. Open standards allowed different people and different companies all over the world to communicate seamlessly. For example, eXtensible Markup Language enabled computer programs to “talk” to other programs. This and a variety of other transactions could be handled without human intervention, thanks to standards allowing different computers from different computer manufacturers, running different operating systems, to communicate. In addition to XML, various other de facto standards emerged, easing the ability for individuals and companies from all over the world to communicate and engage in commerce. Worldwide use of productivity software such as Microsoft Word or Adobe Acrobat enabled information sharing, while standard online payment systems such as PayPal allowed a common global currency to fuel commerce. Providing individuals anywhere in the world with the ability to communicate, share documents, or transfer money, regardless of the underlying computing platform or local currency, is fueling global collaboration of companies, small groups, and individuals.

4. Compare outsourcing, offshoring, and offshore outsourcing.

**Answer:**

Outsourcing refers to an organization sending some business functions to other companies. Offshoring refers to an organization moving some business functions to locations outside of their home country, and offshore outsourcing refers to an organization moving some business functions to foreign companies.

5. Describe in-sourcing and provide examples of how organizations use in-sourcing.

**Answer:**

In-sourcing refers to the delegation of a company's core operations to a subcontractor that specializes in that operation. For example, United Parcel Service (UPS) is becoming a leading in-sourcing provider. In addition to providing their traditional service offering of delivering packages to worldwide destinations, UPS started offering complete supply chain solutions to companies. Traditionally, online retailers such as Nike.com would handle all online customer orders themselves. However, through an in-sourcing arrangement, UPS manages Nike's warehouse and handles product packing and shipping as well as payment collection from customers so that Nike can concentrate on its core competencies, such as the design of new athletic shoes. Similarly, near their sort station in Lexington, Kentucky, UPS employees manage distribution facilities for a vast array of companies, even packaging bulk consumer electronics into retail packages or repairing Toshiba laptop computers. In some instances, it is not the manufacturer's repair team coming to a customer to perform on-site repair or maintenance but rather a team of certified UPS technicians. In these examples, UPS acts as a department within an organization; UPS employees come into an organization, analyze the organization's processes, and take over entire functions. Thus, such in-sourcing agreements require great amounts of trust, and for the outside observer, it is often hard to see that a different company (such as UPS) is performing the actual work. Given the scope of the in-sourcing arrangements and the nature of the task (i.e., complete logistics or supply chain solutions), such activities could usually not be performed from offshore locations.

6. List and describe several reasons why companies are choosing to outsource business activities.

**Answer:**

During the dot-com era, many American companies turned to India for talented employees, as the supply of American engineers was all but dried up and companies had to look overseas for qualified employees. After the stock market crashed, companies had to watch their expenditures much more closely than before and again turned to India. This time, they decided to hire Indian engineers not only because of the availability, but primarily because outsourcing work to India was much more cost-effective than performing those functions at home.

7. List and contrast several challenges of operating in the digital world.

**Answer:**

Broad Challenges	Specific Challenges	Examples
Governmental	Political system	Market versus planned economy; political instability

Broad Challenges	Specific Challenges	Examples
	Regulatory	Taxes and tariffs; import and export regulations
	Data sharing	EU Data Protection Directive
	Internet access and individual freedom	Internet censorship in various countries
Geoeconomic	Time zone differences	Videoconferences across different time zones
	Infrastructure-related reliability	Differences in network infrastructures throughout the world
	Differences in welfare	Migration and political instability caused by welfare differences between rich and poor countries
	Demographic	Aging population in the United States and Western Europe; younger workforce in other countries
	Expertise	Availability of labor force and salary differences
Cultural	Working with different cultures	Differences in power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity, concept of time, and life focus
	Challenges of offering products or services in different cultures	Naming and advertising for products; intellectual property

8. Explain the concept of geoeconomic challenges and how organizations can overcome these challenges.

**Answer:**

Geoeconomic challenges result from the combination of economic and political factors that influence a region. Geoeconomic challenges can come from differences in time zones, infrastructure, or economic welfare. Organizations can overcome such challenges by embracing them – for example by using time zone differences for their advantage by having project teams work on a project during several parts of a day, or by having backup plans (e.g., communications-related) to deal with infrastructure-related issues.

