In this episode of “Small Business School,” the series on PBS stations, you will meet Joan and Bill Keller, founders of Le Travel Store. In 1976 the couple invested $3,000 they received as a wedding gift and borrowed another $3,000 to open a travel agency. Their first big seller was a low-cost plane ticket to Europe, which in 1976 was novel.

They built a loyal following, and in 1985 Joan and Bill left their funky Pacific Beach location and moved into an upscale mall in downtown San Diego. Then in 1994 they took a leadership position in the effort to revive San Diego’s downtown historic business district. The couple bought a building, then worked to bring its original 1907 personality back to life. Just two years later, they put up the cash to build a location in the world’s newest location, cyberspace.

Joan and Bill always seem to be in the right place at the right time. While their physical location is a lovely large shop full of great travel gear, books, and maps—all dedicated to the independent international traveler—as I write this, 60 percent of their sales are coming from http://letravelstore.com. They hired a team to design and deploy the first site, and over the years Joan and a staff person have learned HTML coding and how to shoot, crop, and post photos on the site. Without the help of “the pros,” Joan launched a shopping spot at Yahoo.com; location, location, location continues to be critical to success. You will meet Joan and Bill Keller via video tape but, to fully appreciate their e-commerce success, have a look at the site for yourself.

“We’ve always been investors rather than consumers. We like to take what we earn and reinvest it in growing the business.”

—Joan Keller


Go to page 730 for More! on Le Travel Store.


How many hits did you get this month? What is being done about the virus that is infecting our community? Did you get the firewall set up? How many cookies did we deliver today? Are these questions posed by baseball fans, medical doctors, firefighters, and bakers? Not necessarily. They may simply be questions posed by e-commerce entrepreneurs, speaking the language of cyberspace about their business operations.

We currently live in a digital economy fueled by the tremendous growth of the Internet. Access to the Internet is rapidly transforming the way we live and the way business is conducted. It is important for aspiring entrepreneurs to learn as much as they can about cyberspace because there’s opportunity online.

What is the Internet, and how does it support e-commerce? What benefits does e-commerce offer small firms? What business models reflect an e-commerce strategy? What initial considerations confront an Internet start-up? What are some of the criminal and ethical issues related to e-commerce? These are the primary questions we address in this chapter. We hope that our discussions will help you understand both the opportunities and the limitations associated with today’s digital economy. Additional e-commerce topics are discussed in later chapters.

The Internet and E-Commerce

Since e-commerce is predicated on the Internet, let’s begin with a brief history history lesson.

What Is the Internet?

In 1957, the Russians launched Sputnik, the first unmanned satellite, into space. Their success in this first lap of the space race spurred a chain reaction in the United States. One of the charges given to the U.S. Department of Defense, in response to the fears raised by Sputnik, was to develop a communication system that could survive a nuclear war. So the department began intense and secret research on developing a different way to transmit information over communication channels. One of the results is what we now know as the Internet.

The Internet is one huge, loosely connected computer network that links smaller networks all over the world through modems, phone lines, satellite links, and other communication channels. It enables people to communicate with other connected computer users via electronic mail (e-mail) and real-time (typed) conversation. In addition, it provides access to huge amounts of data, stored on computers all over the world.
the world, that can be read or downloaded. And it allows people at one physical site to use the processing power of computers located at a different physical site. The Internet is a phenomenon that has significantly changed, and will continue to change, the way people communicate in the new millennium.

**How the World Wide Web Works**

The World Wide Web (WWW) is a system of Internet servers accessible via browsers, which navigate via hypertext links. The World Wide Web was conceived and initiated in 1992 at the European Laboratory for Particle Physics, commonly known as CERN, in Switzerland. The idea was to expand the types of media used to convey information—to use not only text but also sound, video, animation, and hyperlinks. Today, information is posted on Web “pages,” just as it is on printed pages in a book, and the interface is graphical.

Servers store information and process requests from clients. Using HyperText Transfer Protocol, or HTTP, the servers send the requested information and instructions on how to display that information (formatted in HyperText Markup Language, or HTML) back to the clients. The clients then handle the chore of displaying the information for the end user. In order to display the information, clients use a special type of program called a Web browser.

**Using the Internet for E-Commerce**

What does the term *e-commerce* really describe? *E-commerce* means electronic commerce, or the paperless exchange of business information via the Internet. It is a means of conducting business transactions that traditionally have been carried out by telephone, by mail, or face to face in brick-and-mortar establishments. As Table 3-1 shows, the growth of the Internet and e-commerce has been dramatic, despite a crash in Web-based stocks in 2000.

