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The Digital Revolution and the Global E-Marketplace

According to a recent “digital opportunity index” published by the United Nations, South Korea leads the world in providing its citizens with access to information and communications technologies (ICT). The country’s high-tech infrastructure takes a variety of forms. The availability of broadband Internet connections is one example. South Korea currently leads the world in broadband penetration (23 connections per 100 inhabitants); with 68 connections per 100 households, South Korea ranks second only to Hong Kong. By comparison, the United States leads the world in total number of broadband subscribers; however, it ranks 19th in terms of connections per 100 households. South Korea’s government budgeted \$50 billion in an effort to link 80 major cities and towns via broadband; moreover, South Korea’s network is extremely fast, offering standard speeds of 8 megabits per second (Mbps). By comparison, much of Europe’s broadband network currently operates at less than 1 Mbps. As Stephen Ward, a consultant with Deloitte, explains, “Koreans tend to be early adopters of technology and, more significantly, are fast followers. They are always conscious of the need not to get left behind by the Japanese and the young have a great desire to conform with the gadget-carrying norm of their peers.”

The digital revolution is driving the creation of new companies, industries, and markets in all parts of the world; the same process is also contributing to the *destruction* of companies, industries, and markets. In short, the revolution is dramatically transforming the world in which we live. Policy makers in South Korea and other countries are hoping to be leaders, rather than followers, as the revolution gains traction and picks up speed. In this final chapter, we will begin by briefly reviewing the key innovations that served as precursors to the digital revolution. In the next two sections, convergence, the disruptive nature of Internet technology, and its effect on global companies are discussed. Next, key e-commerce issues that face global marketers are examined and a typology of Web sites categories is introduced. Next is an overview of Web site design issues as they pertain to global marketing. The final section of the chapter examines some of the new products and services made possible by the digital revolution.



South Koreans in traditional scholar robes use laptop computers at the digital version of a state examination at Sungkyunkwan University in Seoul. The event commemorates the traditional means for selecting government officers during the Chosun Dynasty, which dates back to the 14th century. Several hundred participants competed by composing Korean, Chinese, and English poems, demonstrating foreign language skills, and playing Internet games.

THE DIGITAL REVOLUTION: A BRIEF HISTORY

The **digital revolution** is a paradigm shift resulting from technological advances that allow for the digitization (i.e., conversion to binary code) of analogue sources of information, sounds, and images. The origins of the digital revolution can be traced back to the mid-twentieth century. Over a five-year period between 1937 and 1942, John Vincent Atanasoff and Clifford Berry developed the world's first electromechanical digital computer at Iowa State University. The Atanasoff-Berry Computer (ABC) incorporated several major innovations in computing including the use of binary arithmetic, regenerative memory, parallel processing, and separation of the memory and computing functions. In 1947, William Shockley and two colleagues at AT&T's Bell Laboratories invented a "solid state amplifier," or **transistor**, as it became known. This was a critical innovation because the vacuum tubes that were used in computers and electronics products at that time were large, consumed a large amount of power, and generated a great deal of heat. Shockley and collaborators John Bardeen and William Brattain were awarded the Nobel Prize in physics in 1956 for their invention.

In 1948, a Bell Labs researcher named Claude Shannon wrote a technical report titled *A Mathematical Theory of Communication* in which he proposed that all information media could be encoded in *binary digits*, or bits. Earlier, in 1940, Shannon had argued in his doctoral dissertation that the logical values "true" and "false" could be denoted by "1" and "0", respectively, and that streams of 1s and 0s could transmit media over a wire. In the mid-1950s, Sony licensed the transistor from Bell Labs; Sony engineers boosted the yield of the transistor and created the market for transistor radios. The sound was "lo-fi" but the devices were portable and stylish, which is what consumers—especially teenagers—wanted. Also during the 1950s, Robert Noyce and Jack Kilby independently invented the silicon chip (also known as the

integrated circuit or IC).¹ In essence, the IC put the various parts of an electrical circuit—including resistors, diodes, and capacitors—on a single piece of material. The IC gave the transistor its modern form and allowed its power to be harnessed in a reliable, low-cost way.

The IC and the concept of binary code permitted the development of the **personal computer (PC)**, a compact, affordable device whose appearance marked the next phase of the digital revolution. Many of the events and people associated with this era have become the stuff of legend. Some observers credit Alan Kay with research that permitted the development of the first PCs. During the 1970s, Kay was director of the Learning Research Group at the Xerox Palo Alto Research Center (PARC). Then, between 1981 and 1983, Kay worked at Atari, which, along with other pioneering PC companies such as Osborne and Commodore, has long since disappeared. Kay's work at Xerox PARC had a strong impact on Steve Jobs who, with partner Steve Wozniak, started Apple Computer in a garage in the late 1970s. The company's Apple II is widely regarded as the first "true" PC; the Apple II's popularity received a big boost in 1979 when a spreadsheet program known as VisiCalc was introduced. A computer **spreadsheet** is an electronic ledger that automatically calculates the effect of a change to one figure on other figures across rows and down columns; previously, these changes had to be done manually. While such powerful, time-saving functionality is taken for granted today, VisiCalc was a true milestone in the digital revolution.²

IBM brought its first PC to market in 1981; Bill Gates initially declined an offer to create an **operating system**—the software code that provides basic instructions—for IBM's new machine. Gates later changed his mind and developed the Microsoft Disk Operating System (MS-DOS). In 1984, Apple introduced the revolutionary Macintosh, with its user-friendly graphical interface and point-and-click mouse. A few years later, Microsoft replaced MS-DOS with Windows. Meanwhile, component manufacturers were innovating as well; Intel began marketing the 286 microprocessor in 1982. This was followed in quick succession by the 386 and 486 versions; in 1993, Intel unveiled the Pentium.

The rise of the Internet and the World Wide Web marks the next phase of the digital revolution. The Internet's origins can be traced back to an initiative by the **Defense Advanced Research Projects Agency (DARPA)** that created a computer network that could maintain lines of communication in the event of a war. In 1969, the ARPAnet was unveiled; this was a network linking computer research centers at colleges and universities. E-mail within a computer network was made possible by the creation of a file-transfer program in 1972. There was a problem, however; it was not possible to send e-mail that was created on one network to a computer on a different network. This problem was solved the following year when Vinton Cerf and Robert Kahn created a software framework known as TCP/IP. Launched in 1973, this cross-network protocol paved the way for a "network of networks", and the **Internet** was born.

The ability to exchange e-mail messages on the Internet had a revolutionary impact on society, as technology guru Stewart Brand noted in the mid-1980s:

Marshall McLuhan used to remark, "Gutenberg made everybody a reader. Xerox made everybody a publisher." Personal computers are making everybody an author. E-mail, word processing programs that make revising as easy as thinking, and laser printers collapse the whole writing-publishing-distributing process into

¹ Noyce founded Fairchild Semiconductor and later, Intel. His Intel cofounder was Gordon Moore, who is famous for formulating "Moore's Law," according to which computer power doubles every 18 months. Kilby was the founder of Texas Instruments. See Evan Ramstad, "At the End of an Era, Two Tech Pioneers are Remembered," *The Wall Street Journal* (August 15, 2005), p. B1.

² For more on the development of VisiCalc, see Dan Bricklin, "Natural Born Entrepreneur," *Harvard Business Review* 79, no. 8 (September 2001), pp. 53–59.

one event controlled entirely by the individual. If, as alleged, the only real freedom of the press is to own one, the fullest realization of the First Amendment is being accomplished by technology, not politics.³

The Internet revolution does not end with the advent of e-mail. More innovations were yet to come. In 1990, a software consultant named Tim Berners-Lee invented the **uniform resource locator (URL)**, an Internet site's address on the World Wide Web; **hypertext markup language (HTML)**, a format language that controls the appearance of Web pages; and **hypertext transfer protocol (http)**, which enables hypertext files to be transferred across the Internet.⁴ These innovations allowed Web sites to be linked and visually rich content to be posted and accessed. In short, Berners-Lee is the father of the **World Wide Web**. In the mid-1990s, a computer scientist at the University of Illinois named Marc Andreessen developed a Web browser; called Mosaic, it combined images and words together on the same screen and allowed users to search and view resources on the Web. Andreessen joined forces with Jim Clark, one of the founders of Silicon Graphics, to form Mosaic Communications. Renamed Netscape Communications, the company became one of the brightest stars in the dot-com era as commercial demand for the Netscape browser software exploded. As Thomas L. Friedman notes, "Marc Andreessen did not invent the Internet, but he did as much as any single person to bring it alive and popularize it."⁵

Within five years of the Web's debut, the number of users increased from 600,000 to 40 million. In the following decade, search engines such as Yahoo! and Google were created and encryption and security features were built into the Web. Search engines have also been dramatically improved; for example, Google's novel "page ranking" has superseded an earlier technology known as "link analysis." As the twenty-first century gets underway, Internet usage is exploding around the world; in 2005, the OECD estimated that the Internet had nearly 1 billion users.

The Internet's powerful capabilities and increasing importance have resulted in a backlash that manifests itself in various ways. For example, the Chinese government, alarmed by the free flow of information across the Internet, closely monitors the content on Web sites that its citizens access. In addition, policy makers in some countries are concerned about U.S. control of the Internet. The nonprofit Internet Corporation for Assigned Names and Numbers (Icann) is based in Marina del Rey, California. Icann maintains a database of Web addresses, approves new suffixes for Web addresses (e.g., .info and .tv) and performs other behind-the-scenes procedures that are critical for keeping the Internet functioning properly. Icann's advisory body includes international members, but the U.S. Department of Commerce retains veto power over all decisions. For example, after Icann tentatively approved the domain name .xxx for pornography sites, Commerce blocked the decision. Recently, China, India, Brazil, and the EU have taken the position that since the Internet is global, no single country should be in control. Accordingly, these nations are seeking to have the United Nations assume a role in Internet governance.⁶ Privacy is another issue. As companies become more adept at using the Internet to gather, store, and access information about customers, privacy issues are becoming a focal point of concern among policy makers and the general public. In the EU, for example, a privacy protection directive was established in 1995; in 2002, the EU adopted a privacy and electronic communications directive.

"There are certain limitations that are part of the network, and we are struggling with that. We're worried that in the zeal to address localization that people will not be able to communicate any more. If someone gives you a business card with the e-mail address in Chinese, what are you to do?"⁷

Vinton G. Cerf, Internet Pioneer and
Chairman, Icann

³ Stewart Brand, *The Media Lab: Inventing the Future at MIT* (New York: Penguin Books, 1988), p. 253.

⁴ Hypertext is any text that contains links to other documents.

⁵ Thomas L. Friedman, *The World Is Flat* (New York: Farrar, Straus and Giroux, 2005), p. 58.

⁶ Christopher Rhoads, "EU, Developing Nations Challenge U.S. Control of Internet," *The Wall Street Journal* (October 25, 2005), pp. B1, B2. See also "A Free Internet," *Financial Times* (November 14, 2003), p. 15.

