Objectives

- To understand the different business models implemented on the Internet.
- To explore the transition from brick-and-mortar businesses to e-businesses.
- To understand the many options available to entrepreneurs online.
- To review both B2C and B2B e-business models.

The Road to the City of Emeralds is paved with yellow brick.
Lyman Frank Baum

Ye shall no more give the people straw to make brick.
The Old Testament

I can’t work without a model.
Vincent Van Gogh

The propensity to truck, barter and exchange one thing for another ... is common to all men, and to be found in no other race of animals.
Adam Smith

Method goes far to prevent trouble in business.
William Penn

To business that we love we rise betime,
And go to’t with delight.
William Shakespeare
2.1 Introduction

There are many benefits of bringing a business to the Internet. An e-business can offer personalization, high-quality customer service and improved supply-chain management—the strategic management of distribution channels and the processes that support them. In this chapter, we explore the different types of businesses operating on the Internet, as well as the technologies needed to build and run an e-commerce Web site.

Amazon.com, eBay™, Yahoo! and other e-commerce sites have helped to define industry categories and business models on the Web. Entrepreneurs starting e-businesses and people interested in e-commerce should be aware of the many e-business models. In this chapter, we review the storefront model, the auction model, dynamic-pricing models, the portal model and other Web-business models. Businesses operating within a particular model can leverage their technologies to differentiate themselves from the competition.

2.2 Storefront Model

The move toward e-commerce presents many benefits, as well as a number of new considerations. The storefront model is what many people think of when they hear the word "e-business." The storefront model combines transaction processing, security, online payment and information storage to enable merchants to sell their products online. This model is a basic form of e-commerce in which the buyer and the seller interact directly.
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**e-Fact 2.1**

Shopping online is an increasingly popular activity. At the close of 1999, nearly 55 million people (60 percent of Internet users) were shopping online.

To conduct storefront e-commerce, merchants need to organize online catalogs of products, take orders through their Web sites, accept payments securely, send merchandise to customers and manage customer data (such as customer profiles). They must also market their sites to potential customers—a topic further explored in Chapter 8, Internet Marketing.

Although the term "e-commerce" is fairly new, large corporations have been conducting e-commerce for decades, by networking their systems with those of business partners and clients. For example, the banking industry uses *Electronic Funds Transfer (EFT)* to transfer money between accounts. (This system will be discussed in greater detail in Chapter 4, Online Monetary Transactions.) Many companies also use a standard communications protocol called *Electronic Data Interchange (EDI)*, in which business forms, such as purchase orders and invoices, are standardized, so that companies can share information with customers, vendors and business partners electronically. EDI is discussed in detail in Section 2.6, B2B E-Commerce and EDI.

Until recently, e-commerce was feasible only for large companies. However, the Internet and the World Wide Web make it possible for small businesses to use EDI as well. E-commerce also allows companies to conduct business 24-by-7—all day, everyday—on a worldwide basis.

Some of the most successful e-businesses use the storefront model. Many of the leading storefront model companies are *B2C* (business-to-consumer) companies. For example, **More.com** is a health and beauty e-commerce site that uses an electronic shopping cart to allow customers to shop, buy and arrange shipment. Its products include skincare products, eye-care products, pharmaceuticals and many other health and wellness products.

**Moviefone.com** uses the Internet to improve its offline customer service. Through its Web site, customers have access to movie tickets, reviews, movie clips and trailers. Moviefone uses shopping-cart technology to offer its tickets, an advanced database system to store customer and inventory data and a strong supporting infrastructure to make its Internet operations possible.

### 2.2.1 Shopping-Cart Technology

One of the most commonly used e-commerce enablers is the *shopping cart*. This order-processing technology allows customers to accumulate items they wish to buy as they continue to shop. Supporting the shopping cart is a product catalog, which is hosted on the *merchant server* in the form of a *database*. The merchant server is the data storage and management system employed by the merchant. It is often a system of computers that conduct all of the functions necessary for running a Web site. A database is a part of the merchant server designed to store and report on large amounts of information. For example, a database for an online clothing retailer would typically include such product specifications as item description, size, availability, shipping information, stock level and on-order information. Databases also store customer information such as names, addresses, credit-card data and past purchases. The **Amazon.com** feature explains the these technologies and their implementation.
Amazon.com and the Storefront Model

Perhaps the most widely recognized example of an e-business that uses shopping-cart technology is Amazon.com. Founded in 1994, the company has rapidly grown to become one of the world's largest online retailers. Amazon.com offers millions of products to more than 17 million customers in 160 countries. Amazon.com also offers online auctions.

In its first few years, Amazon.com served as a mail-order book retailer. Its line product line has since expanded to include music, videos, DVDs, electronic cards, consumer electronics, hardware, tools, beauty items and toys. Amazon.com’s catalog is constantly growing and the site allows you to navigate among millions of products.

Amazon.com uses a database on the server-side (the merchant’s computer systems) that allows customers on the client-side (the customer’s computer, handheld device, etc.) to search for products in a variety of ways. This system is an example of a client/server application. The Amazon.com database consists of product specifications, availability, shipping information, stock levels, on-order information and other data. Book titles, authors, prices, sales histories, publishers, reviews and in-depth descriptions are also stored in the database. This extensive database makes it possible for Amazon.com to cross-reference products. For example, a novel may be listed under various categories, including fiction, best-sellers and recommended titles.

Amazon.com personalizes its site to service returning customers; a database keeps a record of all previous transactions, including items purchased, shipping and credit-card information. Upon returning to the site, customers are greeted by name and presented with lists of recommended titles, based on the customers’ previous purchases. Amazon.com searches the customer database for patterns and trends among its clientele. By monitoring such customer data, the company provides personalized service that would otherwise need to be handled by sales representatives. Amazon’s computer system drives sales of additional items without human interaction.

Buying a product at Amazon.com is simple. You begin at the Amazon.com home page and decide on the type of product you would like to purchase. For example, if you are looking for our book e-Business & e-Commerce How to Program, you can find the book by using the Search Box in the top-left corner of the home page. Select Books in the Search Box, then type the title of the book into the window. You will then be taken directly to the product page for the book. To purchase the item, select Add to Shopping Cart, on the top-right corner of the page. The shopping-cart technology processes the information and displays a list of the products you have placed in the shopping cart. You then have the option to change the quantity of each item, remove an item from the shopping cart, check out or continue shopping.

