MadeToOrder.com is a privately held online business that began in September 1999. Headquartered in Redwood City, California, it is a full-service Internet provider of items such as personalized gym bags, T-shirts, book bags, and trophies that are awarded for scholastic excellence or at sporting events. Customers visit the web site to design and order their merchandise. MadeToOrder.com fills the orders and then ships the merchandise to customers. MadeToOrder.com is proud of its speedy delivery.

An entry-level Web Developer at MadeToOrder.com is responsible for analyzing the current web site. For the entry-level Web Developer position, MadeToOrder.com looks for someone who enjoys solving problems, has some experience in web development, and has a degree in Computer Science or a similar technical field. Desired skills include knowledge of HTML coding and experience with databases, Windows operating systems, web server tools, and programming languages.

THINK CRITICALLY
1. What other skills might be useful to a Web Developer?
2. Would you want to work for an online company that has been in business a short time? Explain.
Assess Wireless Services

PROJECT OBJECTIVES

- Compare the products of several companies that are using e-commerce
- Identify the distribution methods of these companies
- Create a new use for wireless technology

GETTING STARTED

Read through the Project Process below. Make a list of any materials you will need. Decide how you will get the needed materials or information.

- Form teams and choose a leader and recorder.
- Search the Internet for companies that provide wireless audio and video communication devices or services. Record the web site addresses of five companies.

PROJECT PROCESS

Part 1 LESSON 1.1 Visit the selected web sites and make a spreadsheet comparing the products or services offered. Columns in the spreadsheet might include Company, Product/Service, Features, Services, Connection Speed, Data Transmission Speed, Size, Weight, Battery Life, Cost, or other relevant data.

Part 2 LESSON 1.2 Answer the following questions about each company.

1. What is the business of the company?
2. Is the company offering products directly to consumers, to businesses, or to both? How do you know?
3. Does the company manufacture the product or just sell it? How do you know?

Part 3 LESSON 1.3 Think of a new use for wireless technology that is not currently available. Describe the product and who would use it. What chain of distribution would you use?

CHAPTER REVIEW

Project Wrap-up Create a presentation using software such as PowerPoint. Compare the web site information you gathered as well as describe the new wireless product you would develop. Present the information to the class.
E-commerce is not what it was yesterday, or what it will be tomorrow. E-commerce (electronic commerce) is the exchange of goods, services, information, or other business through electronic means. E-commerce, as it is today, originated in 1991 when the Internet was opened to commercial use. Today, there are millions of web sites, and hundreds of companies do billions of dollars of business each day over the Internet.

This revolution in communication had an interesting beginning. The Internet is the latest version of a combination of networks from universities, government agencies, large corporations, and research agencies. In 1969, the U.S. Department of Defense created a network called the Advanced Research Projects Agency, or ARPANET. The purpose of ARPANET was for electronic communication in case of nuclear war or natural disasters. Universities and large corporations began creating their own networks about the same time ARPANET was developed.

Gloria is a sales representative for a large insurance company. Her days are extremely busy. Gloria spends hours talking with prospective clients or meeting with current clients to explain their insurance coverage. She keeps all of her client information in her personal computer. She often works overtime because she updates her client files and her database every day. Can you think of any advances in computer technology that would help Gloria manage her client database—and her time—more efficiently?
INTERCONNECTIVITY

Today, the second or third generations of the original networks are connected through the World Wide Web. The World Wide Web (WWW), sometimes referred to as “the Web,” is an Internet service that allows you to browse through text, graphics, video clips, and sound bites from thousands of information sources. Web documents also contain special connections that allow you to switch to other documents that could be on computers anywhere in the world. Millions of people throughout the world log on to the Web to exchange goods, services, and information electronically. More than 510 million people are expected to be online by 2003. This global interconnectivity has changed the way business is conducted in the United States and throughout the world.