⁷ John Markoff, "Control the Internet? A Futile Pursuit, Some Say," *The New York Times* (November 24, 2005), p. C4.

Internet pioneers Bob Khan and Vint Cerf were among those in attendance at the first Internet Governance Forum (IGF) held in Athens, Greece, in 2006. The IGF will guide “the development and application by governments, the private sector, and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programs that shape the evolution and use of the Internet.” Many in the global Internet community are concerned about the inclusion of the word “governments” in this statement.



CONVERGENCE

The digital revolution is causing dramatic changes in industry structure. **Convergence** is a term that refers to the coming together of previously separate industries and product categories (see Figure 17-1). New technologies affect the

the rest of the story

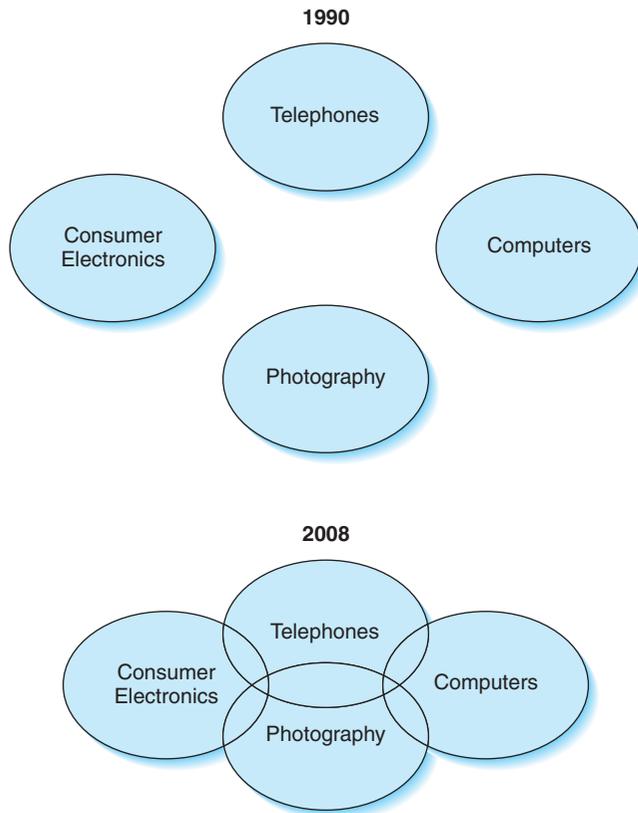
South Korea's Vision for a Digital Future

South Korea's digital future includes much more than simply broadband connections. For example, policy makers are aggressively pursuing applications for radio frequency identification tags (RFID; see Case 12-2); the South Korean government is spending nearly \$300 million to build an RFID research center. The center will be part of an even more ambitious effort: the construction of a ubiquitous city on a 1,500-acre man-made island near the Incheon Free Economic Zone. What makes New Songdo City a “ubiquitous city” (U-city for short)? For one thing, all major information systems—commercial, residential, and government—share data, and computers are designed into all buildings. With an estimated price tag of \$25 billion, New Songdo City is scheduled for completion in 2014. Complementing its high-tech features will be high-touch elements inspired by the world's major cities. These elements include a central park (inspired by New York) and a canal system similar to that in Venice.

John Kim is in charge of planning for the U-city, which he says will exemplify “U-life.” Kim explains, “U-life will become its own brand, its own lifestyle.” Residents will be able to communicate via videoconferencing and everyone will have access to video on demand. Smart-card house keys will also function as payment devices for subways, parking meters, movie tickets, and myriad other uses.

Korea is not alone in embracing the digital future. In France, for example, industry deregulation has resulted in vastly improved broadband service for consumers. The changes have shaken up France Telecom and other established firms and paved the way for newcomers such as Iliad, a company that offers a “triple play” service package. Carrying the brand name Free, the service includes broadband Internet service at 24 Mbps, 81 television channels, and Internet telephone service. The price? €29.95 per month—about \$36. As Iliad chief executive Michaël Bouzoba says, “Entrepreneurship exists in France, but we're a rare example. I also say to French politicians, ‘Stop focusing on national champions. Innovation's not coming from national champions.’” An analyst at eMarketer noted, “France's quick shift to broadband and the oncoming storm of Internet calling and digital television make it the country to watch as a model of market transformation.”

Sources: Tom Braithwaite, “The Young Guns of Broadband,” *Financial Times* (May 29, 2006), p. 8; Pamela Licalzi O'Connell, “Korea's High-Tech Utopia, Where Everything Is Observed,” *The New York Times* (October 5, 2005), p. 6; Andrew Ward, “Where High-Speed Access Is Going Mainstream,” *Financial Times F+T Review: Next-Generation Broadband* (June 9, 2004), p. 4; Jim Hopkins, “Other Nations Zip by USA in High-Speed Net Race,” *USA Today* (January 19, 2004), pp. 1B, 2B.



business sector(s) in which a company competes. What business is Sony in? Originally, Sony was a consumer electronics company best known for innovative products such as transistor radios, Trinitron televisions, VCRs and other stereo components, and the Walkman line of personal music players. Then, Sony entered new businesses by acquiring a record company and a motion picture studio. These acquisitions did not represent convergence because they occurred in the early days of the digital revolution. Motion pictures, recorded music, and consumer electronics were still separate industries. Today, however, Sony is in the “bits” business: Its core businesses incorporate digital technology and involve digitizing and distributing sound, images, and data. Now, Sony’s competitors include Dell (computers and consumer electronics), Kodak (digital cameras), and Nokia (cell phones).

What kind of challenges does convergence present? Consider the plight of Kodak, the undisputed leader in photography-related products for more than a century. The company has been struggling to remake its business model as its sales of digital-related products grew from zero to \$1 billion in five years (see Case 15-1). Because of convergence, Kodak’s competitors include companies such as Gateway and Hewlett-Packard. However, competition also comes from the telecommunications industry. The cell phone camera was invented in 1997; a key benefit was the ability to download digital photos from the camera and post them on the Web or e-mail them to friends. Ironically, Motorola, a key player in the cell phone business, could have been first to market with a cell phone camera. However, management’s attention was distracted by the ill-fated launch of the iridium satellite phone business (see Chapter 6). As a result, inventor Philippe Kahn took his idea to Japan where the first cell phone cameras were introduced in 1999. According to industry estimates, by 2010, annual sales of camera-equipped cell phones will reach 1 billion.⁸

⁸ Kevin Maney, “Baby’s Arrival Inspires Birth of Cellphone Camera—and Societal Evolution,” *USA Today* (January 24, 2007), p. 3B.

Wall Street Journal: "What's next after cell phones that take photos, play games, and pay at soda machines? Will cell phones with personal-organizer functions become a mass-market product?"

Jorma Ollila, Chief Executive Officer, Nokia: "The important thing will be the camera industry converging into mobile phones. Expressing emotions with pictures, where everyone has a suitable device, just makes so much sense. In terms of PDAs, there will be an enterprise [business] segment that will want the PDA functionality integrated with good phone capability."

Source: The Wall Street Journal (Western Edition) by David Pringle and Raju Narisetti. Copyright 2003 by Dow Jones & Company, Inc. Reproduced with permission of Dow Jones & Company, Inc. in the format Other book via Copyright Clearance Center.

VALUE NETWORKS AND DISRUPTIVE TECHNOLOGIES⁹

As noted at the beginning of the chapter, the digital revolution provides both opportunities and threats. IBM, Kodak, Xerox, and Motorola are examples of global companies that have struggled to remake their businesses in the face of technological innovation. IBM missed out on the minicomputer market, in part because management believed minicomputers promised lower margins and represented a smaller market. DEC, Data General, and Prime created the minicomputer market, but these companies, in turn, missed the PC revolution. This time, however, IBM's executive team demonstrated that it had learned its lesson: It set up an independent organizational unit to create the company's first PC. However, IBM subsequently was slow to recognize growing market demand for laptops; new entrants included Toshiba, Sharp, and Zenith. In an era when environmental scanning, strategic planning, and other conceptual tools of the type discussed in Chapter 15 are widely known and used, how is it that managers at many companies have failed to respond to change in a timely manner? According to Harvard professor Clayton Christensen, the problem is that executives become so committed to a current, profitable technology that they fail to provide adequate levels of investment in new, apparently riskier technologies. Ironically, companies fall into this trap by adhering to prevailing marketing orthodoxy, namely, listening to and responding to the needs of established customers. Christensen calls this situation the **innovator's dilemma**.

In every industry, companies are embedded in a **value network**. Each value network has a cost structure associated with it that dictates the margins needed to achieve profitability. The boundaries of the network are defined, in part, by the unique rank ordering of the importance of various product performance attributes. Parallel value networks, each built around a different definition of what makes a product valuable, may exist within the same broadly defined industry. Each network has its own "metrics of value" (e.g., for laptop computers, the metrics are small size, low weight and power consumption, and rugged design). For example, during the 1980s, customers who bought portable computers were willing to pay a premium for smaller size; buyers of

⁹ Much of the material in this section is adapted from Clayton Christensen, *The Innovator's Dilemma* (New York: HarperBusiness, 2003). See also Simon London, "Digital Discomfort: Companies Struggle to Deal With the 'Inevitable Surprise' of the Transition from Atoms to Bits," *Financial Times* (December 17, 2003), p. 17.

mainframe computers did not value this attribute. Conversely, mainframe buyers valued (i.e., were willing to pay more for) memory capacity as measured by megabytes; portable computer buyers placed less value on this attribute. In short, the value networks for mainframe computers and portable computers are different.

As firms gain experience within a given network, they are likely to develop capabilities, organizational structures, and cultures tailored to the distinctive requirements of their respective value networks. The industry's dominant firms—typically with reputations as “well managed” firms—lead in developing and/or adopting **sustaining technologies**, that is, incremental or radical innovations that improve product performance. According to Christensen, most new technologies developed by established companies are sustaining in nature; the vast majority of innovations are of this type. However, new entrants to an industry lead in developing **disruptive technologies** that redefine performance. The benefits associated with disruptive technologies go beyond enhancing product performance; disruptive technologies enable something to be done that was previously deemed impossible. Disruptive technologies typically enable new markets to emerge. As Christensen explains, “An innovation that is disrupting to one firm can be sustaining to another firm. The Internet was sustaining technology to Dell Computer, which already sold PCs direct by telephone. But it was disruptive technology to Compaq, whose major distribution channel was retailers.”¹⁰

To help managers recognize the innovator's dilemma and develop appropriate responses to environmental change, Christensen has developed five principles of disruptive innovations:

1. Companies depend on customers and investors for resources. As management guru Rosabeth Moss Kanter points out, the best innovations are user-driven; paradoxically, however, if management listens to established customers, opportunities for disruptive innovation may be missed.¹¹
2. Small markets don't solve the growth needs of large companies. Small organizations can most easily respond to the opportunities for growth in a small market. This fact may require large organizations to create independent units to pursue new technologies, as IBM did in developing its PC.
3. Markets that don't exist can't be analyzed. Christensen recommends that companies embrace *agnostic marketing*. This is the explicit assumption that *no one*—not company personnel, not the company's customers—can know whether, how, or in what quantities a disruptive product can or will be used before they have experienced using it.
4. An organization's capabilities define its disabilities.
5. Technology supply may not equal market demand. Some products offer a greater degree of sophistication than the market requires. For example, developers of accounting software for small businesses overshot the functionality required by the market, thus, creating an opportunity for a disruptive software technology that provided adequate, not superior, functionality and was simple and more convenient to use. This was the opportunity seized by Scott Cook, developer of Quicken and Quickbooks.