When you are ready to place your order, you proceed to checkout. As a first-time visitor, you will be prompted to fill out a personal-identification form with information including your name, billing address, shipping address, shipping preference and credit-card information. You will also be asked to enter a password that you will use to access your account data for all future transactions. Once you confirm your information, you can place your order.
For more examples of e-businesses that use shopping-cart technology, visit www.etoys.com, www.eddiebauer.com® and www.cdnow.com. In Chapter 3, Building an e-Business, we discuss the important methods and techniques for building an e-business.

While shopping-cart technology offers consumers the convenience of quick and easy transactions, it creates problems regarding consumer privacy and online security. These issues are discussed at length in Chapter 7, Internet Security and Chapter 11, Legal and Ethical Issues; Internet Taxation.

### 2.2.2 Online Shopping Malls

Online shopping malls present consumers with a wide selection of products and services. They offer more convenience than does searching and shopping at independent online storefronts, for a number reasons. For example, consumers can find products from a wide variety of vendors, and rather than making several separate purchases, they can use the mall’s shopping-cart technology to purchase items from many stores in a single transaction. Often, these online shopping-mall sites act as shopping portals, directing traffic to the leading shopping retailers for a specific product.

An example of a leading online mall is Mall.com, which features many of the same vendors you will find in your local brick-and-mortar mall—offline retailers such as J.Crew, The Gap (www.gap.com), The Sports Authority and the Sharper Image. Shopnow.com® and www.DealShop.com are other online malls.
2.3 Auction Model

The Web offers many kinds of auction sites in addition to sites that search other auction sites to pinpoint the lowest prices on an available item. Usually, auction sites act as forums through which Internet users can assume the role of either seller or bidder. As a seller, you are able to post an item you wish to sell, the minimum price you require to sell your item and a deadline to close the auction. Some sites allow you to add features such as a photograph or a description of the item’s condition. As a bidder, you may search the site for the availability of the item you are seeking, view the current bidding activity and place a bid—usually in designated increments. Some sites allow you to submit a maximum bidding price, and an automated system will continue bidding for you. Auction technology is explained in depth in the eBay feature.

\textit{e-Fact 2.2}

Forrester Research has revealed that an estimated $3.8 billion will have been spent on online person-to-person auctions in the year 2000 alone. This number is dwarfed by the $52 billion that is projected to be spent on business-to-business auctions in 2002.

The reverse-auction model allows the buyer to set a price that sellers compete to match, or even beat. One example of a reverse-auction site is Liquidprice.com, which processes your auction bid within two days. A faster option is available when the buyer sets a reserve price. A reserve price is the lowest price that the seller will accept. Sellers can set the reserve price higher than the minimum bid. If no bid meets the reserve price, the auction is unsuccessful. If a seller sets a reserve price at Liquidprice.com, the seller will receive a series of bids within six hours of the initial posting. However, in this faster option, if a successful bid is made, the buyer and seller must commit.

Although auction sites usually require a commission on sales, these sites are only a forum for online buying and selling. After an auction has been completed, both the seller and the bidder are notified, and the method of payment and the delivery is then worked out between the two parties. Most auction sites do not involve themselves in payment or delivery, but they might do so if delivery and payment services could be used to generate revenue and profit.

\textit{eBay} and the Online Auction Model

Online auctions have become an enormously successful method of e-commerce. The leading company in this business is eBay (Fig. 2.1). eBay is one of the most profitable e-businesses. The successful online auction house has its roots in a 50-year-old novelty item—Pez® candy dispensers. Pam Omidyar, an avid collector of Pez® dispensers, came up with the idea of trading them over the Internet. When she expressed this idea to her boyfriend, Pierre Omidyar (now her husband), he was instantly struck with the soon-to-be-famous e-business auction concept. In 1995, the Omidyars created a company called AuctionWeb. The company was renamed eBay and has since become the premier online auction house, with as many as 4 million unique auctions in progress and 450,000 new items added each day.
On eBay, people can buy and sell just about anything. The company collects a submission fee, plus a percentage of the sale amount. The submission fee is based on the amount of exposure you want your item to receive, with a higher fee required if you would like to be among the “featured auctions” in your specific product category, and an even higher fee if you want your item to be listed on the eBay home page under **Featured Items**. Listings are shown on the home page periodically. Another attention-attracting option is to publish the product listing in a boldface font (for an additional charge).

eBay uses a database to manage the millions of auctions it offers. This database evolves dynamically as sellers and buyers enter personal identification and product information. The seller entering a product to be auctioned, provides a description of the product, keywords, an initial price, a closing date for the auction and personal information. This data is used to produce the product profile seen by potential buyers (Fig. 2.2).
The auction process begins when the seller posts a description of the item for sale and fills in the appropriate registration information. The seller must specify a minimum opening bid. If potential buyers feel this price is too high, the item may not receive any bids. In many cases, a reserve price is also set. Sellers might set the opening bid lower than the reserve price to generate bidding activity.

If a successful bid is made, the seller and the buyer negotiate the shipping details, warranty and other particulars. eBay serves as a liaison between the parties; it is the interface through which sellers and buyers can conduct business. eBay does not maintain a costly physical inventory or deal with shipping, handling or other services that businesses such as Amazon and other retailers must provide.

eBay has spawned a number of businesses that use the site as their means of selling products. These businesses depend on eBay to remain up and running. Because downtime can be costly to an online business, companies like eBay make investments in high-availability computing and continuous-availability computing.
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Auctions are also being employed by business-to-business (B2B) Web sites. In these auctions, the buyers and the sellers are companies. Companies use online auctions to sell excess inventory and gain access to new, price-sensitive customers. Three examples of B2B auction sites are DoveBid, Inc. (www.dovebid.com), WorldCall Exchange (www.worldcallexchange.com) and U-Bid-It.com.

2.4 Portal Model

Portal sites give visitors the chance to find almost everything they are looking for in one place. They often offer news, sports and weather information, as well as the ability to search the Web. When most people hear the word "portal," they think of search engines. Search engines are horizontal portals, or portals that aggregate information on a broad range of topics. Other portals are more specific, offering a great deal of information pertaining to a single area of interest; these portals are called vertical portals.

Online shopping is a popular addition to the major portals. Sites such as Hotbot.com, About.com®.altavista.com and Yahoo.com® provide users with a shopping page that links them to thousands of sites carrying a variety of products.