Although the Internet, like the telephone, is merely a tool that parties use to communicate with each other, it is a communication medium unlike any previously available to business. It is reshaping the way firms conduct business while also providing an alternative to the brick-and-mortar store—the traditional physical store from which businesses have historically operated. E-commerce has even found its way into the board games we play at home. In the new dot.com edition of the

**Table 3-1: E-Business Growth and Projections**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Internet hosts</td>
<td>12.9 million</td>
<td>56.2 million</td>
<td>More than 100 million</td>
</tr>
<tr>
<td>Web users</td>
<td>28 million</td>
<td>65 million (U.S.)</td>
<td>83 million (U.S.)</td>
</tr>
<tr>
<td>Percent of Web users who buy goods or services</td>
<td>25%</td>
<td>39%</td>
<td>46%</td>
</tr>
<tr>
<td>Business-to-consumer Web commerce</td>
<td>$2.6 billion</td>
<td>$13 billion</td>
<td>$108 billion</td>
</tr>
<tr>
<td>Business-to-business Web commerce (includes transactions over extranets)</td>
<td>Less than $43 billion</td>
<td>$109 billion</td>
<td>$1.3 trillion (9% of U.S. sales)</td>
</tr>
<tr>
<td>Advertising revenue</td>
<td>$236.5 million</td>
<td>$2 billion</td>
<td>$7.7 billion</td>
</tr>
</tbody>
</table>

world’s most successful board game, Monopoly, brick-and-mortar utilities and real estate have been replaced by Internet-based properties like eBay and Lycos.

Myths About E-Commerce

Though e-commerce is a young industry, several myths have already developed about opportunities in the digital marketplace. To avoid confusion, we will briefly examine and dispel each myth.

First, some believe that the technical nature of the Internet makes e-commerce too expensive for small firms. This simply isn’t true. Many e-commerce sites have been successfully launched with relatively small budgets. Consider the Web site of entrepreneur Deb Edlhuber’s Prairie Frontier seed company, based in Waukesha, Wisconsin. Launched in 1997 after Edlhuber completed a course of self-instruction about the Web, the site had an original cost of only $400. “We put our Web address on our packaging and our displays. People would buy the seeds at garden centers and see the URL and go to the site to get information,” says Edlhuber. In 1999, her Web site was named by Inc. magazine as one of the 20 best small business Web sites. And, so, the first myth is dispelled: Small firms with limited budgets can be successful online.

A second myth is that e-commerce is nothing more than a new way of taking orders, supplementing the capabilities of the telephone or fax machine. True, customers can place orders on a Web site—but e-commerce offers much more to both customers and firms, and it requires business savvy and sound planning. For example, Data-Link Associates, a computer supplies company, began in a traditional fashion; owners Buddy and Helene Stone prospected for customers over the phone, making sales calls and so forth from their North Bellmore, New York home. Then,

IN THE TRENCHES

Utilizing New Technology

Who’s Running the Online Store?

Many e-commerce firms begin as one-person operations, often resulting in an overwhelming experience for the entrepreneur. Outsourcing is one approach to lightening the workload. An entrepreneur who recognized the benefits of outsourcing is Lars Hundley, who launched the Clean Air Gardening Company online in 1998. This online store sells environmentally responsible lawn and garden products—push mowers, composters, etc. Hundley saw very early that he needed help with daily business operations, so he included outsourcing as part of his business model.

Hundley’s success—the company reported profits of $100,000 in 2000—has hinged on knowing what to outsource and what he can best do himself. For a monthly fee of $100, Yahoo! Store processes orders and payments. And to expedite payment to suppliers, the business uses an automated accounting program offered by Wells Fargo Internet banking system. “I don’t have to mess with licking envelopes,” Hundley says. Also, a company named Personalized Communications handles initial orders and also compiles marketing information for the firm at a cost of $350 a month.

Using these services gives Hundley time to concentrate on decisions about what new products to offer and time each day to make a trip to the warehouse—a 10-by-17-foot ministorage unit—where he picks up the merchandise necessary to fill the day’s orders.

Outsourcing saves Hundley time, but it does cost money. However, Hundley believes that having himself as the company’s sole employee is the best way to keep expenses low and profits high—at least for now.

in 1997, the Stones launched their first Web site, where they posted their product list. As the Stones’ Internet business savvy improved, sales increased—to $1.5 million in 2000. E-commerce has changed their entire relationship with their customers. Customers are now finding them and asking questions. Their marketplaces are as far away as Australia, and credit card buying has increased from 1 percent of sales to almost 20 percent, improving credit collection. Is e-commerce effective? Yes. Is it simply a means of taking orders? No.