9. What is meant by transborder data flows, and why is this a concern?

**Answer:**

Transborder data flows result from the need to transfer data between different countries when operating globally. Spurred by the decrease in telecommunications costs, companies started to outsource many functions to other countries; for example, companies today outsource integral functions such as accounting or human resources to India, where the same quality of service can be provided at a fraction of the cost of performing the same functions in the United States or the EU. However, to outsource such functions, much (sometimes sensitive) data has to be transferred to different countries, which is where the problems start. Recently, the EU passed a directive that prohibits the transfer of data to countries with less stringent data protection laws. Thus, while it is now easier to transfer data between countries within the EU, it is much harder to transfer data from an EU member country to a nonmember country. While this poses challenges to companies from EU member countries (e.g., a German insurance company outsourcing its call center to India), this also introduces difficulties for international companies operating in the EU; for example, can a U.S.-based company transfer certain data from a European subsidiary back to the

home office? In most cases no. As such, these limitations significantly restrict a company's ability to utilize common business processes (e.g., in the financial or health care sector), making it much more difficult and expensive to operate globally.

10. Define culture and describe how it affects globalization.

**Answer:**

Hofstede (2001) defines culture as the “collective programming of the mind that distinguishes the members of one group or category of people from another.” Culture is manifested in how individuals view a variety of cultural dimensions, such as power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity, concept of time, and life focus (see Table 9). In essence, each nation has its own culture, which can often have important implications for companies operating in a digital world. One area where such challenges often surface is the interaction between a company's headquarters and a subsidiary in a different culture. Further, cultural differences influence how a company markets its products, or how intellectual property might be protected in foreign markets.

11. List and describe several ways in which cultures differ.

**Answer:**

Culture is manifested in how individuals view a variety of cultural dimensions, such as power distance (a cultural characteristic related to how different societies view authority and hierarchical structures), uncertainty avoidance (a cultural characteristic related to the risk-taking nature of a culture), individualism/collectivism (a cultural characteristic emphasizing the importance of the collective/group over the individual in society), masculinity/femininity (the degree to which a society is characterized by masculine qualities, such as assertiveness, or by feminine characteristics, such as nurturance), concept of time (a cultural characteristic that reflects the extent to which a culture has a longer- or shorter-term orientation), and life focus (the extent to which a culture focuses on the *quantity* versus the *quality* of life).

Further, cultures can differ in terms of language, work culture, aesthetics, education, religion, beliefs, and attitudes, social organization, or political life.

<b>Cultural Element</b>	<b>How It Can Impact Globalization Success</b>
Language	Communication problems can influence efficiency, understanding, and performance.
Work culture	Different skills, work habits, and attitudes can influence performance and manpower constraints.
Aesthetics	Art, music, and dance reflect nonwork interests that can be used to enrich team communication and cohesiveness.
Education	Lack of adequate education level limits skill levels, technological sophistication, and infrastructure.
Religion, beliefs, and attitudes	Basic values and beliefs can influence attitudes toward work, promptness, punctuality, mutual trust, respect, and cooperation.
Social organization	Social norms of a society can influence formal and informal communication, including negotiations and job assignments.
Political life	Differing political systems can influence the delivery of supplies and equipment, human rights, legal system, and overall stability.

12. Describe the multidomestic business strategy and how it affects the flow of control information.

**Answer:**

The multidomestic business strategy is particularly suited for operations in markets differing widely. The multidomestic business strategy uses a loose federation of associated business units, each of which is rather independent in their strategic decisions. In other words, the degree of integration is very low, and the individual subunits can respond quickly to their respective market demands (Ghoshal, 1987). Multidomestic companies can thus be extremely flexible and responsive to the needs and demands of local markets, and any opportunities arising in local markets can be quickly seized.