Portals linking consumers to online merchants, online shopping malls and auction sites provide several advantages. These portals help users collect information on an item for which they are looking and allow users to browse independently owned storefronts, unlike...
some online shopping malls. (See the feature on Yahoo! for an example of a shopping portal.) Yahoo! permits users to browse a variety of sites while maintaining the convenience of paying through their Yahoo! account.

About.com offers its users an individualized experience through GuideSite, a service that acts as a personal shopper for the user. About.com’s “guides,” each specializing in a particular product type, are continually updated and are accessible via e-mail for consumer comments and questions.9

Consumers must be savvy when using portals to do their online shopping. Each portal structures its online shopping experience a little differently. Some portals charge merchants for a link; others do not. For example, GoTo.com bills merchants per consumer click-through. The more a business is willing to pay for each consumer click, the higher that business will appear in GoTo.com’s ranks. Portals that charge a listing fee limit the number of merchants accessible to customers.10 Other sites—About.com and altavista.com, for example—do not charge merchants to appear in some locations on their sites (About.com’s GuideSite and Altavista.com’s Shopping and Services Categories), but reserve the top of the page and other prime site locations for paying customers.

### Yahoo! and the Web Portal Model

Yahoo! is a horizontal portal with an enormous number of site links and subject categories (Fig. 2.3). It also provides consumers with shopping-cart capabilities. Through Yahoo!, consumers can link to a variety of online stores, adding items to their Yahoo! shopping cart as they shop. Once users are registered with Yahoo!, they may begin searching for products. After selecting a product and a merchant, users have the option of adding the item to their shopping cart or putting it on their wish list. The wish list is a personalized Web page that aggregates and stores all items you wish to purchase at a later date. It can also be used to build a Christmas list or a wedding registry.

To participate in Yahoo!’s shopping offering, a consumer clicks on the Shopping link at the top of Yahoo!’s home page. From there, a consumer can search for a product by selecting a category, conducting a keyword search or visiting one of the Featured Stores. Other features included on this page are gift registration, Hot Products, What’s Selling Now and the Yahoo! Points reward system. Signing up for gift registration or the reward system is a simple process, completed by clicking on the Sign-In link and creating a username and password.

When consumers are ready to check out, they can purchase all their items through Yahoo!, rather than purchasing at each store. This simplifies the purchasing process by limiting the number of registration and billing forms the customer must complete.

Yahoo! Shopping is just one of the many sections within Yahoo! A visitor to the site can search the Web for any product. To improve the quality of its Web-searching capabilities, Yahoo! has partnered with the search engine Google.com. When Web surfers enter a keyword using Google search technology, they receive a list of links based on the popularity of each site; the Web links are returned in descending order based on the number of people who link to each site.11
2.5 Dynamic-Pricing Models

In the past, bargain hunters had to search for deals by visiting numerous local retailers and wholesalers. In this section, we describe in depth the many ways in which creative pricing
is being used to generate business. Many of these methods would not be possible without
the Internet. Some companies enable customers to name the prices they are willing to pay
for travel, homes, automobiles and consumer goods.

Buying in bulk has always driven prices down, and there are now Web sites that allow
you to find lower prices by joining with other buyers to purchase products in large quanti-
ties. Another pricing strategy used by many e-businesses is to offer products and services
for free. By forming strategic partnerships and selling advertising (see Chapter 9, Affiliate
Programs) many companies are able to offer their products at a greatly reduced rate, and
often for free. Bartering and offering rebates are other ways in which companies are
keeping prices down on the Internet (see Chapter 8, Internet Marketing).

The Web has also improved the customer’s ability to compare pricing among many
vendors. Sites like Deja.com and bottomdollar.com aggregate pricing information
on a wide variety of products sold across the Web.

### 2.5.1 Name-Your-Price Model

The name-your-price business model empowers customers by allowing them to state the
price they are willing to pay for products and services (see the Priceline.com feature).
Many of the businesses that offer this service have formed partnerships with leaders of var-
ious industries, such as travel, lending, retail, etc. These industry leaders receive the cus-
tomer’s desired price from the business, which acts as an intermediary, and decide whether
or not to sell the product or service the customer wants. If the customer’s price is not ac-
cepted, the customer may offer another price. If it is accepted, the customer is obligated to
make the purchase.

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**Priceline.com and the Comparison-Pricing Model**

Employing the name-your-price business model has catapulted Priceline.com
into the spotlight. Through its system, you can name your price for airline tickets, hotel
rooms, rental cars and mortgages. Its patented business mechanism, called the demand-
collection system, is a shopping bot that takes customers’ bids to the Priceline partners
to see whether they will accept the prices for the requested products and services. Many
e-businesses are using intelligent agents (such as shopping bots) to enhance their Web
sites. Intelligent agents are programs that search and arrange large amounts of data and
report answers based on that data. Shopping bots are often used to scour data contained
within a single database or across the Web to find answers to specific questions. (Inte-
lligent-agent and shopping-bot technology are discussed in Chapter 10, e-Customer Re-
lationship Management.)

The buying process is easy at Priceline.com. For example, when looking for
a domestic flight, you first enter your departure location, destination, bid price and the
number of tickets you would like to purchase. You then select the travel dates and air-
ports in or near the departure or arrival cities. The more flexible you are with your travel
arrangements, the greater your chance of getting the air ticket at your stated price.
2.5.2 Comparison-Pricing Model

The comparison-pricing model allows customers to poll a variety of merchants and find a desired product or service at the lowest price (see the BottomDollar.com feature). These sites often generate revenue from partnerships with particular merchants. You need to be careful when using these services, though, because you may not necessarily be getting the best price available on the entire Web.

Priceline.com and the Comparison-Pricing Model (Cont.)

The Priceline.com bot presents your bid to the airlines and attempts to negotiate a fare below the customer’s bid price. If the bid is accepted, Priceline.com retains the difference between the customer’s bid and the actual fare. The markup percentage varies with the price that is accepted by the airline. For domestic flights, the whole process takes about an hour.

Priceline.com is another example of how the Internet and Web are profoundly changing the way business is conducted. In the case of airlines, hundreds of thousands of airline seats go empty each day. Priceline.com helps airlines sell those seats. By facilitating the sale of excess inventory at a discount, Priceline.com allows airlines to realize increased revenue and helps passengers save money.

Last-minute travel is expensive. Airlines and accommodations are often priced at a premium. With Priceline.com and similar services, you can often travel at reduced rates far below the retail price. However, waiting until the last minute is also risky, as there is no guarantee that seating will be available.