E-commerce is a dynamic force on the U.S. and world economies. The use of the Internet for commercial activity is changing the way the world does business. The Internet is shifting the power of the economy, joining traditional large corporations and new commercial leaders. Smaller companies now have equal access to customers through the use of the Internet. Customers around the world can now order goods and services “24/7”—twenty-four hours per day, seven days per week.

THE E-COMMERCE DIRECTION

Individual consumers, small businesses, large corporations, and governments conduct business daily over the Internet. Today, business is primarily conducted by using personal computers. However, this is quickly changing as the explosion of e-commerce creates a demand for mobility.

DICK TRACY’S WATCH

What does a cartoon character from the 1950s have to do with the future of technology-based e-commerce? Dick Tracy is a police detective in a newspaper comic strip with the same name. Tracy’s wristwatch has two-way audio and two-way video, which were considered very high-tech until recently. Today’s version of two-way communication doesn’t just connect to the police station—it also connects to the world.

GOING WIRELESS

Dick Tracy’s creator may have had the idea first, but cell phone companies, personal computer companies, software companies, and Internet providers are gearing up to change the way you access the Web. Access to the Internet...
has traditionally been through the PC—a personal computer connected to phone lines—or through an **intranet**, a private internal network of computers available only to employees of a business. Phone lines kept users tethered to their machines. **Wireless access** is the ability to use the Internet without having to be connected to a phone line. This means that you are unleashed from a physical location. **Wireless access** is seen as a major breakthrough in conducting business electronically.

The uses for wireless access are just beginning to be tapped. Airlines and travel web sites use pagers, cell phones with e-mail, and PCs to alert ticket holders when flights are delayed. Some sites give passengers additional information about their destinations, such as area restaurants or the availability of public transportation. Northwest Airlines is developing a system that will allow passengers to book flights from wireless devices.

**PICKING UP SPEED**

The first versions of wireless communication devices were suggestive of the early Internet—text only with no graphics or color. Patience was needed while making a connection or typing a response, and the price was also extremely high. Has all of this changed? Yes, improvement continues. Nokia, Motorola, Ericsson, and Sprint are a few of the companies that are rushing to provide the first rounds of improved service. In February 2000, Japan had more than two million people using wireless web services. Britain’s giant Vodafone intends to eventually broadcast live soccer games via web-enabled phones. A **web-enabled phone (WAP)** is a cellular telephone that is capable of receiving data over the Internet.

In February 2000, Texas Instruments introduced a new programmable digital signal processor. A **digital signal processor (DSP)** is a device that allows wireless communications to receive digital data. The new DSPs are expected to be...
THE FUTURE IN FINLAND

Finland is considered the center of the wireless web revolution. A company located in Helsinki, Finland, named Iobox Oy operates a web service designed for wireless web users. Over 400,000 people use the Iobox Oy web site to read and write e-mail and check calendars. The incredible growth of cell phone use in Finland is driving the expansion of wireless applications such as stock trading or playing games. Other companies have developed systems that take standard web content and change its format so that wireless web users can access the information.

THINK CRITICALLY Why would Finland be considered a leader in wireless web technology? What factors make wireless technology attractive in the European market?

10 times faster than the current ones. The DSPs introduced by Texas Instruments were built for equipment that combines phones, music, and digital cameras with a constant online link to the Internet. The uses and advances of DSP are in their infancy and are expected to improve in speed and quality. As the speed evolves, the amount of use and the variety of uses will increase tremendously.

FIXED, UNPLUGGED, AND BYPASSED

Another new method for data delivery and e-commerce is by not using phone lines at all, but by offering Internet connection to fixed locations. This fixed wireless system uses a signal that is broadcast to an antenna at a fixed location. It provides high-speed connections to an antenna the size of a piece of paper. The speed is extremely fast when compared to Internet connections made over a telephone line. Fixed wireless is the answer for people like telecommuters, who often need speed for downloading huge documents but live where high-speed options are not available.

Checkpoint

What is the current direction of e-commerce?
THINK CRITICALLY
1. What events led to the development of the Internet?