¹⁰ Simon London, “Why Disruption Can Be Good For Business,” *Financial Times* (October 3, 2003), p. 8.

¹¹ Rosabeth Moss Kanter, John Kao, and Fred Wiersema, *Innovation: Breakthrough Thinking at 3M, Dupont, GE, Pfizer, and Rubbermaid* (New York: HarperBusiness, 1997), p. 24.

GLOBAL E-COMMERCE

The term **e-commerce** refers to the general exchange of goods and services using the Internet as a marketing channel. In 2003, global e-commerce revenues stood at \$1.6 trillion and growing. Consider the following:

- Every 48 hours, Yahoo! records more than 24 terabytes of data about its users' online activities. That is the equivalent of all the information contained in all the books in the Library of Congress.¹²
- Between 2003 and 2006, the number of Internet users in China increased from 68 million to 123 million. This makes China the world's second-largest e-commerce market; in Shanghai, Beijing, and Guangzhou, more than one-third of all residents use the Internet. Local companies such as Dangdang.com are proving to be formidable competitors against global rivals such as Yahoo!, Google, and eBay.¹³
- Nielsen's Netrating service estimates that Japan has about 44 million active at-home Internet users; by comparison, Germany, the United Kingdom, and France have 33 million, 24 million, and 19 million at-home users, respectively.

E-commerce activities can be divided into three broad categories: business-to-consumer (B2C or b-to-c), business-to-business (B2B or b-to-b), and consumer-to-consumer (or peer-to-peer or P2P). Many people associate e-commerce with well-known commerce service providers (CSPs) such as Amazon.com and Yahoo!. NUA Surveys projected worldwide e-commerce revenues of \$2.7 trillion in 2004, with the United States accounting for more than half of the total. Forrester Research, eMarketer, Gartner Group, and Ovum are firms that track e-commerce trends; Ovum estimates that online consumer spending will increase from \$90 billion in 2003 to \$361 billion by 2007. However, in the United States alone, B2B transactions in 2003 totaled \$700 billion. Overall, B2B commerce constitutes the biggest share of the Internet economy and will likely continue to do so for the foreseeable future. About three-fourths of 2001 B-to-C revenue was generated in North America; that figure is expected to drop to 50 percent as online sales in Europe and elsewhere increase over the next few years (see Table 17-1).

Problems can arise when a transaction site that is not designed to serve foreign customers nevertheless attracts them. Customer service can be a problem when customers are located in different time zones. For example, BlueTie is a small company based in Rochester, New York that markets e-mail and office-software applications by subscription. The company's servers continually update customer calendars and e-mail. When non-U.S. orders began to come in, BlueTie

Table 17-1

eCommerce Forecast, Select European Countries (millions)

Country	2006	2007	2008	2009	2010	2011
Italy ^a	€3,765	€5,309	€7,220	€9,444	€11,906	€14,520
Netherlands ^b	3,450	4,752	6,322	8,074	9,926	11,783
Spain ^c	3,048	4,077	5,294	6,706	8,279	10,001
Sweden ^d	2,846	3,874	5,075	6,371	7,705	9,004

^aForrester Research, *Italian eCommerce Forecast: 2006 To 2011* (August 28, 2006), p. 3.

^bForrester Research, *Dutch eCommerce Forecast: 2006 To 2011* (September 20, 2006), p. 3.

^cForrester Research, *Spanish eCommerce Forecast: 2006 To 2011* (August 30, 2006), p. 3.

^dForrester Research, *Swedish eCommerce Forecast: 2006 To 2011* (October 4, 2006), p. 3.

Source: Forrester Research.

¹² Kevin J. Delaney, "Lab Test: Hoping to Overtake Its Rivals, Yahoo Stocks Up on Academics," *The Wall Street Journal* (August 26, 2006), p. A8.

¹³ Jason Dean, "China's Web Retailers Beat U.S. Rivals at Their Own Game," *The Wall Street Journal* (August 22, 2006), p. B1.

managers found it challenging to deliver correct times and dates. Fixing the problem required spending tens of thousands of dollars and tied up precious employee time.

Web sites can be classified by purpose: **promotion sites** provide marketing communications about a company's goods or services, **content sites** provide news and entertainment and support a company's PR efforts, and **transaction sites** are cyberspace retail operations that allow customers to purchase goods and services. In many instances, Web sites combine the three functions. Web sites can also be categorized in terms of content and audience focus. When studying the categories, keep in mind that, overall, the Internet can be used as an advertising channel, as a PR tool, as a means for running a contest or sales promotion, and as support for the personal selling effort. In quadrant 1 of Figure 17-2, the focus is on providing information and service to domestic or local-country customers. Quadrant 2 companies, such as iTunes Music Store, maintain transaction-oriented e-commerce sites with a domestic focus (see Case 17-1). Companies in both quadrants 1 and 2 do attract international traffic, but the focus is still local. For example, international students at your college may have learned about your school via the Internet, even though home-country prospective students constitute the primary target audience for the Web site. Companies that initially fall into quadrants 1 and 2 can transition into quadrants 3 and 4; for example, in 2004, Apple's iTunes Music Store was rolled out in Germany, France, and the United Kingdom.

Procter & Gamble Far East Inc., the consumer products company's operation in Japan, is using the Web to build its portfolio of brands in the region. The company has launched shufufufu.com, Japan's first virtual community for women. The Web address combines *shufu* ("housewife") and *fu-fu-fu* (the sound of a woman's laughter); the P&G logo has been de-emphasized. The site was created by the digital division of Beacon Communications K.K. As Fergus Kibble, digital director at Beacon, noted, "Our research showed that Japanese housewives often feel very isolated."¹⁵ The site's success can be attributed in part to the popularity of Harumi Kurihara, the "Japanese Martha Stewart" who writes a weekly essay on the site and provides tips on cooking, homemaking, and personal care.

Technology Forecast

Travel booked over the Internet represents the largest e-commerce category. Revenues totaled \$68 billion in 2005 and are expected to reach \$104 billion by 2010.¹⁴

Jupiter Research

		Web Site Content	
		Information/Support/Service	Transactions
Audience Focus	Domestic	<p>1</p> <p>Simpson College Washington Post</p>	<p>2</p> <p>iTunes Music Store TiVo</p>
	Global	<p>3</p> <p>Gucci Godin Guitars Procter & Gamble</p>	<p>4</p> <p>Amazon.com Dell eBay</p>

Figure 17-2

Categories of Web Sites

Source: Adapted from "The Internet and International Marketing," by John A. Quelch and Lisa R. Klein, MIT Sloan Management Review 37, no. 3 (Spring 1996), p. 65.

¹⁴ Amy Yee, "Integrating New Assets the Way to Go," *Financial Times* (January 3, 2006), p. 17.

¹⁵ Tom Boatman, "Interactive Marketing Strategies in Japan," *Japan Inc.* (June 2001).

"Increased broadband penetration is opening up possibilities that didn't exist even two years ago. . . . We need to realize that online is now an important part of the overall communications mix. . . . We are not an online business. We're a beverage business. But we have to develop compelling marketing platforms that are relevant to the lives of young people."¹⁶

Tim Kopp, Vice President of Global Interactive Marketing, Coca-Cola

In quadrant 3, the audience focus is global. Companies such as Federal Express and Gucci are already global in scope, and the Internet constitutes a powerful, cost-effective communication tool. Unilever PLC has begun digitizing its vast library of television commercials. Computer users can download the full-frame, full-motion videos for products, such as Salon Selectives shampoo, and watch them at any time. Although some industry observers are skeptical, Unilever's interactive marketing staff believes that the Web may represent an important new, low-cost channel for showing ads.¹⁷ McDonald's is also putting digitized versions of its ads on the Web, but for a different purpose. The fast-food giant has established an online digital commercial archive, www.mcdcommercials.com, that allows McDonald's ad agencies anywhere in the world to review a library of 15,000 TV commercials. The agency can then request preexisting footage to incorporate into new ads.¹⁸

Procter & Gamble also has ambitious plans for exploiting the Internet as a global promotional and informational tool. P&G has registered a number of Internet domains based on brand names, including www.covergirl.com, www.oldspice.com, and www.sunnyd.com. Another P&G site, www.pampers.com, represents a new conceptualization of the brand. Previously, brand managers viewed Pampers as a way of keeping babies happy; the new view is that the Pampers brand is a child development aid. By mid-2006, Pampers.com was receiving 400,000 hits per month. Visitors to the site can read advice from the Pampers Parenting Institute as well as tips from mothers. Discount coupons are also available from the site.¹⁹ P&G has also registered scores of other generic domains that relate to its various product lines, including www.cakemix.com, www.laundry.com, and www.nails.com. P&G's actions have sent a signal to other consumer packaged-goods marketers that it is striving for a first mover advantage on the Internet.

In quadrant 4, companies seek e-commerce transactions with customers on a worldwide basis. Amazon.com is perhaps the most successful example of the global audience-transaction business model. Online book shoppers can choose from more than 2.5 million titles; many titles carry discounted prices. After assessing a number of potential products in terms of their suitability for online sales, company founder Jeffrey Bezos settled on books for two reasons. First, there are too many titles for any one "brick-and-mortar" store to carry. The second reason is related to industry structure: The publishing industry is highly fragmented, with 4,200 publishers in the United States alone. That means that no single publisher has a high degree of supplier power. Bezos's instincts proved sound: Sales exploded after Amazon.com's Web site became operational in mid-1995. Within a year, orders were coming in from 66 countries.

Some products are inherently not suitable candidates for sale via the Internet: McDonald's doesn't sell hamburgers from its Web site, and Procter & Gamble does not sell shampoo. In some instances, global marketers make the strategic decision to establish a presence on the Web without offering transaction opportunities even though the product could be sold that way. Rather, such companies limit their Web activities to promotion and information in support of offline retail distribution channels. There are several reasons for this. First, many companies lack the infrastructure necessary to process orders from individual customers. Second, it can cost anywhere from \$20 million to \$30 million to establish a fully functioning e-commerce site. There may be other, product-specific reasons. The Web site for Godin Guitars, for example, provides a great deal of product information and a directory of the company's worldwide dealer network. Company founder Robert Godin believes that the best way for a person to select a guitar is to play one and that requires a visit to a music store.

¹⁶ Andrew Ward, "Coke Taps into Brand New Internet Craze," *Financial Times* (August 8, 2006), p. 15.