BottomDollar.com Will Help You Find the Lowest Price

BottomDollar.com uses intelligent-agent technology to search the Web and find the products you want at the best available prices. A customer can use BottomDollar.com to search for a product or to browse the various categories on the site. The service searches the catalogs of over 1,000 online retailers to find the products you want. The search usually takes less than a minute. Imagine trying to call or visit 1,000 different stores one by one.

Shopping bots and intelligent agents are changing the ways in which people shop. Rather than going directly to the stores with established brand names, customers are using services like BottomDollar.com to get the best available prices. This situation pressures online retailers to keep their prices competitive.

Similar comparison pricing sites include Dealtime.com, Deja.com and MySimon.com. DealTime (www.dealtime.com) selects merchants based on customer popularity, reliability and reviews. Deja.com is a multifaceted Web site offering shopping, discussion groups, customer ratings and comparison shopping. Users of the service can write their own opinions in the sections for discussions and reviews. MySimon (www.mysimon.com) offers a comparison-pricing search from a small number of better known retailers.
2.5.3 Demand-Sensitive Pricing Model

The Web has enabled customers to demand better, faster service at cheaper prices. It also empowers buyers to shop in large groups to obtain group discounts. The concept behind the demand-sensitive-pricing business model is that the more people who buy a product in a single purchase, the lower the cost per person becomes. Selling products individually can be expensive because the vendor must price a product so that it covers selling and overhead costs while still generating a profit. When customers buy in bulk, these costs are shared among products, and the profit margin is increased. Mercata™ (www.mercata.com) sells products for the home, electronics, computers and peripherals using the demand-sensitive pricing model. MobShop™ (www.mobshop.com) offers comparable services. Because pricing and products vary between these and other, similar sites, customers should visit several such sites before making a purchase.

2.5.4 Bartering Model

Another popular method of conducting e-business is bartering, or offering one item in exchange for another. Ubarter.com™ is a site that allows individuals and companies wishing to sell a product to post their listings. The seller makes an initial offer with the intention of bartering to reach a final agreement with the buyer. A broad range of products and services is available for barter.

If a business is looking to get rid of an overstocked product, iSolve™ (www.isolve.com) can help sell it. Products can be sold directly or on a barter basis. Potential customers send their pricing preferences to the merchant, who evaluates the offer. Deals are often part barter and part cash. Examples of items typically bartered are overstocked inventory items, factory surplus and unneeded assets.

2.5.5 Rebates

Rebates can help attract customers to your site. Many companies offer “everyday low prices” and specials to keep customers coming back. eBates.com is a shopping site where customers receive a rebate on every purchase. eBates.com has formed partnerships with wholesalers and retailers who offer discounts; the company passes these discounts to customers in the form of rebates. By adding value to a customer’s visit, eBates builds customer satisfaction and loyalty. eBates retains a portion of the savings.

eCentives.com offers a similar service. During the eCentives registration process, customers are asked to describe their interests, needs, hobbies, etc. This information allows eCentives.com to tailor rebates and product promotions directly to the customer. The site forms partnerships with vendors, who, in turn, offer their rebates and promotions on the site.

2.5.6 Offering Free Products and Services

Many entrepreneurs are forming their business models around advertising-driven revenue streams. Television networks, radio stations, magazines and print media use advertising to fund their operations and make a profit. The sites discussed in this section offer their products for free on the Web. Many of the sites also form partnerships with companies to exchange products and services for advertising space and vice versa.

The Hollywood Stock Exchange (www.hsx.com) is a free gaming site where visitors become traders of entertainment stocks and Hollywood star bonds. Traders are able to track
the value of their movie and music stocks and bonds as they fluctuate. The strongest portfolios 
are rewarded with prizes. Although no actual money is traded, real prizes are awarded. The 
company is able to offer its services for free by selling advertising to sponsors.

**iWon.com** is a portal site that rewards users with raffle points as they browse the 
site’s content. **iWon.com** has the appearance of a traditional search engine, offering links 
to news, sports, weather, and other topics. However, users registering and surfing the site 
become eligible for daily, weekly, and monthly prizes. Every advertisement and link 
has a point value, and as points accrue, so does a customer’s chances of winning. **iWon.com** supports its free contests through advertising revenue and partnerships.

**Freelotto.com** also offers free contests supported by advertising revenue. After 
registering with **Freelotto.com**, you can enter a free lottery. FreeLotto awards tens of 
millions of dollars in cash and prizes through its online lottery system. However, you must 
visit sponsoring Web sites in exchange for an entry into the daily **Freelotto.com** con-
test. **Freelotto.com** generates its income from these sponsors.

**Freemerchant.com** offers free hosting, a free store builder, a free shopping cart, 
free traffic logs, free auction tools and all of the necessary elements for running an e-com-
merce storefront or auction site. **Freemerchant.com** makes money from its strategic 
partnerships and referrals. **Freemerchant.com** partners are companies that can help 
small businesses establish a presence on the Web. These partners offer their services free 
of charge in exchange for advertising.

At **Startsampling.com**, you can earn prizes for trying and reviewing products. 
The site allows you to request free samples from companies across the country. Web sites 
offering similar services include **free-programs.com**, **freestuffcenter.com** and 
**emazing.com**.

### 2.6 B2B E-Commerce and EDI

B2B, the acronym for "business-to-business," refers to the relationship between two or 
more companies. Online or offline, the term "B2B" can be applied to simple relationships 
between a single buyer and a single seller, as well as to complex distribution and fulfillment 
systems that link hundreds of suppliers and manufacturers. Electronic Data Interchange 
(EDI) systems help businesses manage their supply chains. A company’s supply chain re-
fers to the relationship between original equipment manufacturers (OEMs), secondary 
manufacturers, distributors, shipping companies, retailers and consumers.