2. How is e-commerce similar to nonelectronic commerce?

3. How is e-commerce different from traditional commerce?

4. Why would wireless communications be considered important to e-commerce?

MAKE CONNECTIONS
5. COMMUNICATION Write a one-page report telling a small commercial orchid grower why he or she should start an e-commerce segment of business.

6. RESEARCH Use the Internet to visit the General Motors Company fleet sales page. Find the address and phone number of the contact for fleet sales in Singapore. Which GM vehicles are available in Singapore?

7. MARKETING In a small group, think of ways a company could get wireless web users to look at advertising. Present the ideas to the class.
If you have ever had to make a purchase late at night during a storm, you can appreciate the comfort and convenience of e-commerce for both consumers and industry. The Internet is always on. The Internet store is always open when you want to shop, whether it is for the newest CD from your favorite artist or the latest best-selling novel.

In terms of commerce, distribution is the movement of products and services from the producer to the consumer. Distribution is an extremely important process that requires much planning. The right amount of the right product needs to arrive at the right place at the right time. Fifty thousand

Manuel Gonzalez is the owner of a small bakery. Manuel’s customers arrive early each morning to sample the muffins and other pastries. In the evenings, people also stop by to purchase breads or cakes. Manuel has a brisk walk-in business. Lately, though, he has been thinking about selling his baked goods from a web site. How could Manuel deliver his baked goods to people who buy from his web site? Can you think of several delivery methods he might consider?
Super Bowl shirts that arrive in February will be sold at a loss to everyone, including the consumer who wanted one to wear to the neighborhood Super Bowl party.

Traditionally, producers of goods conduct market research to determine whether they have a viable product and to estimate how many items they will sell. Sometimes they produce too many items and have to lower the price to sell them and reduce the inventory. Sometimes they produce too few and miss sales. E-commerce has changed this process. E-commerce allows direct connection between the manufacturer and the consumer so that products are produced when ordered.

THE DELL MODEL

One of the early users of direct connection is Dell Computer Corporation. Michael Dell began assembling computers for people while he was in college in Austin, Texas. Today, you can visit Dell’s web site, choose the exact components you want in a computer, and have it delivered to your door in less than a week. Dell Computer Corporation does not have a warehouse of computers waiting for you. You do not have to choose from options already selected by the company. Dell makes your computer when you place your order, just like some fast food. This is called the build-to-order model because the product is built the way you want it and only after you place the order. A company that uses the build-to-order model does not need to keep large amounts of materials in its inventory and, therefore, saves the money that would be needed to store these materials.

Ford Motor Company has formed a new company with Trilogy Software Inc. to offer all of its products online. The web site will allow customers to buy build-to-order vehicles online. The web site will also have links to local dealers. Local car dealers have seen the Internet as a threat to their business. They fear they will be left out of the distribution channel if auto manufacturers deal directly with consumers. For Ford Motor Company, though, local dealerships will remain a place to test drive, pick up, and acquire service for the vehicles.

REAL-TIME MARKETING

In the future, customer service will move beyond providing customers with build-to-order products. Real-time marketing will anticipate the customers’ changing needs and automatically respond to those needs. For example, with real-time marketing, a company like Dell could anticipate a customer’s need for a computer upgrade and supply the upgrade automatically.
E-commerce is causing positive economic change. However, traditional channels of distribution are under siege from the changing channels of e-commerce distribution. Consumers want to deal directly with the manufacturers to get what they want, when they want it. Distribution partners are finding that they are sometimes in conflict with each other, and retailers are finding themselves competing with their suppliers.

**AMERICA ONLINE AND TIME WARNER**

The merger of Internet service provider America Online (AOL) with media giant Time Warner created an unprecedented communications impact. With more than 22 million subscribers, America Online bought Time Warner, owner of cable television, movie companies, CNN, Time magazine, and a vast entertainment empire. The delivery of entertainment and news over the Internet is expected to take on dramatic new speed and potential.