However, working in a decentralized fashion, much of the knowledge generated is retained at the local subsidiaries, and knowledge transfer between the individual subsidiaries is often limited, leading to inefficiencies and mistakes that potentially can be repeated across subsidiaries (Bartlett and Ghoshal, 1998). In sum, for companies following a multidomestic business strategy, very little data and control information flows between the home and subsidiary locations.

## ANSWERS TO PROBLEMS AND EXERCISES

1. Match the following terms to the appropriate definitions.

<u>  j  </u> Transnational business strategy	<u>  b  </u> Offshore outsourcing
<u>  d  </u> Multidomestic business strategy	<u>  e  </u> Geoeconomic
<u>  f  </u> In-forming	<u>  h  </u> Uncertainty avoidance
<u>  c  </u> Globalization 3.0	<u>  a  </u> Nearshoring
<u>  i  </u> Quotas	<u>  g  </u> Embargoes

2. Visit the Go4Customer Web site ([www.go4customer.com](http://www.go4customer.com)). What does this company do? Where are they located? Who are Go4Customer customers? Give an example of how a U.S. company would use Go4customer.

Go4Customers is an offshoring provider offering primarily call center solutions, answering services, and telemarketing. The company is located in Jaipur, India. Among the various clients are Bell, Aflac, and Rogers Wireless. A U.S. company could use Go4Customers by outsourcing their help desk function, or their call center operations.

3. Visit Wal-Mart China ([www.wal-martchina.com/english.index.htm](http://www.wal-martchina.com/english.index.htm)). Compare and contrast your local Wal-Mart with Wal-Mart China. Are the items sold in China the same as your local Wal-Mart? How does Wal-Mart China differ from your Wal-Mart? Explain your answer.

In China, Wal-Mart primarily operates stores of the Wal-Mart Supercenter and Sam's Club Brands. Both Wal-Mart China and Wal-Mart USA procure a wide selection of their goods from China, so whereas in the U.S., many of the products sold are imported, Wal-Mart China has strong ties with the local business communities.



4. Interview an IS professional and document his or her views on offshore outsourcing. Specifically, find out if his or her company is using offshore outsourcing; if so, what does the company outsource and why? If not, why not? If it utilizes offshore outsourcing, have the IS professional critique its quality, cost, and so on.

Answers will vary.

5. What search engine do you use? Compare and contrast your search engine preference with one of the other big search engines available (google.com, msn.com, yahoo.com). How would these search engines be used to create your “own personal supply chain”?

Answers will vary.

6. What digital news media do you use to get your news? According to this textbook’s definitions, are you in-forming? If you are in-forming, describe how. What other ways could you in-form?

Answers will vary.

7. What are some examples of key technologies that utilize “steroids”? Using the technology definition provided by this textbook, how do you use technological steroids in your everyday life?

Answers will vary.

8. Should the U.S. government allow companies to use offshore outsourcing if qualified U.S. citizens are willing and able to do a job? Should the government regulate the amount that can be outsourced by any company? Why or why not?

Answers will vary. While some students will take a protectionist stance, others will argue for the use of free market forces.

9. Work flow software allows an organization to move documents and/or tasks through a work process. Using your own experiences and observations, either professionally or personally, describe how the work flow software worked.

Answers will vary.

10. As outlined in the chapter, UPS provides in-sourcing services for many businesses. Visit [www.ups.com](http://www.ups.com) and identify some examples of UPS providing in-sourcing services and include a listing of some of UPS’s in-sourcing customers.

In-sourcing services include logistics management, post-sales support, recycling management, or returns and repair management. Customers include Alcatel, Cisco Systems, Hitachi GST, Intermec Technologies, or Silicon Graphics, Inc. (SGI), or companies such as DaimlerChrysler, General Motors, Harley-Davidson, or Honeywell.

11. Interview an IS professional regarding some possible uses for open-source software. Is open-source software being used in the IS professional's organization? If so, document what software it uses and how it is working; if not, document why it is not using open-source software.

Answers will vary.

12. List ten reasons why you would (or would not) be a good global manager.

Answers will vary.

13. 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.

Answers will vary.

14. Examine Table 2-9 and rate yourself for each of the critical cultural dimensions. Do your ratings match those of your country in every instance? If so, why do you think this occurred? If not, why?