Traditional EDI systems are made up of a combination of computers and communica-
tions equipment that give businesses the ability to conduct secure, reliable transactions 
electronically. Traditional EDI, as opposed to Internet-based EDI, uses a *value-added net-
work*, or VAN. The VAN is a closed network that includes all members of a production pro-
cess. Every supplier, manufacturer and distributor is linked to the EDI system through the 
VAN. EDI systems track and document the daily accounting and inventory data for a busi-
ness. For example, an airplane manufacturer may have an EDI system in place to manage 
its supply and distribution relationships. In a given day, the airline manufacturer might 
receive thousands of yards of sheet metal, countless shipments of electronics equipment 
and dozens of engines from various suppliers worldwide. Each of these shipments must 
pass through complex distribution channels. Since the shipments are essential to the timely 
completion of an airplane, the manufacturer must make every effort to ensure that the prod-
ucts will be delivered on time. Operations personnel at the manufacturing plant use the EDI
system to buy supplies, track shipments and keep an accurate inventory count. This process is done through a standardized transfer of electronic documentation that verifies each party in a transaction, records the terms and conditions of the transaction and processes the order. Purchase orders and invoices are commonly processed through EDI systems.\(^\text{14}\)

Although EDI systems improve efficiency and promote better accounting practices, they can be costly to operate. Many suppliers and distributors are small machine shops and shipping companies, which do not have the technology to link themselves into a traditional EDI system. Suppliers and distributors also have to consider their other customers. If a supplier standardizes its information systems with a single manufacturer, it may become more difficult to do business with other, “incompatible” manufacturers. In this instance, the manufacturer can either incur the cost of integrating the supplier into the system or exclude the supplier from the EDI system and manage the relationship manually. Either way, the benefits of the EDI system are compromised, and expenses increase. The Internet is improving EDI standards by making it more accessible to a broader group of manufacturers, distributors and retailers.

Since the transfer of data is conducted through a common system (the Web), compatibility is less of an issue. In the past, companies with incompatible information management systems might have had difficulty conducting transactions. XML (eXtensible Markup Language) can now be used to improve compatibility between disparate systems, creating new market opportunities. XML is a development technology similar to HTML (Hypertext Markup Language). HTML is a language used to format the content and appearance of Web sites. It has been a de facto Web development standard since its creation. XML takes the language one step further and defines the meaning of data.\(^\text{15}\) For example, an XML developer can code the data in a product catalog with XML. Each product in the catalog is assigned tags describing its size, color, price, supplier, estimated lead time and discounting policy. Since XML can be used with a wide range of systems and platforms, the company could then offer its catalog data on multiple B2B exchange sites. The product name, price and other descriptive data are formatted automatically to fit the look and feel of each site.\(^\text{16}\)

\textbf{ebXML.com} is the Web presence of the United Nations body for the Facilitation of Electronic Commerce (UN/CEFACT) and the OASIS, a nonprofit organization dedicated to the standardization of electronic business. The goal of the group is to create and support an XML-based standard, ebXML, for business communication and operations on the Web. The site is a source of documentation for the ebXML standard and the latest news and updates on the progress of the standard.\(^\text{17}\)

B2B exchange sites offer this new form of EDI. These exchange sites have been established in almost every major industry and provide a method of buying, selling, bartering and partnering in a standardized environment. Some of the most successful automobile, energy, health care and construction organizations use B2B exchanges to conduct business with their suppliers and customers. The typical B2B exchange site allows manufacturers, wholesalers, retailers and end consumers to buy, sell and barter over the Web (Fig 2.4). By aggregating these relationships into a single marketplace, B2B exchange sites can provide secure, reliable and more accessible forms of EDI.

Many B2B exchanges and Internet-based EDI systems enable businesses to link their current information systems with those of other businesses. For instance, an automobile exchange can give an automobile manufacturer access to hundreds of suppliers, each competing for its business. This competitive environment leads to lower prices for the automo-
bile manufacturer. Once a purchase has been made, the manufacturer pays for the product and arranges shipment through the site. Once the cars are assembled, the manufacturer can use the exchange to form relationships with various dealerships and auctions.

B2B e-commerce and the use of exchange sites allow businesses to reach their markets faster and more efficiently. By shortening lead time, or the time it takes to receive a product from a supplier after an order has been placed, businesses can lower their inventory costs and gain competitive advantage. Long lead times increase inventory costs, increase worker stress levels and strain relationships between the manufacturer and the supplier.\(^{18}\)

Companies can arrange shipment of supplies at the exact time they are needed, thereby limiting any unnecessary inventory expense. In many cases, a company’s inventory management system will place a supply order automatically when inventory levels drop below critical levels. This eliminates the need for a stockroom, as parts are delivered from the truck directly to the production floor. This system is often referred to as JIT (just-in-time) inventory management. JIT inventory management has been practiced for decades, but a fully integrated e-commerce infrastructure can improve a company’s ability to operate under such protocols. The Web can help reduce supplier delays, which traditionally are a major risk for manufacturers.\(^{19}\)

**e-Fact 2.3**

Goldman Sachs has estimated that B2B e-commerce will generate as much as $1.5 trillion in revenues by 2004, with some estimates running even higher.\(^{20}\)

The process of integrating traditional EDI systems with the Web is often referred to as Enterprise Application Integration (EAI).\(^{21}\) There are a number of companies that use XML and similar technologies to help other companies integrate their current systems with the Web. These companies, called business-to-business integrators (B2Bi), include Excara (www.excara.com), Webmethods.com, Commerce One® (www.commerceone.com), Tibco Software, Inc. (www.tibco.com), Freemarkets.com® and Mercator®, (www.mercator.com). They help a brick-and-mortar business develop an online presence with e-commerce capabilities, enabling the business’ products to be distributed through its site, B2B exchanges and corporate intranets. They will help convert a company’s paper or CD-ROM-based catalog into a dynamically enhanced digital catalog. B2B integrators will also improve a company’s supply-chain management efforts by standardizing its electronic data interchange protocols and product-listing procedures. Many integrators also help companies improve their marketing and promotional efforts.

The ItoI exchange site, located at www.itoi.com, is designed for inter-industry trading and offers services in the chemical, retail, construction and energy industries. The business provides a marketplace for raw materials, chemicals, equipment and services. Visitors have the option of buying through traditional methods, auctioning or conducting exchanges—in an exchange, customers make requests, and merchants attempt to fill the requests at the best available price.

**BidGov.com** is an exchange site for the U.S. government. This intra-government exchange site fosters economic growth by generating new business for government agencies and related groups. **BidGov.com** operates with a reverse auction model. An agency looking to make a purchase must first submit a request for proposal (RFP)—a formal statement of need that allows vendors to sell their products and services to the agency. Once this request is made, the agency will post classified ads and receive bids from other individuals and agen-
cies capable of fulfilling the request. Customers can also make purchases through a traditional auction. Figure 2.4 gives examples of additional B2B exchanges, listed by industry.