The merger of AOL and Time Warner is a good example of the e-commerce-driven changes taking place in the distribution system. Time Warner began with the founding of Time magazine in 1923. Time later merged with
CHAPTER 1 WHAT IS E-COMMERCE?

Warner Brothers film studio. Time Warner was extremely successful in generating news and entertainment. Time Warner then distributed that content by using traditional forms of distribution, such as television and print media.

America Online is a very young company in comparison to Time Warner. AOL has the audience, the marketing plan, the new delivery system, and the future. Joining the two giants will allow one company to provide content and deliver it directly to the consumer via the Internet.

Some consumer groups raised red flags about the power the AOL/Time Warner merger will generate. This type of merger will allow the new combined company to control huge amounts of information provided to millions of people. Consumers may have fewer choices as a result.

DISINTERMEDIATION AND REINTERMEDIATION

When a traditional channel of distribution is no longer needed, it disappears. This process of “losing” distribution channels is called disintermediation. For example, some travel agents are losing airline ticket business to airline web sites. Reintermediation is the addition of a level of the distribution system. Web sites that assist people in comparison-shopping are an exciting online example of reintermediation that would not exist without the Internet. To compare the cost of products without Internet help, the customer would have to contact the sellers themselves. With the Internet, a few clicks provide information for multiple suppliers from which to choose.

Hardy’s Computers makes and sells personal computers to individuals and businesses. Anne Hardy started the business in her garage five years ago. Since then, the business has grown rapidly. Several weeks ago, one of Anne’s employees suggested to her that she could make more money by selling her computers online. Currently, Anne sells 160 computers a year at $1,500 per computer. After some market research, Anne believes that she can double the number of computers she sells if she goes online. What will Anne’s annual sales be in dollars if she doubles her current annual sales?

**SOLUTION**

To determine Anne’s current annual sales, multiply the number of computers by the price of each computer.

160 computers × $1,500 per computer = $240,000 Anne’s current annual sales

Then, multiply Anne’s current annual sales by two.

$240,000 × 2 = $480,000

Anne’s annual sales will be $480,000.
A key to economic strength is productivity. Productivity is defined as the amount of output for each hour of work. Increased productivity brings about an improved economy without inflation of prices and wages. Economists attribute the strong growth of productivity in the United States to fast computers and technology such as the Internet. Information technology allows workers to complete more work in less time. When workers can communicate and access information quickly, they can work more efficiently. When companies can add and subtract distribution channels as needed, while keeping the most effective distribution channel, productivity is increased.

Intel, the dominant computer chip maker, was one of the early users of the Internet to change and improve productivity. The first uses included freeing salespeople from repetitive jobs like entering orders. The salespeople’s additional time was then used to analyze sales and provide service to customers. The connection between increased productivity, the world’s economy, global commercial interaction, and e-commerce will be fascinating to observe.

On a sheet of paper, list every traditional channel of distribution that you can think of that is either no longer used or will not be needed in the near future. Then, list new channels of distribution that are opening up due to e-commerce. Pair with a teammate and discuss your lists.
1. Does electronic commerce provide more choices or fewer choices for a manufacturer and its retail partners? Describe some of the choices.

2. Who would be hurt financially by the changes in distribution brought about by e-commerce? Why?

3. Why might customers like dealing directly with the manufacturer to make purchases?

4. Discuss why traditional retailers may be vulnerable to online competition.

5. COMMUNICATION In a one-page report, convince a traditional business to add a level to its current distribution channel. The additional level should be an online level. For example, a record company might list its products on a web site that auctions products.

6. MATH Anne Hardy's plans to take her computer business online are so successful that she actually sells three times as many computers as she had the year before. Use the information in the Business Math Connection feature to calculate Anne's sales in dollars.