¹⁷ Vanessa O'Connell, "Unilever to Run Some TV Spots, Digitized, Online," *The Wall Street Journal* (March 2, 2001), pp. B1, B5.

¹⁸ Kata MacArthur, "Fast Food Meets the Internet," *Advertising Age* (June 19, 2000), p. 28.

¹⁹ Gary Silverman, "How May I Help You?" *Financial Times* (February 4-5, 2006), p. W2.

Likewise, visitors to Web sites for some luxury goods purveyors, including Burberry, Prada, and Gucci, are not given the opportunity to buy. Top design houses strive to create an overall retail shopping experience that enhances the brand; this objective is basically at odds with the e-commerce. As a spokesperson for Prada noted recently, "Miuccia Prada is trying to combine fashion with architecture and design. It's a 360-degree experience."²⁰ One notable exception is LVMH, whose www.eluxury.com Web site offers a limited selection of ready-to-wear items by Marc Jacobs and other designers. However, the site has yet to show a profit.

As the Internet has developed into a crucial global communication tool, decision makers in virtually all organizations are realizing that they must include this new medium in their communications planning. Many companies purchase banner ads on popular Web browsers such as AOL or Yahoo!; typically, the ads are linked to the company's home page or product- or brand-related sites. Although creative possibilities are limited with banner ads and **click-through rates**—the percentage of users who click on an advertisement that has been presented—are typically low, the number of companies that use the Web as a medium for global advertising is expected to increase dramatically over the next few years.

The increased importance of the Internet in global marketing can also be seen in the number and variety of alliances that advertisers are establishing with Web sites. For example, Unilever PLC sponsors the Microsoft Network (MSN) and MSN WomenCentral in the United States, France, Germany, and the United Kingdom. This type of sponsorship generally means banner ads and links to other brand-related sites are featured prominently.²¹ The trend toward consolidation among media companies allows advertisers to efficiently achieve greater reach across media platforms. For example, Toyota Motors advertised its 2002 Camry on AOL Time Warner's various media properties. One of Toyota's objectives was to reposition Camry from a brand associated with older women to a brand that appeals to younger men. In fall 2001, Toyota sponsored a special issue of *Time* titled "Music Goes Global"; part of AOL's "Music Goes Global" Web site was dedicated to the Camry. Also, Toyota sponsored some music programming on CNN and TNT, which are also part of the Time Warner family.²² An important trend is **paid search advertising**, whereby companies pay to have their ads appear when users type certain search terms. Yahoo! recently paid \$1.6 billion to acquire Overture, a company specializing in paid search advertising. As a Yahoo! spokesman person noted, "Paid search is just starting to take off globally. So this acquisition wasn't just part of our strategy for search, it was important for our international strategy as well."²³

Technology Forecast

Online music spending is forecast to increase from \$800 million (7 percent of total music sales) in 2003 to \$3.3 billion (26 percent of music sales) in 2008.²⁴

Jupiter Research

WEB SITE DESIGN AND IMPLEMENTATION²⁵

To fully exploit the Internet's potential, company executives must be willing to integrate interactive media into their marketing mixes. Web sites can be developed in-house, or an outside firm can be contracted to do the job. During the past few years, a new breed of interactive advertising agency has emerged to help companies globalize their Internet offerings (see Table 17-2). Whichever approach a company adopts, several issues must be addressed when setting up for global e-commerce.

²⁰ Sally Beatty, "Fashion Tip: Get Online," *The Wall Street Journal* (October 31, 2003), pp. B1, B3.

²¹ Sarah Ellison, "Unilever, Microsoft in European Net Deal," *The Wall Street Journal* (February 2, 2000), p. B8.

²² Julia Angwin, "AOL Lands Toyota for Multimedia Pact," *The Wall Street Journal* (August 28, 2001), p. B7.

²³ Bob Tedeschi, "E-Commerce Report," *The New York Times* (January 12, 2004), p. C6.

²⁴ Nick Wingfield and Ethan Smith, "Microsoft Plans to Sell Music Over the Web," *The Wall Street Journal* (November 17, 2003), p. B5.

²⁵ Much of the discussion in this section is adapted from Alexis D. Gutzman, *The E-Commerce Arsenal* (New York: AMACOM Books, 2001).

Table 17-2

Top Five Interactive Agencies by U.S. Interactive Marketing Revenue

Agency/HQ Location	Clients
Avenue A/Razorfish (New York)	AstraZeneca, Oxfam, Red Bull, Singapore Airlines
Sapient (Cambridge, MA)	Audi, Avis Europe, Deutsche Telekom, Volkswagen
Digitas (Boston)	American Express, Royal Bank of Scotland, Saab, FedEx
Agency.com (New York)	British Airways, BT, Chevron, Hewlett-Packard, T-Mobile
OgilvyInteractive (New York)	

Source: Adapted from "Top 50 Marketing Services Agencies by Discipline," *Advertising Age* (May 1, 2006), p. S-6.

This include choosing domain names, arranging payment, localizing sites, addressing privacy issues, and setting up a distribution system.

A critical first step is registering a country-specific domain name. Thus, Amazon.com has a family of different domain names, including one for each country in which it operates (see Table 17-3). Although it is certainly possible for European consumers to browse Amazon.com's U.S. site, they would likely prefer a direct link to a site with a local domain name. From both a marketing and consumer perspective, this makes sense: The Web site of choice will be one that quotes prices in euros rather than dollars, offers a product selection tailored to local tastes, and ships from local distribution points. Moreover, research suggests that visitors spend more time at sites that are in their own language; they also tend to view more pages and make more purchases. Many people will seek information about sites on local versions of well-known search engines. For example, in France, Yahoo!'s local site is fr.Yahoo.com. The same principle applies to non-U.S. companies targeting the American online consumer market. Waterford Wedgwood PLC, Harrods, and other well-known companies have acquired U.S. domain names and created sites with prices listed in dollars.²⁶

While registering a ".com" domain name is a relatively straightforward procedure in the United States, requirements can vary elsewhere. In some countries, for example, a company must establish a legal entity before it can register a site with a local domain-name extension. **Cybersquatting**—the practice of registering a particular domain name for the express purpose of reselling it to the company that should rightfully use it—is also a problem. Panasonic and Avon are two companies that were victims of cybersquatting.

Payment can be another problem; in some countries, including China, credit card use is low. In such situations, e-commerce operators must arrange payment by bank check or postal money order; cash on delivery is also an option. Another issue is credit card fraud; Indonesia, Russia, Croatia, and Bosnia are among the countries where fraud is rampant. Extra identity measures may have to be taken, such as requiring buyers to fax the actual credit card they are using as well as photo IDs.²⁷ In Japan,

Technology Forecast

In 2004, the European online retail market was worth about €40 billion (\$48 billion). By 2009, it will more than quadruple to €167 billion.

Forrester Group

Table 17-3

Amazon.com Domain Names

Domain Name	Country
amazon.co.uk	United Kingdom
amazon.de	Germany
amazon.fr	France
amazon.co.jp	Japan
amazon.at	Austria

²⁶ Jessica Vascellaro, "Foreign Shopping Sites Cater to U.S. Customers," *The Wall Street Journal* (October 12, 2005), pp. D1, D14.

²⁷ Peter Loftus, "Internet Turns Firms into Overseas Businesses," *The Wall Street Journal* (December 16, 2003), p. B4. See also Matt Richtel, "Credit Card Theft Is Thriving Online as Global Market," *The New York Times* (May 13, 2002), p. A1.

consumers pay for online purchases at convenience stores (*konbini*). After selecting an item online, the buyer goes to a nearby convenience store (e.g., a 7-Eleven) and pays cash for the item; the clerk transfers the money to the online seller's account. However, foreign companies can't participate in the *konbini* system; this means that a foreign online retailer must establish an alliance with a local company.

Ideally, each country-specific site should reflect local culture, language usage, customs, and aesthetic preferences. Logos and other elements of brand identity should be included on the site, with adjustments for color preferences and meaning differences when necessary. For example, the shopping cart icon is familiar to online shoppers in the United States and many European countries. However, online companies must determine whether that icon is appropriate in all country markets. Subtle but important language differences can occur even in English-speaking countries. For example, www.figleaves.com and www.figleaves.com/uk are, respectively, the American and British Web addresses for a U.K.-based lingerie marketer. However, the U.S. site refers to "panties" while the U.K. site has a listing for "briefs." When two or more different languages are involved, translators should be used to ensure that copy reflects current language usage. It is also important not to "reinvent the wheel" by translating the same terms over and over again. Local translators should have access to an in-house dictionary that contains preferred translations of company-specific terms. The system should be capable of identifying content that has already been translated and then reusing that content. Product descriptions may also vary from country to country; as noted in Chapter 4, American-themed merchandise is very popular in Japan. Table 17-4 compares sample product descriptions in English and Japanese.

A note of caution is in order: It is not enough to simply translate a Web site from the home-country language into other languages. Thus, another basic step is localizing a Web site in the native language and business nomenclature of the target country. From a technical point of view, Web sites designed to support English, French, German, and other languages that use the Latin alphabet only store a maximum of 256 characters in the American Standard Code for Information Interchange (ASCII) format. Even so, there are language-specific

"Shopping on the Internet is no different than traditional sales channels. It's all about trusting the brand and having a strong relationship with one's customers."²⁸

Ron Fry, Internet Business Manager, Lands' End

English	Japan
<p>"New York Yankees hat with white stitching on black canvas."</p> <p>These warm-weather cargos are made from our popular tropic-weight cotton. The 6 oz. cloth is dyed with rich pigment color that weathers gradually. Garment-washed to feel comfortably broken-in right away. Our Natural Fit offers extra room at the seat and thighs. Quarter front pockets, two flapped back pockets and roomy cargo pockets on legs. Double-needle stitching at stress seams. Fit belts up to 13/4". Imported. Machine wash and dry. (L.L.Bean)</p>	<p>"Authentic baseball hat for the New York Yankees baseball team. Just like they wear in New York City! White stitching on black canvas reflects the team's colors."</p> <p>Cargo Pants have high breathability for hot weather. This garment is made from tropic-weight cotton and dyed with rich pigment color and weathers gradually. Enjoy the way this cargo's fabric feels comfortably broken in. This fits you naturally for the way you move. Front pockets for both sides, two flapped back pockets and roomy cargo pockets on legs. Double-needle stitching at stress seams. Fit belts up to 4 cm. 100% Cotton. Washable by machine.</p>

Table 17-4

Product Description: An English Versus Japanese Comparison

Source: Alexis D. Gutzman, *The E-Commerce Arsenal* (New York: AMACOM Books, 2001), p. 165.