### 2.7 Click-and-Mortar Businesses

In this section, we explore the advantages and the disadvantages of developing an online presence, and the ways in which traditional businesses are implementing Internet strategies to enhance their brick-and-mortar operations. We also consider the decision to create an Internet-only business.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Key Benefits</th>
<th>Exchange Sites</th>
</tr>
</thead>
</table>
| Automotive   | • Combined supplier base.  
• Connects automobile manufacturers, dealers and consumers in a single marketplace.  
• Decreases lead time and production costs. | Covisint.com  
IStarXchange.com  
Autovia.com       |
| Electronics  | • Provides access to thousands of components from hundreds of electronics suppliers.  
• Provides ability to search by part number, product type or manufacturer.  
• Increases competitive pricing. | FastParts.com  
avnet.com  
chipcenter.com |
| Energy       | • Provides real-time pricing data on energy commodities.  
• Provides access to hundreds of energy commodities.  
• Allows regional energy providers to gain access to a worldwide market. | enrononline.com  
altra.com  
houstonstreet.com |
| Food         | • Reduced lead times preserve perishables.  
• Provides access to real-time pricing data.  
• Online auction technology allows for alternative pricing. | gofish.com  
globalfoods.com  
foodtrader.com |
| Chemical     | • Access to millions of chemical products from thousands of suppliers.  
• Integrated supply chains promote faster, more reliable transactions. | chemdex.com  
chemconnect.com  
e-chemicals.com |
| Construction | • Contracting and subcontracting are made simpler by online bidding.  
• Construction companies can find raw materials from suppliers worldwide. | Bidcom.com  
buildscape.com  
e-builder.com |

Fig. 2.4  A sampling of B2B exchange sites by industry. (Reprinted by Permission of Forbes Magazine © 2000 Forbes 2000.)
Internet-only establishments face several challenges, particularly those businesses offering business-to-consumer services, such as e-retailers and online banking services. One problem facing Internet-only businesses is customer relations. As we will see in Chapter 16, Online Banking and Investing, Internet-only banks can struggle to build a customer base, because many consumers demand human-to-human communication when managing their money. In Chapter 10, e-Customer Relationship Management, we explore online methods of improving communication and customer service.

While Internet-only businesses offer the convenience of home shopping and often reduce costs for the consumer, they also face the challenges of name recognition and customer satisfaction. Branding is discussed in Chapter 8, Internet Marketing. Internet shoppers rely on a screen image of a product when they are making purchasing decisions. Texture, true color and quality are often difficult to determine. Many click-and-mortar businesses allow customers to purchase products online and pick them up at the brick-and-mortar store. Many of these companies also allow online purchases to be returned at physical locations. This adds convenience for the customer, but adds another level of accounting complexity for the merchant. In the next chapter, we explore choosing a domain name, as well as features that can be added to your site to address your customers’ concerns about quality. Trust and confidence are two key issues that often impede an e-business in its beginning stages.

There are many circumstances when it is more beneficial to operate as an Internet-only business. For example, the overhead costs (or the costs of operation, including rents, utilities, storage and taxes) of Internet-only businesses are generally lower than those of traditional brick-and-mortar businesses. However, e-business owners must also be aware of the costs of computer equipment and of managing a 24-by-7 business (i.e., a business that functions round the clock every day of the year).

Businesses must also consider the ability of their organizations to function online. Restaurants, for example, cannot exist solely on the Web, but they can offer a Web site for providing directions and making reservations. Menus, entertainment and special events can also be posted on the site. The same might be true for many other businesses in service industries. Auto and home repair, beauty and medical assistance are among the industries that cannot provide their services online.

**e-Fact 2.4**

Click-and-mortar retailers accounted for 59 percent of online retail sales, compared with 41 percent for Internet-only retailers, in 1999.  

One of the most highly publicized transitions from brick-and-mortar operations to click-and-mortar operations was that of Charles Schwab. Facing competition from E*TRADE and other online stock-trading Web sites, Charles Schwab (www.schwab.com) moved its brokerage services to the Web. The Internet has allowed customers to trade at lower commission rates and has given them a chance to become more informed investors. Schwab has found that its customers value the security and service they receive from a traditional broker, but also enjoy the convenience of trading on the Web.  

Chapter 16, Online Banking and Investing, discusses these and related issues in detail.

Barnes & Noble (www.bn.com) has established itself as a leader in the booksellers’ market, both online and offline. Customers have access to the same inventory online as they do in the actual stores. In the event that a customer is dissatisfied with a purchase made online, the product can be returned to a local brick-and-mortar Barnes & Noble store.
1-800-Flowers (www.1800flowers.com) offers its flower and gift delivery service both online and offline. The Web has given a major boost to the gift and floral industry by making it easier for customers to make purchases. One of the problems with offering an order-by-phone service only is that the customer does not get to see the product before it is sent. Other online flower dealers include Winston Flowers (www.winstonflowers.com), FTD.com and flowersdirect.com.

CircuitCity (www.circuitcity.com) specializes in consumer electronics, appliances, audio and video. It has effectively integrated its online and offline entities. CircuitCity has tied its offline stores to its online stores, allowing customers to order online and pick up the products at their local stores, though shipping is still available.

In this chapter, we have examined the various business models used on the Internet. In the next chapter, we discuss building e-businesses. We explore writing a business plan, choosing a domain name, finding a Web-site host and Web-site design. We outline many turnkey solutions available to entrepreneurs (several of which are free) and give future e-business owners a better understanding of the fundamental technologies needed to operate a business online.

2.8 Internet and World Wide Web Resources

**Storefront Model**

barnesandnoble.com
One of the first brick-and-mortar companies to make a large-scale commitment to the Web, Barnes & Noble sells books, e-books, CDs and software on their Web site using the shopping cart technology.

Moviefone.com
Moviefone enhances its offline efforts by allowing people to buy advance tickets to movies from its Web site. Visitors can also view movie trailers, read cast interviews and get the latest movie reviews.

Half.com
This company sells new, used or refurbished items often at half the cost from its Web site. You can buy products from the site or sell used items to Half.com.

**Auction Model**

eBay.com
This site is one of the most well known and successful sites on the Web. The site gives average people the chance to sell their items on the Internet.

auctiontalk.com
This site is an auction portal, providing links to other auctions and specific products being auctioned at various sites online.

fsauctions.co.uk
Freeserve is one of the UK’s most popular Web sites. FSauctions is the freeserve auction site.