The last myth we dismantle is that being first is the only way to be successful online. Innovators do, of course, have an extra edge in defining and developing a market, but the “earliest bird” doesn’t automatically have a monopoly on success. An entrepreneur interested in entering a market can learn many important lessons from watching innovators. For example, marketing clothing online is no longer novel, but still provides opportunities for success. Adventure travel clothing firm Ex Officio Inc., founded in 1986 and based in Seattle, uses its Web site to offer visitors more than just an online clothing store. Ex Officio launched the site in 1999 to provide travel information as well as clothing items. “We want it to be a virtual community for travelers,” says marketing manager Janine Robertson. In fact, four screens of travel information are provided to customers before they even encounter a garment for sale. This clothing store is successful, even though it certainly wasn’t the first to go online, perhaps because navigating its site is an enjoyable experience for both consumers and travelers.

Benefits of E-Commerce to Small Firms

Electronic commerce benefits small firms in a number of ways. Basically, it offers a firm the opportunity to compete with bigger businesses on a more level playing field. Limited resources frequently restrict the ability of small firms to expand beyond local markets. Confined to their brick-and-mortar world, small firms typically serve a small geographic area. But the Internet blurs geographic boundaries. E-commerce allows any business to access customers almost anywhere. The Internet is proving to be the great equalizer, giving small firms a presence comparable to that of the giants in the marketplace.

An e-commerce operation can help small firms with cash flow problems by compressing their sales cycle—that is, reducing the time between receiving an order and converting the sales to cash. E-commerce systems can be designed to generate an order, authorize a credit card purchase, and contact a supplier and shipper in a matter of minutes, all without human assistance. The shorter cycle translates into quicker payments from customers and improved cash flows to the business.

E-commerce also enables small firms to build upon one of their greatest strengths—customer relationships. The Internet has brought new life and technology to bear on the old-fashioned notion of customer service. Electronic Customer Relationship Marketing (eCRM) is an electronically based system that emphasizes customer relationships. At the heart of eCRM is a customer-centric data warehouse. A typical eCRM system allows an e-commerce firm to integrate data from Web sites, call centers, sales force reports, and other customer contact points, with the end goal of building customer loyalty. To appreciate the possibilities, consider this hypothetical example posed by Professor Thomas W. Leigh of the University of Georgia, as he discusses how an existing dot.com retailer might use eCRM:
Consider my local flower and gift retailer, or even a larger firm such as flowers.com and garden.com. With my permission, they can build a personalized database on Thomas W. Leigh. You can think of this database as a folder, hypercard, or line of code. The data may be collected from a variety of sources. Checkout line bar codes detail my purchases. Warranty cards and survey responses suggest my interest and preferences. Telephone calls indicate my interest in certain information or problem resolution. And, very importantly, if the firm has my trust, the eCRM system can be managed by an ongoing dialogue that allows me to help the flower retailer understand and manage my flower and gift needs.

Let’s see, that means that flower retailer can develop an annual gift plan for me. Imagine, I could plan all my gifts on January 1 instead of merely making a pledge “to do better in 2001.” The retailer would then remember my wife’s and mother’s birthdays. And our anniversary. I could choose a set of pre-selected gifts, perhaps modified at the suggestion of the retailer if something new hit the market. The retailer could schedule appropriate delivery dates. No more late gifts and apologies. The retailer would then send me a reminder and a timely payment plan. No surprises when I get home. Just a happy family! Sounds pretty good, doesn’t it? Oh, by the way, they can suggest new products to fit my needs without asking me. Why? Because I gave them permission to track my purchases. They can begin to anticipate my needs, making my life even simpler and better.4

There are, of course, innumerable other benefits that small firms can reap from e-commerce; space does not allow us to discuss them all here. And as e-commerce continues to evolve, additional benefits will emerge.

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**IN THE TRENCHES**

**UTILIZING NEW TECHNOLOGY**

**DOGIE SNACKS GO GLOBAL**

The Internet offers small firms the opportunity to expand beyond local markets. This is exactly the approach used by Dan Dye and Mark Beckloff of Kansas City, Missouri, founders of Three Dog Bakery. Back in 1989, they began baking dog biscuit treats in their kitchen and selling them to local pet owners. The premise for their venture was that dog owners, who spend billions of dollars each year just to feed their pets, would buy them high-quality (and high-priced) doggie snacks.