²⁸ Christopher Price, "Fashion Suits the Internet Shopper," *Financial Times* (June 24, 1998), p. 23.

needs; for example, a German language Web site requires more than double the capacity of an English language site because German copy takes more space.²⁹ However, languages such as Japanese and Chinese require a database that supports double-ASCII. For this reason, it is wise to start with a double-ASCII platform when designing a Web site's architecture. The site's architecture should also be flexible enough to allow different date, currency, and money formatting. For example, to someone living in the United Kingdom, "7/10/05" means October 7, 2005. To an American, it means July 10, 2005.³⁰

Another critical global e-commerce issue is privacy. The EU's regulations are among the world's strictest; companies are limited in terms of how much personal information—a customer's age, marital status, and buying patterns, for example—can be gathered and how long the information can be retained. Customers have the right to view the information contained in company databases and correct errors. Moreover, the EU's standards have been adopted in other parts of the world, including Canada, Australia, and Asia. Spain's regulations are particularly stringent; taking advantage of a common language, Chile and Argentina have copied the Spanish drafts of Spain's laws. By contrast, Washington's reluctance to protect privacy is due in part to First Amendment issues as well as to national security concerns stemming from the terror attacks of September 11. To help ensure compliance with privacy laws, American companies have created a new executive-level job position: chief privacy officer.³¹

challenges in the global marketplace

Open Source Software

Global software sales have been very, very good to Microsoft. The company's Windows operating system is found in more than 90 percent of the world's PCs, and popular software programs such as Office Suite are used virtually everywhere. Because of its dominant position in the industry, Microsoft has a global pricing policy that calls for charging approximately the same amount in every world market. Today, however, Microsoft's pricing structure faces a threat from open source software that is distributed for free.

The term *open source software* is used to describe a software program for which the source code—the original program instructions—is made available so that users can make modifications. In the mid-1970s, a programmer named Richard Stallman wrote a macro editor for Unix that he called Emacs. Other programmers wanted to use Emacs, so Stallman published the GNU ("GNU's not Unix") Public License (GPL) in association with the concept of "copyleft" (a play on the notion of copyright). In essence, Stallman granted permission for others to run, copy, modify, and distribute his operating system software, with one caveat: No one could place restrictions on their modifications. In 1991, a 21-year-old Helsinki University student named Linus Torvalds developed a Unix-compatible operating system that he called Linux (a combination of Linus and Minix, a Unix clone widely used by college students). Today, numerous free versions of Linux are available, including Mandrakelinux. Worldwide, 25 percent of servers run Linux software; increasingly, Linux is being used on PCs as well.

What does the Linux phenomenon mean for Microsoft? In short, it means that the software giant's virtual monopoly on PC

operating systems may be at risk. In developing countries, such as Malaysia and Thailand, government initiatives are aimed at putting as many PCs as possible into the hands of ordinary citizens and small business owners. Government agencies are looking for the best price, making free Linux software a very attractive choice. For example, working with the Association of Thai Computer Manufacturers, the Thai government made Linux-equipped "People's PCs" available for about 10,900 baht (\$260). Microsoft responded by creating a Thai-language version of Windows XP and bundling it with Microsoft Office for a price of about \$36. By mid-2003, roughly one-quarter of the 134,000 PCs ordered by Thais were equipped with Windows. Similarly, in Malaysia, PCs running Linux are available at prices as low as about \$263. Microsoft has responded by making a Malaysian version of Windows XP available on a PC for about \$302.

Developing countries are not the only ones hoping to find cheaper alternatives to Microsoft. France, for example, needs to reduce its deficit to be in compliance with euro zone regulations. To do so, the French government is considering open source options such as OpenOffice, a version of Sun Microsystems's StarOffice, Mozilla, a Web browser, and other open source programs. In Asia, representatives from Japan and South Korea are holding meetings in an effort to set joint policies regarding information technology.

Sources: Rebecca Buckman, "Microsoft's Malaysia Policy," *The Wall Street Journal* (May 20, 2004), p. B1; Buckman, "Face-Off Over People's PC," *The Wall Street Journal* (August 14, 2003), p. B1; www.gnu.org (accessed June 2004).

²⁹ Patricia Riedman, "Think Globally, Act Globally," *Advertising Age* (June 19, 2000), p. s48.

³⁰ Alexis D. Gutzman, *The E-Commerce Arsenal* (New York: Amacom, 2001), p. 165.

³¹ David Scheer, "For Your Eyes Only: Europe's New High-Tech Role: Playing Privacy Cop to the World," *The Wall Street Journal* (October 10, 2003), p. A1.



The Linux open-source operating system was created by Linus Torvalds, shown here with the system's iconic penguin mascot. Although Linux is distributed for free, annual sales of Linux-related software, hardware, and support services total about \$15 billion. In an effort to better compete with Microsoft and its Windows operating system, the Linux Foundation was recently created. The Foundation will also deal with technical, legal, and standards issues.

A number of issues are related to physical distribution decisions. As online sales increase in a particular country or region, it may be necessary to establish local warehouse facilities to speed delivery and reduce shipping costs. In the United States, such a step has tax implications; the marketer may have to collect sales tax. To allay consumer concerns about ordering merchandise online, companies may opt to waive shipping fees and offer free returns and money-back guarantees.

NEW PRODUCTS AND SERVICES

As a result of the digital revolution, a variety of companies in all parts of the world are developing a new generation of products, services, and technologies. These include broadband networks, mobile commerce, wireless connectivity, and “smart” cell phones.

Broadband

A **broadband** communication system is one that has sufficient capacity to carry multiple voice, data, or video channels simultaneously. *Bandwidth* determines the range of frequencies that can pass over a given transmission channel. For example, traditional telephone networks offered quite limited bandwidth compared with state-of-the-art digital telephone networks. As a result, a traditional telephone call sounds “lo-fi.” Bandwidth is measured in bits-per-second; a full page of English text is about 16,000 bits. For example, a 56 Kbs modem connected to a conventional telephone line can move 16,000 bits in less than one second; by comparison, a broadband Internet connection that utilizes coaxial cable can move up to 10 gigabits per second. Consumer broadband service is typically available from cable TV companies or telephone companies via digital subscriber lines (DSL). In addition to faster download times and greater capacity, broadband offers other advantages. For example, it is always on (in other words, there is no need to access the Internet via phone dial-up service). Roughly one-third of American households currently have high-speed Internet

access. Even so, according to figures compiled by the Organization for Economic Cooperation and Development, at the end of 2003 the United States ranked tenth in the world in terms of broadband penetration.³²

What opportunities does broadband offer to companies outside the telecommunications industry? Broadband Internet allows users to access streaming audio, streaming video, and streaming media. **Streaming audio** allows users to listen to Internet radio stations. **Streaming video** is a sequence of moving images that are sent in compressed form over the Internet and displayed by the viewer as they arrive. **Streaming media** combines streaming video with sound. With streaming video or streaming media, a Web user does not have to wait to download a large file before seeing the video or hearing the sound. Instead, the media is sent in a continuous stream and is played as it arrives. Apple, Microsoft, RealNetworks, and MacroMedia are some of the companies that sell the software necessary to view streaming media. Streaming media represents a huge market opportunity for the video game industry, which includes electronics companies (e.g., Microsoft and Sony); game publishers (e.g., Electronic Arts); and Internet portals (e.g., Yahoo!). Yahoo! currently ranks as the top Web destination for online gaming, with more than 5.5 billion minutes of gaming hosted on its servers each month. Most of these are simple, Java-based games such as chess that are available without charge. However, in 2002, Yahoo! launched Games On Demand (GOD), a service that allows users to download and play PC games such as *Zoo Tycoon*. Another trend is online gaming: Gamers in different locations, even different countries, compete against each other using PCs, Xbox, or PlayStation consoles. These are sometimes known as massively multiplayer online games (MMOG); popular titles include *EverQuest*, *Second Life*, and *Final Fantasy IX*. As of mid-2006, Microsoft's Xbox Live service had attracted three million subscribers worldwide.³³ Next generation game consoles from Microsoft and Sony are expected to fuel consumer interest in online gaming. Broadband also permits publishers to offer full-featured games for sale online via downloads.

However, the promise of broadband goes far beyond gaming. Many industry observers and policy makers believe that broadband will be a critical economic tool in the coming decades. Broadband will provide opportunities for online education, medical diagnosis and treatment, and e-commerce. It is a key productivity tool that allows employees to save time by tapping online resources and by sharing electronic documents on desktop PCs in real time.

Singapore offers businesses grants of up to \$200,000 to pay for broadband equipment and consulting services. The EU also wants to increase broadband access throughout its member nations. Several factors help explain broadband's relatively slow start in the United States. For one thing, one-quarter of the U.S. population lives in rural areas; this means that broadband is more expensive to roll out than in densely populated nations, such as South Korea. Also, U.S. telecom companies were reluctant to invest in broadband lines because of concern that the U.S. Federal Communications Commission would force them to lease the lines to rival service providers. Concerned about the lack of broadband capacity, Michigan and other states are launching their own initiatives.³⁵

Technology Forecast

By 2008, 18 percent of U.S. households will be playing online PC games.³⁴

Forrester Group

³² Demetri Sevastopulo, "Rocky Road to the US's Broadband Future," *Financial Times* (December 9, 2003), p. 10.

³³ Chris Nuttall, "Everything to Play For," *Financial Times IT Review—Mobile and Online Games* (December 10, 2003), p. 4.

³⁴ Ben King, "Heavenly Time Playing GOD," *Financial Times IT Review—Mobile and Online Games* (December 10, 2003), p. 4.

³⁵ Jim Hopkins, "Other Nations Zip By USA in High-Speed Net Race," *USA Today* (January 19, 2004), pp. 1B, 2B.

Mobile Commerce and Wireless Connectivity

Mobile commerce (m-commerce) is the term for conducting commercial transactions using wireless handheld devices such as personal digital assistants (PDAs) and cell phones. Many companies are developing ways to provide Internet access without the need for a wired broadband connection. For example, **wireless fidelity (Wi-Fi)** permits laptop and PDA users to establish high-speed wireless connections to the Internet and corporate intranets via “hot spots” located in airports, cafés, or other public places. One reason for the popularity of hot spots is the need for so-called knowledge workers or “laptop warriors” to maintain high levels of productivity during business trips. As noted in the chapter opening, South Korea is home to the world’s largest Wi-Fi network of more than 17,000 hot spots from local telecom company KT.