**Portal Model**

google.com
Google is an advanced search engine that ranks search results based on the true popularity of the Web site. The more people that follow a link to a particular site, the higher the site will appear in a search.

yahoo.com
Yahoo is a full scale portal allowing people to search the Web using a traditional search engine, by browsing specific categories. Yahoo! also offers games, e-business solutions and free e-mail.
AltaVista is one of the most widely visited sites on the Web. It is a full-scale search portal providing targeted links and a search bar.

**Name-Your-Price Model**

Priceline.com
The originator and patent holder of the name-your-price model, Priceline.com gives customers the ability to name their price for travel arrangements and scores of other products and services.

ticketsnow.com
Finding low-priced tickets to concerts and theater is often difficult, this site gives people the ability to bid for a lower price on their tickets.

allbooks4less.com
Textbooks can be expensive, this site allows people to name-their-price for text books.

**Comparison-Pricing Model**

Deja.com
Deja.com uses the comparison pricing model to sell products through its Web site. The site also hosts newsgroups on a broad range of topics.

Pricewatch.com
People interested in building a computer or upgrading their current system will find the lowest prices on computer equipment on this price comparison Web site.

Bottomdollar.com
Bottomdollar.com was one of the first sites to offer comparison-pricing services. The site will find lower prices on a broad range of retail products including consumer electronics, software, books, camera equipment, toys and more.

**Demand-Sensitive Pricing Model**

Mercata.com
One of the originators of the group-buying model on the Internet, this site will drop the price as the number of its sold to the group increases.

Mobshop.com
A competitor of Mercata, Mobshop also lowers prices as group buying increases.

Shop2gether.com
This site gives visitors a chance to buy products at a lower price buy buying with a group.

**Bartering Model**

Ubarter.com
This site facilitates B@B transactions by allowing members to trade assets through the ubarter.com Web site.

Bargain.com
This site allows business to sell virtually any product in return for Trade dollars. These Trade dollars can be used to purchase other products on the Bigvine Web site.

Bartertrust.com
Automotive parts and equipment, advertising, office supplies and retail products are among the products available to trade on this Web site.
Rebates

www.ebates.com
This site provides electronic rebates on popular products available on its site.

www.ecentives.com
This site is a competitor to ebates and allows customers to get rebates and incentives on purchase made through the eCentives Web site.

Free Products and Services

2000freebies.com
This search engine offers visitors links to thousands of free products and services on the Web.

www.killerfreebies.com
Killerfreebies offers links to free software, clothing, wedding supplies, server space and a large number of free products and services.

www.startsampling.com
Startsampling will send members free product samples in return for filling out short questionnaires. People can also win free samples by participating in contests and quizzes.

Click-and-Mortar Businesses

www.compusa.com
Compusa combines its online and offline efforts to provide the best possible service to its customers. A full product catalog is available from the Web site.

www.circuitcity.com
Circuit City allows customers to pick up products purchased online in its brick-and-mortar stores.

SUMMARY

• An e-business can offer personalized service, high-quality customer service and improved supply-chain management.
• An e-business is defined as a company that has an online presence. Selling, trading, bartering and engaging in transactions over the Web is referred to as e-commerce.
• The storefront model combines transaction processing, security and information storage, to allow merchants to sell their products on the Web.
• The banking industry uses Electronic Funds Transfer (EFT) to transfer money between accounts.
• Many companies use Electronic Data Interchange (EDI), in which business forms, such as purchase orders and invoices, are standardized so that companies can share information with customers, vendors and business partners electronically.
• E-commerce enables companies to conduct business 24 hours a day, 7 days a week (24-by-7), worldwide.
• B2C stands for “business to consumer.”
• The merchant server is the data storage and management system employed by the merchant.
• A database is a part of the merchant server designed to store and report on large amounts of information. Databases also store customer information, such as names, addresses, credit-card data and past purchases.
• Online shopping malls present consumers with a wide selection of products and services. Consumers can search and shop for a variety of products; rather than making separate purchases, they can use the mall’s shopping-cart technology to purchase items from many stores in a single transaction.
• Forrester Research has revealed that an estimated $3.8 billion will have been spent on online person-to-person auctions in the year 2000 alone. This number is dwarfed by the $52 billion that is projected to be spent on business-to-business auctions in 2002.

• Reverse auctions, or auctions that allow the buyer to set a price as sellers compete to match, or even beat it, are becoming more popular.

• eBay uses a database to manage the millions of auctions that it offers. This database evolves dynamically as sellers and buyers enter personal identification and product information.

• High-availability computing attempts to minimize downtime; continuous-availability computing attempts to eliminate it completely.

• Fault-tolerant systems use redundancy. Every crucial piece of hardware—processors, disks and communications channels—has one or more levels of backup, so, in a failure, the system simply shifts from a failed component to a backup component. The system keeps running while the failed component is fixed or replaced.

• In the past, bargain hunters had to search out deals by visiting numerous local retailers and wholesalers. Today, a few mouse clicks are all you need to find the lowest price available.

• Buying in bulk has always driven prices down, and there are now sites on the Web that allow you to lower the price of a product by waiting for others to purchase the product at the same time.

• A pricing strategy used by many e-businesses is to offer products and services for free.

• Bartering and offering rebates are ways in which companies are keeping prices down on the Internet.

• The name-your-price business model empowers customers by allowing them to choose their price for products and services.

• Shopping bots are often used to scour data contained within a single database or across the Web to find answers to specific questions.

• The comparison-pricing model allows customers to poll merchants and find a desired product or service at the lowest price. These sites often take their revenue from partnerships with merchants.

• The Web has allowed customers to demand better, faster service at cheaper prices. It has also empowered buyers to shop in large groups to achieve a group rate on products.

• The concept behind the demand-sensitive pricing business model is that the more people who buy a product in a single purchase, the lower the cost per person becomes.

• Another popular method of conducting e-business is bartering, or offering an item you do not want or need in exchange for something for which you have a need.

• Rebates are a good way to attract customers to your site. Many companies offer everyday low prices and specials to keep customers coming back.

• B2B e-commerce is defined as buying, selling, partnering, bartering or trading, conducted between two or more businesses. Goldman Sachs has estimated that B2B e-commerce will generate as much as $1.5 trillion in revenues by 2004, with some estimates running even higher.

• The B2B marketplace is one of the fastest growing segments of e-commerce. Industry leaders have begun using B2B marketplaces and exchanges to improve their business methods on the Web.

• Procurement, or acquiring goods or services, and effective supply-chain management can be difficult and costly aspects of running a business.