Answers will vary.

15. Download and use the open source Firefox Web browser ([www.mozilla.com/firefox/](http://www.mozilla.com/firefox/)) and compare and rank its features against those of Microsoft Internet Explorer or Flock. Which do you prefer and why?

Answers will vary.

## **ANSWERS TO APPLICATIONS EXERCISES**

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

### **SUGGESTED ANSWERS TO TEAM WORK EXERCISE: Becoming a Global Leader**

Many universities believe, rightfully so, that they have a duty to help internationalize students through a variety of events, courses, and experiences in order to help prepare students for managing in the digital world. Work in teams of four or five students and compile a list of all the different things you feel your school is doing to help students develop into better global leaders.

Answers will vary depending on the opportunities the respective university offers.

### **ANSWERS TO OPENING CASE—Managing in the Digital World: Infosys Technologies Ltd.**

1. What events have led to the flat world?

Two events have led to the flat world, (1) the fall of the Berlin Wall, and (2) Netscape going public. Students may discuss the other trends that have led to flattening, such as the advent of work flow software, uploading, outsourcing, offshoring, supply chaining, in-sourcing, in-forming, and the steroids.

2. What types of activities within an organization are better candidates for outsourcing?

Customer service and accounting activities are discussed as good candidates for outsourcing because other companies may be able to provide those services at a lower cost due to their specialization, or their lower labor rates in the case of offshore outsourcing.

### **ANSWERS TO BRIEF CASES—IT Globalization: Accenture in India**

1. What can you do to prepare yourself to work for an organization like Accenture?

Answers will vary.

2. Why do you think Accenture has been successful in the flat world?

Accenture has exploited the opportunities for operating in the digital world in that they

have expanded into new markets and have been able to utilize the skilled, low-cost global workforce.

## **Industry Analysis: The Automobile Industry**

1. How is Globalization 3.0 fueling change in the auto industry?

Operating in a variety of different markets, many auto manufacturers now have to try to strike a balance between catering to local tastes and preferences and building a world car, trying to reap economies of scale. On the other hand, automakers can produce in a variety of locations, both in low-cost locations, as well as locally, close to the end customer, to minimize the effects of quotas and tariffs, and to be able to quickly react to local needs.

2. Examine how cultural differences make it difficult to create a world car.

Many of the obstacles to creating a world car are based on local tastes and preferences. Cultural differences hindering the development of a world car include masculinity/femininity (e.g., influencing a car's design, also aesthetics), life focus, or power distance (e.g., in some countries, it is seen as inappropriate to drive a larger car than one's boss). Other factors, such as political, have to be considered when trying to conform to government regulations.

## **ANSWERS TO END-OF-CHAPTER CASES**

### **Case 1: *Global Picture Sharing: Flickr***

1. Why do you think Flickr has been so popular throughout the world?

Answers will vary. Many students will mention that many people share the desire to view new, interesting pictures, and that features, such as tagging, help to experience viewing picture albums in whole new ways.

2. What lessons could a Web site for a local business learn from Flickr?

Some lessons to be learned include that providing the possibility to interact with other users sharing the same interests can broaden the reach of the site.

3. How do Web sites like Flickr act to increase globalization?

Web sites such as Flickr can act to increase globalization similar to the way movies can act to increase globalization; it can introduce people from all around the world to similar cultural norms, tastes, and preferences. Using the possibility to comment on pictures gives users the opportunity to discuss the appropriateness of certain images, behavior, and so on.

### **Case 2: *Enabling Global Payments at PayPal***

1. Why do you think PayPal has been so successful throughout the world?

Answers will vary. Many students will discuss how Paypal has taken advantage of the

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opportunities of operating in a digital world (reaching new markets and utilizing a skilled global workforce), and worked hard to minimize the challenges of doing so (working to resolve regulatory problems).

2. How has PayPal acted to increase globalization?

Paypal has developed into the largest currency exchange Web service and in doing so, has made it possible for people all over the world to more efficiently purchase products and services from local vendors and global vendors.

3. Do you use PayPal? Why or why not?

Answers will vary.