7. ECONOMICS In a small group, discuss ways e-commerce has impacted the world economy. Share the ideas with the class.
The leaders in e-commerce are a fearless group of daredevils embarking into unknown territory in an ever-changing environment. They have jumped in early and some have quickly made huge sums of money, but many more have fallen by the wayside. In the early part of this new century, e-commerce is a very immature business with lots of room for growth and development. Virtual businesses are being dreamed of, built, and revised at an incredible pace. Some of the early leaders like Steve Case, Bill Gates, and Masayoshi Son are making themselves a place in history next to the leaders of the industrial revolution.

**BRINGING AMERICA ONLINE**

Steve Case, Chairman of the Board of AOL Time Warner, is a passionately optimistic man with a realistic vision of the potential for e-commerce. Case is

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**ON THE SCENE**

Jon Chase goes online to purchase an airline ticket for business. The travel site automatically

- updates the calendar on his PC and in his palm device/cell phone
- puts the ticket on his business expense report
- makes hotel and rental car reservations
- notifies his father Chuck’s PC and cell phone of the travel dates and hotel phone number

Can you think of other services that web sites may be able to provide for future business travelers? What services would be most helpful for you?
portrayed as a hard-charging businessperson who, along with CEO Gerald M. Levin, runs the most aggressive Internet company in the world. The company went public in 1992, offering its stock over the NASDAQ, the world’s first electronic stock market. Steve Case is known as someone who realizes the importance of making it easy for everyone to get online. Much of AOL’s success is due to Case making sure that AOL is extremely simple to use. With the purchase of Time Warner, AOL has positioned itself to continue as a major service provider and to be a major supplier of content over the Internet. Dominance of the Internet is within sight for AOL Time Warner. Staying the leader will be the challenge.

MICROSOFT

A significant era for an electronic giant came to an end in early 2000, when Bill Gates handed over his title as CEO of Microsoft to Steve Ballmer. Another well-known technology pioneer, Gates had been the only CEO in the 25-year history of the company, but he was not stepping aside to retire. Gates, the ultra-tough competitor, was clearing his desk to pursue dominance of the Internet and e-commerce.

Microsoft is one of the great success stories of e-commerce. In 1973, Gates entered college at Harvard. In 1975, Gates and his friend Paul Allen licensed a computer language program written for personal computers and called their partnership “Micro-Soft.” They registered Microsoft as a trade name in 1976. By 1978, their sales exceeded $1 million. By 1990, Microsoft was exceeding $1 billion in sales each year.

MICROSOFT’S FOCUS

Prior to 1995, Microsoft had focused on software for personal and business computers, such as the well-known Windows operating system. In 1995, the company dramatically changed direction to become a major force on the Internet. Bill Gates moved from the CEO position in 2000 to spend 100 percent of his time on developing new technologies to interact with the Internet. Gates believes that Microsoft must make an operating system that will work on any device.

THE INTERNET WORLD

Tokyo-based Softbank owns a part of more Internet-based businesses than any other company in the world. The entrepreneur behind Softbank is Masayoshi Son, whose long-range plan is to establish a conglomerate of networked companies. Son does not run the companies or own them outright. He does own controlling interest in 20 to 30 percent of some 130 Internet-based companies, including Yahoo!, PeoplePC, Global Sports, and Webvan, the online grocer. Son’s goal is to invest early and often in as many as 780 online companies.
Envisioning a business, making it succeed, taking the stock public, selling the company, and getting rich are the most visible e-commerce steps to success. This is the quick cycle seen over and over again as e-commerce has become a reality.

THE GOAL
People with ideas for online businesses can assume that five to ten other people are currently working on the funding to launch the same business. Quick execution of the idea is critical in the first frantic growth stages of e-commerce. People planning online businesses usually need to find a person or company that is interested in funding the start-up of the idea. The new companies must have operating money to use while they develop the idea and until they make a profit. People or companies that provide funds to start a company in exchange for part ownership of the company are called venture capitalists.

The goal of most Internet start-up companies is the initial public offering. The initial public offering (IPO) describes the point at which a company changes from private ownership to public ownership by selling shares of the company in the stock market. It generally takes from four to six years of successful operation to reach the IPO stage. This is generally the point at which the original founders, the venture capitalists, and those employees who have been given shares before the IPO become very wealthy. The potential for a huge payoff means there is a rush to get there first and to do it faster, cheaper, and better than anyone else.