• B2B service providers make business-to-business transactions on the Internet easier. These e-businesses help other businesses improve policy and procedure, customer service and general operations.

• Brick-and-mortar companies that wish to add a Web presence must determine the level of cooperation and integration the two separate entities will share.

• A company that can offer its services online and offline can add value to the customer’s experience.
TERMINOLOGY

1-Click® system  fault-tolerant systems
24-by-7  high-availability computing
auction model  horizontal portal
B2B exchange  industry to industry (ItoI)
B2C (business-to-consumer)  intelligent agent
bartering  JIT (just-in-time) inventory management
brick-and-mortar business  lead time
business to business (B2B)  merchant server
business-to-business integrators (B2Bi)  name-your-price model
click-and-mortar business  procurement
client/server application  redundancy
comparison-pricing model  request for proposal (RFP)
continuous-availability computing  reserve price
database  reverse-auction model
demand collection system  search engine
dynamic-pricing model  shopping bot
e-books  shopping cart
e-business  storefront model
ebXML  supply-chain management
e-commerce  toolbar
EAI (Enterprise Application Integration)  value-added network
EDI (Electronic Data Interchange)  vertical portal
EFT (Electronic Funds Transfer)

SELF-REVIEW EXERCISES

2.1 State whether the following are true or false. If the answer is false, explain why.
   a) A shopping cart allows customers to continue to browse after selecting each item they
      wish to purchase.  True.
   b) In a reverse auction, the seller sets a price and customers make individual bids to buy an
      item.  False. This statement expresses the concept of a true auction.
   c) A reserve price is the highest bid a customer is willing to make.  False. A reserve price
      is the lowest price a seller will accept in an auction.
   d) In the demand-sensitive-pricing model, the price decreases as more people buy.  True.
   e) The name-your-price model is an auction-based model.  False. The name-your-price model
      allows customers to get a lower price by clearing the price with a number of vendors. This model
      does not involve an auction.

2.2 Fill in the blanks in each of the following statements:
   a) A business with a presence off, but not on, the Web is described as a ________ company.
      brick-and-mortar
   b) The ________ model is designed to bring prices down by increasing the number of cus-
      tomers who buy a particular product at once.  demand-sensitive pricing
   c) Customers can shop for products and store them for later purchase using a ________.
      shopping cart
   d) Reserve prices are set by a seller in an ________.
      name-your-price model
   e) The two types of portals are called ________ and ________.
      vertical, horizontal

ANSWERS TO SELF-REVIEW EXERCISES

2.1  a) True. b) False. This statement expresses the concept of a true auction. c) False. A reserve
     price is the lowest price a seller will accept in an auction. d) True. e) False. The name-your-price model
     allows customers to get a lower price by clearing the price with a number of vendors. This model
     does not involve an auction.

2.2  a) brick-and-mortar. b) demand-sensitive pricing model. c) shopping cart. d) auction. e) vertical, horizontal.
EXERCISES

2.3 State whether the following are true or false. If the answer is false, explain why.
   a) eBay began as using the storefront model, but eventually introduced the auction model.
   b) Shopping bots are often used to scour data contained within a single database or across the Web to find answers to specific questions.
   c) A B2B exchange allows businesses to conduct transactions online despite having disparate information systems.
   d) Businesses with both a physical and an online presence are referred to as brick-and-mortar businesses.
   e) Just-in-time inventory management is used to authenticate the shipper and receiver of products in a warehouse.

2.4 Fill in the blanks in each of the following statements:
   a) __________ computing attempts to minimize downtime; __________ computing attempts to eliminate it completely.
   b) A __________ is a formal statement of need that allows vendors to solicit their products and services to the government.
   c) __________ sites allows customers to search several Web sites to find a desired product or service at the lowest price.
   d) Integrating traditional EDI systems with the Web is often referred to as __________.
   e) __________ can be used to improve compatibility between disparate systems, creating new market opportunities.

2.5 Categorize each of the following items as it best relates to the storefront model, the auction model or dynamic-pricing models:
   a) reserve price
   b) liquid price
   c) shopping cart
   d) catalog
   e) Mercata
   f) BottomDollar.com

2.6 Define each of the following terms:
   a) Web-based training
   b) name-your-price model
   c) shopping cart
   d) reverse auction
   e) redundancy
   f) high-availability computing
   g) merchant server

2.7 (Class Discussion) Visit Amazon.com, eBay, Yahoo! and Priceline.com. How do each of these companies generate a majority of their revenues? Visit each site and comment on the sites navigability. Which model would you be most likely to use when making a purchase? Why?

2.8 Visit BottomDollar.com, Pricewatch.com and Deja.com each of these sites offers a comparison-pricing service. At each site, search for a digital camera, a photo scanner and a printer. Find the lowest price on each of these products at each site. Try to use the same brand and model in each case. Make a chart with five columns and place the names of each product type vertically in the first column. In the header row, list the name of each site. Under each company write the appropriate product name and price for each specific product type. Add up your total for each site. Now visit a traditional retailer such as circuitcity.com or compusa.com find the same products on one of these sites and list them in the fifth column. Find a total cost of the products on
from the retailer's web site. Which of the sites was able to provide the lowest price on these products? Which site was able to offer price quotes from the largest number of sources?

2.9 Enrononline.com is a B2B exchange for the energy industry. Take the free tour available on the site's home page. How many energy products does enrononline.com offer? According to the tour, how does a person initiate a bid on an energy commodity? What is the "All or Nothing" option as described in the tour? Enron offers an alternative to the B2B exchange at the end of the tour, what is this alternative buying method?

2.10 Spend one hour searching the Web for free products and services. List as many free resources as possible. Estimate the value of each free item you find. Determine the total value of all of the free resources you discovered. Write a short essay summarizing your search efforts and discussing your findings. If you are working with a group, compare your findings with those of others.

2.11 Make a spreadsheet containing a column for each of the following business models: storefront model, auction model, name-your-price model and B2B exchange model. In each column, list three e-businesses that operate in the corresponding model. Visit the Web site of each of the companies you have selected. Answer the following questions:
   a) Do the companies operate with more than one of the defined business models (e.g., storefront and auction)? If so, which models do they implement?
   b) Are the companies Internet-only companies, or brick-and-mortar businesses?
   c) How do the companies generate revenue?

WORKS CITED

The notation <www.domain-name.com> indicates that the citation is for information found on that web site.

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