Wi-Fi networks have a limited range; an improved technology known as **World Interoperability for MicroWave Access (WiMax)** is being deployed in many parts of the world. A WiMax network can have a range of several miles, making it superior to traditional Wi-Fi. Fixed WiMax doesn’t work with mobile devices; an improved technology called mobile WiMax does. Because mobile WiMax offers greater capacity and faster speeds than current mobile data networks, it is well suited for streaming music or video.³⁶

A mobile communication technology known as **Bluetooth** is gaining popularity in Europe; because it consumes less power than Wi-Fi, Bluetooth is well suited to use with cell phones.³⁷ However, Bluetooth works over shorter distances than Wi-Fi. Each week, approximately 1 million Bluetooth-enabled devices are shipped to stores. In addition to cell phone handsets, Bluetooth has been incorporated into automobiles and home appliances such as refrigerators and microwave ovens. Currently, British Telecommunications (BT) has several thousand Bluetooth hot spots in place. In addition, BT is testing a service called Blue Phone that will allow Bluetooth users to connect to BT’s phone line network from a mobile unit.³⁸ Bluetooth-enabled billboards can broadcast marketing information to a nearby cell phone or BlackBerry PDA. Paris-based Kameleon is a Bluetooth technology provider; Patrick Nagle, Kameleon’s chairman of global marketing strategies, says, “Anything you can imagine getting off the Internet, you can get with Bluetooth.” In the United Kingdom, a Bluetooth campaign for Coldplay’s 2005 CD release X&Y enabled passengers in London’s train stations to download song clips and photos. In the United States, Cingular Wireless featured Coldplay in its new Cingular Sounds program. Subscribers were offered 30-second ringtones of new songs.³⁹

Wi-Fi connections require a subscription to a service provider; one problem is getting a connection in a hot spot supported by a different provider than the one to which a user subscribes.⁴⁰ In the United States, Starbucks is partnering with T-Mobile USA (the American arm of Deutsche Telekom’s T-Mobile International) to offer Wi-Fi service; the strategy is to encourage patrons to stay in its coffee shops longer and, presumably, spend more money on coffee and other items. In the United States, T-Mobile also has deals with Borders bookstores, FedEx Kinko’s business centers, Texaco service stations, and major airports. Current Wi-Fi technology can only handle data, not voice. However, many industry observers expect that in the near future, hot spots will allow cell phones to switch to the Internet for telephone calls.

³⁶ Sarmad Ali, “New and (Soon) Improved,” *The Wall Street Journal* (November 27, 2006), p. R8.

³⁷ *Bluetooth* is the English translation of Harald Blatand, a Danish Viking and king who lived in the tenth century.

³⁸ Jonathan Moules, “Bluetooth and the Quest for a Wireless World,” *Financial Times* (December 3, 2003), p. 9.

³⁹ “MediaMorph: Bluetooth,” *Advertising Age* (November 7, 2005), p. 51.

⁴⁰ Dennis K. Berman and Jesse Drucker, “Wi-Fi Industry Bets ‘Roaming’ Will Lure Users,” *The Wall Street Journal* (November 6, 2003), p. B1.

Wi-Fi zones such as this one in Paris are becoming more common in Europe. U.K.-based Cloud Networks operates public access Wi-Fi networks for laptop users in select towns and cities in the United Kingdom, Germany, the Netherlands, and Sweden. Cloud is expected to establish a network in Paris in the near future. Some industry observers have identified Wi-Fi as a disruptive technology. The argument is that Wi-Fi's faster download speeds pose a threat to cellular networks which, although offering greater coverage and mobility, have slower download speeds. However, Nokia and other manufacturers are developing next-generation handsets with Wi-Fi capabilities.



Technology Forecast
The number of MP3 players in the United States is expected to grow from 11.3 million in 2004 to 40 million in 2008.⁴²

Jupiter Research

Wireless technology is being used in other ways. In the automotive world, there is a trend toward **telematics**, which is a car's ability to exchange information about the vehicle's location or mechanical performance. Cars are also being equipped with online access so passengers can send and receive e-mails. BMW Online illustrates some of telematics' potential. The system, which is available in Germany and the United Kingdom in 7 Series BMWs, provides access to a wide range of information and services, including the availability of parking spaces. The service also assists users who wish to book hotel rooms or make restaurant reservations. Mercedes-Benz is rolling out a similar service.⁴¹

Smart Cell Phones

Cell phones have been one of the biggest new product success stories of the digital revolution. Worldwide, 500 million cellular handsets are sold each year. The popularity of cell phones has been a boon to manufacturers such as Nokia, Motorola, Samsung, and Ericsson as well as service providers such as Deutsche Telekom, U.S. Cellular, Verizon, and others. New features such as color displays and cameras give consumers a reason to upgrade their equipment on a regular basis; a new generation of **smart phones** gives phones some of the capabilities of computers. Though smart phones only represent a small percentage of the market at present, they have the potential to boost the fortunes of the manufacturers as well as to create new sources of revenue for the service providers. The following suggest the marketing possibilities of cell phone-based e-commerce:⁴³

- In Europe, France's Orange SA, Spain's Telefonica Moviles SA, Germany's T-Mobile International AG, and Britain's Vodafone Group have formed a consortium called Simpay to offer m-commerce services to 250 million cellular subscribers throughout the EU.

⁴¹ Chris Reiter, "Web-Rigged Cars Get Second Look," *The Wall Street Journal* (December 11, 2003), p. D2.

⁴² John Markoff, "With All Those iPods, Podcasting Is On the Air," *The New York Times* (February 25, 2005), pp. C1, C4.

⁴³ Gren Manuel, "Dialing for Dollars," *The Wall Street Journal—E-Commerce* (October 20, 2003), p. R3.

- In Australia, a thirsty traveler can pay for a Coke at Central Station in Sydney by calling “Dial-a-Coke,” making a beverage selection, and then collecting their selection from a vending machine. Charges for the purchase appear on the customer’s cell phone bills.
- In Norway, mobile operator Telenor ASA has teamed with a finance group to offer mobile purchases of flowers, compact discs, bus tickets, and food.

While these and other new mobile services are in development, individuals are already using their cell phones for tasks other than calling. For example, text messaging has exploded in popularity; worldwide, about 10 billion peer-to-peer messages are sent each month. Now, advertisers are taking advantage of this capability by using **short message service (SMS)**, a globally accepted wireless standard for sending alphanumeric messages of up to 160 characters. SMS can be used to send *spam*, which is unsolicited “junk” e-mail sent to large numbers of people to promote products or services. (The term *spam* is borrowed from a famous Monty Python comedy routine in which the brand name of Hormel Foods Corporation’s canned meat product is used so often that it crowds everything else out). A new global industry trade group, the Mobile Marketing Association, has been formed to address this and other issues (www.mmaglobal.com). Coca-Cola, Twentieth Century Fox, and other companies are using SMS for m-commerce purposes. Industry experts expect marketers to integrate SMS with communication via other digital channels such as interactive digital TV, the Internet, and e-mail.

“Wireless phone booths are the Starbucks of telephony in South America.”⁴⁴

Ralph de la Vega, BellSouth Latin America

Technology Forecast

Sales of cellphones with cameras reached 460 million units in 2006. By 2010, the number sold per year will exceed 1 billion.⁴⁵

Gartner Group

Mobile Music: Ringtones, Ring Tunes, and Full-Track Downloads

Because of rampant illegal sharing of music files, record companies are searching for new sources of revenue. Thanks to technology convergence, a new generation of cell phones is leading to changes in the mobile music industry. **Mobile music** is music that is purchased and played on a cell phone. One opportunity is to license the rights to popular songs for use as cell phone ringtones. According to the Gartner research firm, cell phone users spent \$6 billion on ringtones in 2006; sales are strongest in Europe and Japan. Currently, however, the primary beneficiaries of this growing market are music publishers and songwriters. The reason is simple: Many ringtones are rerecordings and, thus, represent instrumental “soundalike” or “cover” versions rather than the original versions by the original recording artists; therefore, a song’s publisher and writer receive royalties of approximately 15 percent each time a ringtone is downloaded.

The situation is changing, however, as the record companies prepare to make original recordings available. **Ring tunes**, also known as music tones, song tunes, TruTones, and master tones, are digitized clips of original songs by the original recording artists. Licensing fees for ring tunes will be higher because they include master recording royalties of 30 percent to 50 percent. As John Rose, former executive vice president of EMI Group, notes, “This is quite an attractive market to us. We think it’ll be a significant multi-billion-dollar market over the next couple of years as the new handsets roll out.”⁴⁶ This attitude has some industry players concerned. For example, Simon

⁴⁴ Almar Latour, “Latin Lessons: BellSouth Finds Pocket of Growth in an Odd Place,” *The Wall Street Journal* (November 20, 2003), p. A8.

⁴⁵ Kevin Maney, “Baby’s Arrival Inspires Birth of Cellphone Camera—and Societal Evolution,” *USA Today* (January 24, 2007), p. 3B.

⁴⁶ Bob Tedeschi, “E-Commerce Report,” *The Wall Street Journal* (February 23, 2004), p. C5.

Technology Forecast

By 2008, annual cell phone music purchases in the United States could reach \$1 billion.⁴⁸

The Yankee Group

Technology Forecast

By 2011, annual worldwide mobile music purchases will total \$14 billion. Asia is expected to account for 40 percent of the market.⁴⁹

Juniper Research

Technology Forecast

By 2008, the global market for cellphone games could reach \$7 million.⁵¹

Strategy Analytics

Buckingham is chief executive of PhoneFurniture, which does business as www.ringtones.com. He says, "Record companies are in danger of killing the golden goose before it has laid its eggs by charging excessive royalty rates, and are doing so more out of ignorance of the mobile market and value chain than greed."⁴⁷ Meanwhile, a Web-based company called Xingtones has begun offering software that allows users to create their own ring tunes from compact discs and digital music files.

Mobile Gaming

As noted previously, broadband's role in the console video game market is growing in importance. At the same time, many consumers are playing simple, inexpensive games on their cell phones. In the United States, Verizon Wireless sells games for about \$4; in Europe, mm02 plc sells games for an equivalent amount. Because cell phones have small screens and limited storage space and computing power, mobile gaming appeals more to occasional users, such as commuters, rather than hard-core gamers. Industry growth may also be slow due to the large number of different technical standards incorporated into different brands of telephones. Currently, the economics of mobile gaming do not favor game developers; cell phone service providers keep 10 percent to 70 percent of the selling price of each game downloaded. Moreover, for games based on popular motion pictures, game developers are required to pay licensing fees to the film studios.⁵⁰ For this reason, some big industry players, including Electronic Arts, are not investing heavily in mobile games. Some simple multiplayer games written in the Java programming language are currently available for downloading on cell phones. However, mobile games are quickly becoming more sophisticated as phone makers add more features. For example, some phones are equipped with a **global positioning system (GPS)** that allows users to determine their exact geographic position. GPS capability will lead to location-based games in which players compete by trying to physically approach their opponents.

Internet Phone Service

For the telecommunications industry, Internet telephone service is the "next big thing." Thanks to a technology known as **voice over Internet protocol (VoIP)**, the human voice can be digitized and broken into data packets that can be transmitted over the Internet and converted back into normal speech. If a call is placed to a conventional phone, it must be switched from the Internet to a traditional phone network; local telephone companies generally own the lines into residences and businesses. However, if the call is made between two subscribers to the same VoIP provider, it bypasses the traditional network altogether. The implications are clear: VoIP has the potential to render the current telecommunications infrastructure—consisting primarily of twisted copper and fiber optic cable—obsolete.

⁴⁷ Yinka Adegoke, "Record Labels Bank on a Ring Tone Boom," *Financial Times* (December 16, 2003), p. 8.

⁴⁸ Bob Tedeschi, "E-Commerce Report," *The Wall Street Journal* (February 23, 2004), p. C5.

⁴⁹ Bob Ibison, "Deal Could Be Music to Nokia's Ears," *Financial Times* (August 14, 2006), p. 14.