FOR THOSE WHO SUCCEED
The fast generation of huge sums of money sounds like something everyone should do, except for two questions.

1. What happens next for those who succeed?
2. What about those who don't make it?

Some of those who have quickly succeeded with an e-commerce start-up and just as quickly sold it have turned around and started another e-commerce business.

WORKSHOP
Do you have an idea for an online business? In a group, discuss possible start-up businesses that you think would have a good chance of being successful online. Choose one business. Make a list of everything you would need to consider before beginning your business.

CHECKPOINT
Why is e-commerce considered an immature method of commerce?
In 1998, Rakesh Mathur, an Indian-born entrepreneur, sold Junglee Corporation to Amazon.com for about 225,000 shares of Amazon. Junglee was a shopping technology company. Mathur has now left Amazon to join Purple Yogi, a company developing technology to create a digest of content on popular web sites and send it to customers' PCs. Software on a customer's web browser, dubbed “Yogis,” displays information for the customer based on a personalized profile. The biggest difference is that the company does not collect and maintain data on the customer, so the company knows nothing about which sites a customer visits. Other software packages that have attempted the same personalization have kept extensive files on the customers, which many consider an invasion of privacy.

WOMEN AND THE WEB

Women have played an important role in development of e-commerce. Early female e-commerce pioneers include Nancy Evans, the co-founder of iVillage.com: The Women's Network. This popular site has an estimated 2.7 million members. Google, the ever-popular search site, has Vice President of Search Services Joan Braddi and Vice President of Corporate Communications Cindy McCaffrey to thank for much of the success of the site. Prior to joining Google, Joan Braddi was director of business development and sponsorship sales for Netcenter, the web site division of Netscape. Cindy McCaffrey was a communications leader at E*Trade and Apple Computer.

HERE'S TO THE OTHERS

As fast as companies can come online, more are falling off the other end, going out of business. Some people think e-commerce is flying off the tracks with some of the wild ideas being considered. The amount of cash available for start-up companies early in 2000 made some venture capitalists seek out some strange places to invest money. The chance for failure in e-commerce is very high. Only one company in thirty that receives venture-capital funding ultimately goes public. Those who succeed have both the knowledge and skills of the technology, but they also know how to open a start-up company. They understand teamwork and the rules of finance. They are entrepreneurs.
THINK CRITICALLY

1. What are possible disadvantages to consumers when AOL and Time Warner merged?

2. Are there still opportunities for new businesses in e-commerce? Why?

3. Where do start-up Internet companies get the money to operate until they become profitable?

4. Why would a venture capitalist like Masayoshi Son buy parts of nearly hundreds of Internet companies?

MAKE CONNECTIONS

5. **COMMUNICATION** Using word processing software, write a one-page report about the history of Amazon.com. Include information found on the company’s web site.

6. **PROBLEM SOLVING** In a small group, think of reasons a business should have a web site. Report the reasons to the class.

7. **HISTORY** Develop a three-minute presentation with software such as PowerPoint, comparing the beginnings of e-commerce to the California Gold Rush.
CHAPTER SUMMARY

LESSON 1.1 Electronic Commerce
A. E-commerce is the exchange of goods, services, information, or other business through electronic means.
B. E-commerce is a driving force behind positive economic growth.

LESSON 1.2 Changing the Distribution System
A. E-commerce has created new patterns of distribution, eliminating some channels of traditional distribution and adding new ones in other areas.
B. The changes in the channels of distribution are shaking the world of commerce.

LESSON 1.3 Web Entrepreneurs
A. A large number of e-commerce start-up companies find venture capitalists who are interested in funding them.
B. Moving the company from being privately held to being offered at an initial public offering, or IPO, is the goal of many start-ups.

VOCABULARY BUILDER
Choose the term that best fits the definition. Write the letter of the answer in the space provided. Some terms may not be used.