⁵⁰ David Pringle, "Making Games for Cellphones is No Easy Play," *The Wall Street Journal* (October 17, 2003), p. B1.

⁵¹ David Pringle, "Making Games for Cellphones is No Easy Play," *The Wall Street Journal* (October 17, 2003), p. B1.



The phenomenal success of Apple's iPod digital music player has generated a backlash in different parts of the world. In Japan, the recorded music industry was unsuccessful in its 2005 attempt to persuade the government to charge a royalty fee on each iPod sold. The money generated would have been distributed to record companies, songwriters, and recording artists as partial compensation for financial losses due to illegal music file downloading.

In France, the National Assembly approved a bill that would require Apple to share the iTunes software codes with other companies so that music downloads would play on all digital music players, not just iPods.

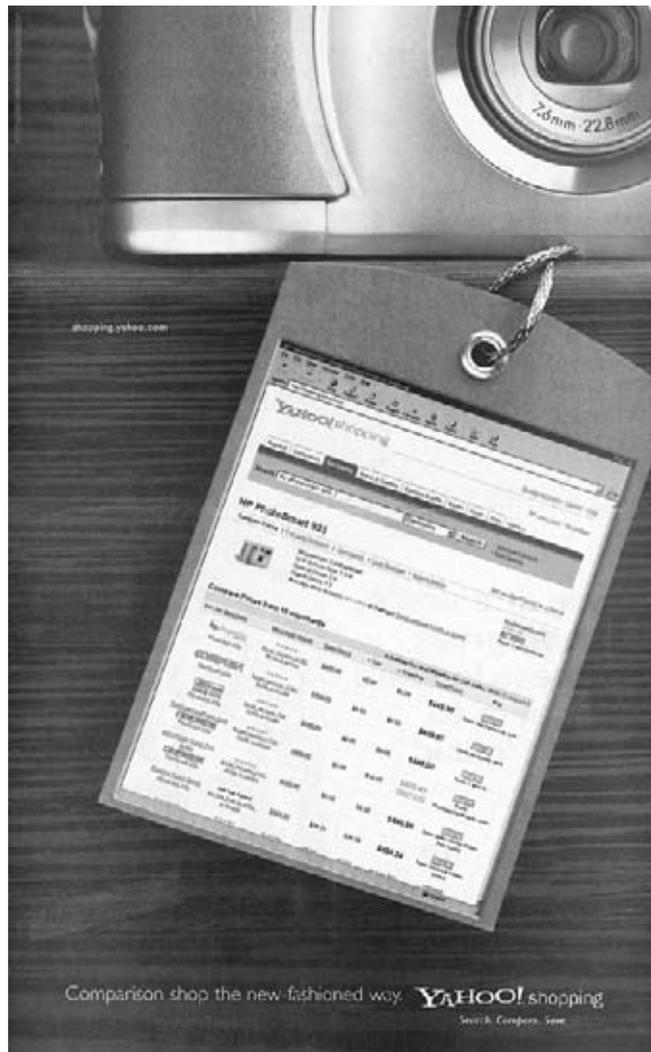
In January 2007, Norway's consumer ombudsman ruled that iPod's lack of interoperability was illegal. In response, Apple issued a statement that the company "hopes that European governments will encourage a competitive environment that allows innovation to thrive, protects intellectual property, and allows consumers to decide which products are successful."

Currently, VoIP accounts for only 3 percent of global calling; however, the promise of a global growth market has resulted in soaring stock values for start-up companies in the United States such as SpectraLink Corporation and Verso Technologies. In Europe, Niklas Zennström, the cofounder of the KaZaA music file sharing service, has started Skyper Ltd. The company offers free peer-to-peer software for Internet calls. Revenue is generated from SkypeOut and SkypeIn, which allow users to make and receive calls from landlines and mobile phones, respectively. With 250,000 new users—many in China, India, and Sweden—joining each day, Skype has become a global phenomenon. In 2005, eBay acquired Skype for \$2.6 billion.⁵²

Not to be outmaneuvered, AT&T and other established phone companies are setting up their own VoIP phone services. Meanwhile, a controversy is brewing because traditional phone companies are subject to heavy regulation. By contrast, in most countries, the Internet is still unregulated; this is to encourage innovation and promote acceptance by businesses and the general public. For example, the European Commission is relying on regulators in member nations to establish rules for Internet calls. Likewise, in the United States, the Federal Communications Commission classifies VoIP as an information service. At the state level, some regulators are taking a similar "hands off" approach. In

⁵² Jason Dean, "Everyone's Talking Skype in China," *The Wall Street Journal* (March 30, 2006), p. B3.

Yahoo! is the Internet's most visited site. The company boasts more than 140 million registered users; one of Yahoo's strengths is the number of services it offers besides search. For example, Yahoo! users can access GeoCities, My.Yahoo, Games On Demand; send instant messages; and, as shown here, compare prices with Yahoo! Shopping. The company currently has 25 global sites in 13 different languages; Yahoo! Shopping's country-specific sites include Denmark, Germany, and India.



Minnesota, a district court judge ruled that Vonnage, based in Edison, New Jersey is an information service provider. As a result, Vonnage and other Internet phone service companies do not have to pay the taxes and fees that conventional telecom companies pay. This, in turn, allows them to set lower prices for their services.⁵³

⁵³ Peter Grant and Almar Latour, "Circuit Breaker: Battered Telecoms Face New Challenge: Internet Calling," *The Wall Street Journal* (October 9, 2003), pp. A1, A9. See also Anne Marie Squeo, "Internet Phone Service Threatens Industry's Giants," *The Wall Street Journal* (November 28, 2003), pp. B1, B2.

The **digital revolution** has created a global electronic marketplace. The revolution has gained momentum over the course of 70-plus years, during which time technological breakthroughs included the digital mainframe computer; the **transistor**; the **integrated circuit (IC)**; the **personal computer (PC)**; the **spreadsheet**, the **PC operating system**; **DARPA**net; and the **Internet**. Three key innovations by Tim Berners-Lee, the **uniform resource locator (URL)**, **hypertext markup language (HTML)**, and **hypertext transfer protocol (http)**, led to the creation in the early 1990s of the **World Wide Web**.

The digital revolution has resulted in a process known as **convergence**, meaning that previously separate industries and markets are coming together. In this environment, the **innovator's dilemma** means that company management must decide whether to invest in current technologies or try to develop new technologies. Although leading firms in an industry often develop **sustaining technologies** that result in improved product performance, the revolution has also unleashed a wave of **disruptive technologies** that are creating new markets and reshaping industries and **value networks**.

This is an exciting time to prepare for a career in global marketing. Until recently, one sure way to put your career at risk in many companies (especially U.S. companies) was to go overseas. There was nothing wrong with being overseas per se, but management did not always recognize the value of global experience and turned to executives who were close at hand for promotions.

Today, global experience counts. We are in a global market with global competition and those with global experience have a definite advantage.

How do you establish a career in global marketing? There are two broad paths:

1. Get directly into a job outside your home country or into a multicountry headquarters job in a global company.

E-commerce is growing in importance for both consumer and industrial goods marketers. Generally, commercial Web sites can have a domestic or global focus; in addition, they can be classified as **promotion sites**, **content sites**, and **transaction sites**. Global marketers must take care when designing Web sites. Country-specific domain names must be registered and local-language sites developed. In addition to addressing issues of technology and functionality, content must reflect local culture, customs, and aesthetic preferences.

The Internet is a powerful tool for advertisers; **click-through rates** are one measure of effectiveness. Another trend is **paid search advertising**. New products and services spawned by the digital revolution include: **broadband**, which permits transmission of **streaming media** over the Internet; **mobile commerce (m-commerce)**, which is made possible by **Wi-Fi**, **Bluetooth**, **WiMax**, and other forms of wireless connectivity; **telematics** and **global positioning systems (GPS)**; and **short message service (SMS)**. **Smart cell phones** are creating new markets for **mobile music** downloads, including **ringtones**, **ring tunes**, and complete songs; they can also be used for **mobile gaming** and Internet phone service using **VoIP**.

2. Get company experience in an industry that prepares you for promotion to a job with multicountry responsibility or to an assignment outside your home country.

For many, the second choice is better than the first. There is no substitute for solid industry experience, and your best opportunity to get it may be in your home country. You speak the language, understand the culture, and are trained in business and marketing. You are ready to learn. An option is to get this basic experience in another country. The advantage of this move is that you will learn a new culture and language and broaden your international experience while you learn about a company and industry. Good luck!

discussion questions

1. Briefly review the key innovations that culminated in the digital revolution. What is the basic technological process that made the revolution possible?
2. What is convergence? How is convergence affecting Sony? Kodak? Nokia?
3. What is the innovator's dilemma? What is the difference between sustaining technology and disruptive technology? Briefly review Christensen's five principles of disruptive innovation.
4. What key issues must be addressed by global companies that engage in e-commerce?
5. Briefly outline Web design issues as they pertain to global marketing.
6. Review the key products and services that have emerged during the digital revolution. What are some products and services that are not mentioned in the chapter?

suggested readings

Chris Anderson is the editor of *Wired* magazine. In his view, "The story of the Long Tail is really about the economics of abundance—what happens when the bottlenecks that stand between supply and demand in our culture start to disappear and everything becomes available to everyone." Anderson notes that "below-the-radar" products (e.g., obscure books, movies, and music) are

driving revenues at e-commerce merchants such as Amazon.com, Netflix, and iTunes. He says, "These millions of fringe sales are an efficient, cost-effective business. . . . For the first time in history, hits and niches are on equal economic footing."

Chris Anderson, *The Long Tail: Why the Future of Business Is Selling Less of More* (Hyperion, 2006).

Case 17-1

eBay in Asia

eBay, the company whose name is synonymous with online auctions in the United States, is one of the legendary success stories of the digital revolution. Today, the company is a cultural phenomenon, boasting 230 million registered users who can bid on 45,000 different categories of goods; at any given time, customers are engaged in 100 million auctions. The company also hosts more than 250,000 online stores. In 2006, eBay generated \$5.9 billion in revenues; this represents an increase of more than 100 percent from 2003. To sustain this type of growth, eBay's executive team has set its sights on international expansion. Today, the company has successfully established a presence in several countries, including Australia, Brazil, Spain, and Switzerland.

However, one of eBay's first forays outside the United States ended in defeat. Yahoo! opened its Internet portal in Japan in April 1996, four years ahead of eBay's entry. Yahoo! Japan was a joint venture between Yahoo! Inc. and Japan's Softbank Corporation. Yahoo! Japan was modeled on its U.S. parent; a variety of free services was available, including news, chat rooms, and e-mail. As more users logged on, increasing numbers of advertisers paid to post banner ads on the site. In due course, Yahoo! founder Jerry Yang and Softbank chairman Masayoshi Son encouraged Yahoo! Japan chief Masahiro Inoue to start offering online auctions. Yang had been blindsided by eBay's U.S. success and did not want to repeat the mistake a second time. Inoue resisted, noting that the Japanese have little experience with auctions of any kind. He was also skeptical that status-conscious Japanese consumers would buy products from complete strangers. However, Yang continued to press his case, stressing that eBay was gearing up for a Japanese launch. Moreover, with advertising providing 80 percent of Yahoo!'s revenues in the United States, Yang was anxious to diversify the venture's revenue stream.

In the end, Inoue relented; his team of engineers had Yahoo! Japan's auction site operational in September 1999. eBay launched its Japanese service in February 2000. Taking its cue from eBay's early development in the United States, management stressed used collectibles. This turned out to be a mistake; Japanese users showed more interest in bidding on new goods. eBay also erred by charging a commission on each transaction; initially, Yahoo! Japan users did not pay commissions or monthly fees. By the end of 2001, between 20,000 and 25,000 items were listed on eBay's Japanese site; by contrast, Yahoo! Japan had more than 3 million items. As eBay CEO Meg Whitman noted, "We're definitely in catch-up mode." In March 2001, after barely more than a year, eBay closed down the service.

Despite the setback in Japan, eBay continues to expand in Asia. In 2003, the company paid \$180 million to acquire Eachnet, a popular Chinese consumer auction site. Once again, eBay faces competition from Yahoo!, whose entry

strategy included investing in a Chinese language search development company and forming a joint venture auction site with Sina.com. In 2005, Yahoo! bought a 40 percent stake in Alibaba, a company founded by Chinese Internet entrepreneur Jack Ma that operates an auction site called



Taobao.com. Initially, Taobao.com users were not charged sales commissions or listing fees.

Ma believes that global Internet companies are prone to making three types of mistakes in approaching China: They underestimate the differences between China and the U.S. market; they incur higher costs than local companies; and they go global too quickly. In 2004, Ma summarized the situation by observing, "[eBay and Yahoo!] are the sharks in the ocean, and we are the crocodiles in the Yangtze River. When they fight in the Yangtze River, they will be in trouble. The smell of the water is different." Now that Ma has joined forces with Yahoo!, he has changed his tune slightly. "I know the Chinese user market and users better than Meg Whitman. Once we start to charge, we can be profitable in 18 months," Ma said.

Ma's words were prescient: In September 2006, Martin Wu, head of eBay China, resigned. At the end of the year, eBay announced that it had spent \$40 million for a 49 percent stake in Tom Online, a Chinese Internet portal and wireless operator. eBay shut down its main Chinese Web site and announced that the new Tom-eBay service would be launched in 2007.

Discussion Questions

1. Why has eBay struggled in Japan, China, and other Asian markets?
2. eBay is making a strategic shift by giving control of its main China operation to Tom Online. What does this shift signify?

Sources: Chris Nuttall and Mure Dickie, "eBay Tries to Fix Its Strategy in China," *Financial Times* (December 20, 2006), p. 15; Moon Ihlwan and Rob Hof, "Out-eBaying eBay in Korea," *Business Week* (July 17, 2006), p. 74; Mylene Mangalindan, "Hot Bidding: In a Challenging China Market, eBay Confronts a Big New Rival," *The Wall Street Journal* (August 12, 2005), pp. A1, A6; Jason Dean and Jonathan Cheng, "Meet Jack Ma, Who Will Guide Yahoo in China," *The Wall Street Journal* (August 12, 2005), p. B1;

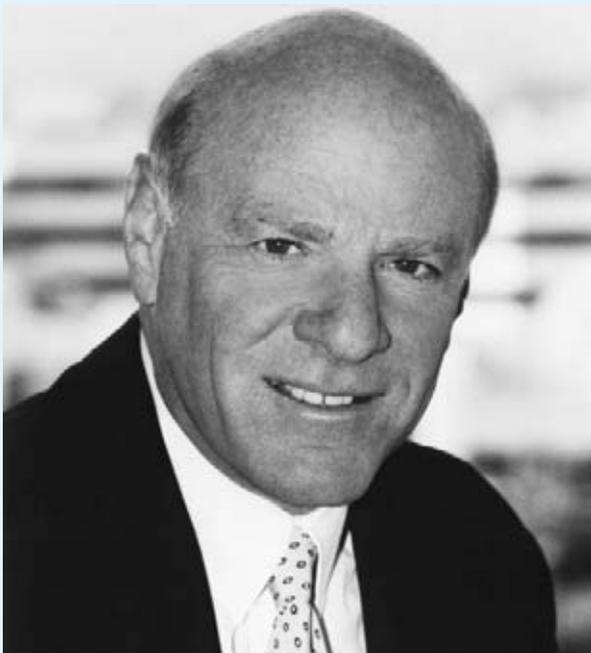
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Yahoo! Japan Beat eBay at its Own Game," *Business Week* (June 4, 2001), p. 58; Robert A. Guth, "Yahoo Japan Learns from Parent's Achievements and Errors," *The Wall Street Journal* (December 11, 2000), p. A28.

Case 17-2

Barry Diller and IAC/InterActiveCorp

Barry Diller has always been a man with big plans. He began his career in the mailroom at the fabled William Morris talent agency. His next stop was ABC Television, where his programming innovations included the "Movie of the Week" and the miniseries. Television proved to be a stepping-stone to Hollywood; in 1974, at the age of 34, Diller became chairman of Paramount Pictures. In 1984, having presided over such blockbuster hits as *Raiders of the Lost Ark*, he moved on to Twentieth Century Fox. Cable television was next; Diller took the top spot at QVC, the home shopping channel. After resigning from QVC in the mid-1990s, Diller began building a media company that he named USA Networks. He bought the Home Shopping Network (HSN) and a family of TV stations. During the next few years, however, the burgeoning dot-com scene caught his eye. He was intrigued by the possibilities for e-commerce, especially online retailing. In 2001, only one year after the dot-com bubble had burst, he bought a 64 percent stake in Expedia, the online travel service.



Barry Diller has been described as a no-nonsense, cut-to-the-chase kind of businessperson. Hailed by some observers as a visionary, Diller laid the groundwork for a successful e-commerce empire by investing in companies with strong business plans featuring services that are well matched to the Internet.

To raise additional money to invest, he sold USA Networks to Vivendi Universal, the French media company, for \$11 billion. Diller's vision is to make his new company, IAC/InterActiveCorp, the world's largest e-commerce enterprise. Today, IAC is the world's largest provider of online travel services through its Hotels.com and Expedia.com Web sites. InterActiveCorp also owns Ticketmaster, the world's leading ticketing service, and online personals listing services Match.com and uDate.com.

The travel industry experienced a steep downturn in the aftermath of September 11. In an effort to put "heads in beds," InterContinental, Marriott, and other major hotel chains sold excess room inventory at a discount to Hotels.com and other online services. When a traveler books a room through, for example, Hotels.com, the price he or she pays is 20 percent to 30 percent more than Hotels.com's cost; thus, each transaction nets a tidy gross margin for Hotels.com. According to estimates compiled by Smith Travel Research, in the United States alone, online services redirected \$1 billion in revenues away from the hotel operators. Six percent of all U.S. hotel reservations were made online in 2003; travel consultancy PhoCus Wright expects that figure to increase significantly.

Hotel operators took notice and began developing their own online services. InterContinental has been especially aggressive, launching brand-neutral sites such as Accommodations.info and DealsonHotels.com that direct users to various hotel properties run by InterContinental. The company has also launched Web sites in French, German, Spanish, and Chinese. As Eric Pearson, vice president of e-commerce at InterContinental, noted, "There's a huge demand from consumers traveling abroad. That shows proof positive that if you're a global company, you need to provide services around the world."

For the moment, hotel bookings remain an extremely lucrative source of revenue and profit for IAC/InterActiveCorp. By contrast, financial results from the Match.com and uDate.com personals services have been less stable. For example, in the fourth quarter of 2003, profits from personals were only \$1.5 billion, a decline of 84 percent. Match.com logs tens of thousands of new subscribers each day; however, that figure is offset by a significant number of cancellations. As Diller explained, "We went from a few thousand subscribers to 880,000. We changed the model, thinking we could change the pricing and get people to stay subscribed for longer, which turned out to be just dumb." Still, Diller sees great potential for cross selling between the personals and his company's other services.

Recently, Diller has begun sharpening his focus on Internet search. Although it is the market leader in online travel services, Diller also spun off the Expedia.com business, which now

trades separately on the NASDAQ exchange. He also acquired the Ask Jeeves search engine for \$1.7 billion and renamed it Ask.com. A new advertising campaign developed for the U.S. market was keyed to the slogan "Use Tools, Feel Human." The ads were intended to position Ask.com as a faster, easier, more user-friendly service. In the United Kingdom, a separate ad campaign from the Fallon Worldwide agency used an unusual creative strategy: Reminding consumers that Google is the leading search engine. The campaign, which urged people to "stop the online information monopoly" and rebel against "the establishment [i.e. Google]," appeared to be the work of a grass-roots, underground movement. However, a publicity backlash developed when it became clear that the campaign was, in fact, advertising.

Ask.com's marketing campaign in the United Kingdom is just one indication that Diller is keenly aware of global market opportunities. Currently, about 17 percent of IAC/InterActiveCorp's revenues are generated outside the United States; Diller wants to double that figure. Some industry observers predict Diller's next move will be to acquire a British travel site such as Lastminute.com or eBookers.com. As Diller explains, "The aim is to be the largest e-commerce player with a multi-brand strategy. In some cases, we're going to set up new ventures; in some

cases it's more efficient to acquire, where a brand is already established."

Discussion Questions

1. Why did Barry Diller divest Expedia.com and acquire Ask Jeeves?
2. Which search engine do you use most frequently? Why?
3. What acquisition do you think Diller will make next?

An interview with Barry Diller was recently broadcast on *60 Minutes*. The program is available on DVD and makes an excellent companion to this case.

Sources: Aaron O. Patrick, "Ask.Com's 'Revolt' Risks Costly Clicks," *The Wall Street Journal* (April 5, 2007), p. B8; Peter Grant and Sara Silver, "Diller Retools IAC to Compete with Web Stars," *The Wall Street Journal* (August 31, 2006), pp. C1, C5; Grant, "Diller's IAC, AOL to Invest in Web-TV Company," *The Wall Street Journal* (November 22, 2005), p. B4; Dennis K. Berman and Kevin J. Delaney, "Diller's IAC Nears Deal for Jeeves," *The Wall Street Journal* (March 21, 2005), p. A3; Tim Burt and Peter Thal Larsen, "The Negotiator-in-Chief," *Financial Times* (April 27, 2004), p. 11; Betty Liu and Amy Lee, "Hoteliers Try to Evict an Unwelcome Visitor," *Financial Times* (April 19, 2004), p. 6; Timothy J. Mullaney and Ronald Grover, "The Web Mogul" (Cover Story), *Business Week* (October 13, 2003), pp. 62–66+; Tim Burt and Peter Thal Larsen, "Inside Barry Diller's Hive of Interactivity," *Financial Times* (September 19, 2003), p. 10.