1. Exchange of goods, services, information, or other business through electronic means
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

2. Private internal network of computers available only to employees of a business
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

3. Point at which a company changes from private to public ownership by selling shares of the company in the stock market
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

4. Loss of a distribution channel when that channel is no longer needed
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

5. People or companies that provide funds to start a company in exchange for part ownership of the company
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

6. Movement of products and services from producer to consumer
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

7. Internet service that allows you to browse through text, graphics, video clips, and sound bites from thousands of sources
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

8. Process in which a product is built the way you want it and only after you place the order
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

9. Addition of a level of the distribution system
   a. build-to-order model
   b. digital signal processor (DSP)
   c. disintermediation
   d. distribution
   e. e-commerce
   f. fixed wireless system
   g. initial public offering (IPO)
   h. intranet
   i. real-time marketing
   j. reintermediation
   k. venture capitalists
   l. web-enabled phone (WAP)
   m. wireless access
   n. World Wide Web (WWW)

10. Cellular telephone capable of receiving data over the Internet
    a. build-to-order model
    b. digital signal processor (DSP)
    c. disintermediation
    d. distribution
    e. e-commerce
    f. fixed wireless system
    g. initial public offering (IPO)
    h. intranet
    i. real-time marketing
    j. reintermediation
    k. venture capitalists
    l. web-enabled phone (WAP)
    m. wireless access
    n. World Wide Web (WWW)
REVIEW CONCEPTS

11. What are some examples of e-commerce?

12. What are some uses for wireless Internet connections?


14. What is the relationship between productivity and technology?

15. What does a venture capitalist do?

16. What is the difference between the World Wide Web and an intranet?

17. Why is real-time marketing a powerful tool?

18. Describe a distribution system that you benefit from every day.
19. Why is productivity the key to economic strength?

Productivity is the key to economic strength because it allows the economy to grow without inflation.

20. How does a fixed wireless system work?

Broadcasts the Internet to an antenna in a fixed location.

APPLY WHAT YOU LEARNED

21. Why would consumer groups be concerned about the merger of large companies?

Fear of fewer choices, limited competition, control and slant of content, and higher prices.

22. How has e-commerce benefited the U.S. economy in the early part of the new century?

Kept the economy rising because of the large number of new businesses created online or in support of older businesses adding online services. Helped businesses be more productive.

23. What are two benefits of disintermediation?

Cuts down on the people between the manufacturer and the consumer. Allows the manufacturer to react directly to consumer needs.

24. What are two benefits of reintermediation?

Adds to the options for distributing a product. Can expose the product to a new group of customers who might not otherwise see the product.

25. Why has e-commerce grown so quickly?

Look at Metcalf’s law — the more people who use it, the more products offered, which causes more people to use it.
26. What are the benefits to a small business for doing some of its business online?

- Added customer convenience
- Attract customers from other locations
- Provide information and sales 24/7

27. Why do you think Dell Computer Corporation doesn’t advertise related products on its web site?

- Dell does such a huge volume of business daily on its web site, it has not needed to advertise related products. It would just distract from Dell’s focused business of selling computers.

28. Discuss how you think e-commerce has changed the way business is conducted.

- People from all over the world buy and sell each day.
- Businesses are forming alliances on the Internet.
- Productivity is improving.

MAKE CONNECTIONS

29. COMMUNICATION Talk with the web master at your school and one from a local business. Ask them about their backgrounds and what they do to design and maintain their web sites. Write two or more paragraphs about what you find.

- Look for: Some formal web page design training. Designing the web page takes technical knowledge and an eye for design. The page needs frequent updates to keep attracting viewers.

30. HISTORY On the Internet, research the history of the Internet. Use word processing software to type and format your two-page report.

31. MATH Anne Hardy’s online computer business has grown rapidly, and she now sells 600 computers per year. The price per computer has increased to $1,800. What is Anne’s current annual sales in dollars?

- $1,080,000