Sales were so good that two years later Dye and Beckloff rented an old storefront for $750 a month and began diversifying. Later, they launched their first Internet site, hoping to sell snack treats online. It worked! Their electronic store has provided access to customers around the world. “We ship to Japan and Jakarta, and we never would have had the resources to reach [those customers] otherwise,” Beckloff says. Their Web page racks up more than a million hits a month and the average sale is $40, more than twice the average sale at the bakery counter.

With their click-and-mortar strategy, Beckloff and Dye have created a $10 million-a-year business. Clearly, these two entrepreneurs seized the opportunity to use e-commerce to grow their business.

**Source:** From material from http://www.threedog.com; and Dina Temple-Raston, “Canine Cuisine Fetches Success,” USA Today, February 17, 2000, p. 12B.

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http://www.threedog.com
E-COMMERCE BUSINESS MODELS

The dictionary defines an opportunity as a “combination of circumstances favorable for a chance to advance oneself.” Thus, it is logical to study the circumstances surrounding e-commerce in its current state in order to uncover e-commerce opportunities. Let’s begin by examining some existing e-commerce business models.

The term business model describes a group of shared characteristics, behaviors, and goals that a firm follows in a particular business situation. Online business firms differ in their decisions concerning what customers to serve, how best to become profitable, and what to include on their Web sites. Figure 3-1 shows some possible alternatives for business models. None of these models can currently be considered dominant, and some Internet businesses cannot be described by any single model. The real world of e-commerce contains endless combinations of business models.

Can a poorly devised business model be a major factor in business failure? Yes, it can! Appendix 3A discusses the reasons for three dot.com failures.
Type of Customers Served

Marketing theory classifies traditional brick-and-mortar firms as manufacturers, wholesalers, or retailers, depending on the customers they serve. E-commerce businesses also are commonly distinguished according to customer focus. There are three major categories of e-commerce business models: business-to-business (B2B), business-to-consumer (B2C), and auction sites. In this section, we examine some strategies used by e-commerce firms within these three categories.

**BUSINESS-TO-BUSINESS MODELS** Notice in Table 3-1 that the dollar amounts listed for firms using a **business-to-business (B2B) model** (selling to business customers) are significantly greater than those listed for firms with a business-to-consumer (B2C) model (selling to final consumers). Because B2B success stories generally receive less publicity than B2C ventures do, the potential of a B2B opportunity may be missed. Aspiring entrepreneurs should be sure to consider the B2B model.

All B2B firms do not look alike. One form of B2B strategy emphasizes sales transactions. By using online capabilities, a B2B firm can create greater efficiency in its selling and buying. Dell Computer Corporation is a good example. By dealing directly with its corporate customers online, it is able to build computers to specifications after
an order is placed. Storage and carrying costs are reduced, and dealing directly with Dell allows the buyer to pay less. Dell also has online connections with hundreds of suppliers and is able to implement more efficient delivery of parts for its factories.

As B2B e-commerce models continue to develop and evolve, new versions will emerge. The wise entrepreneur will continue to monitor these changes to learn where opportunities lie.

**BUSINESS-TO-CONSUMER MODELS** In contrast to a B2B model, a **business-to-consumer (B2C) model** has final consumers as customers. In the traditional retail setting, customers generally approach a business location (a brick-and-mortar store) with the intent of shopping or purchasing. Alternatively, customers might purchase via telephone or mail order, using a printed catalog. The B2C model introduces another alternative for consumers—buying online.

Amazon.com represents the classic B2C firm, which is directly focused on individual final consumers. B2C ventures are extremely diverse in the products they sell, with products ranging from clothing to pet items, computer software, toys, and groceries. The B2C model offers three main advantages over brick-and-mortar retailing: speed of access, speed of transaction, and round-the-clock access to products and services, often referred to as **24/7 e-tailing**.

On the negative side, many final consumers avoid online shopping for several reasons, the primary ones being reluctance to send credit card data electronically and to purchase a product without first seeing it. Table 3-2 summarizes concerns mentioned by respondents in a recent survey conducted by a major Internet consulting firm.

Many B2C firms offer an electronic environment where customers can experience a sense of community. For example, Delia’s sells fashionable clothing to young girls but also devotes a part of its Web site to something called The Lounge. It’s a chat room where young girls can talk about their summer plans, music, the prom, or whatever. It creates a feeling of community that builds customer loyalty.5

### TABLE 3-2

<table>
<thead>
<tr>
<th>Why Consumers Didn’t Buy Online</th>
<th>Percentage of Online Households That Didn’t Purchase via the Web</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Uncomfortable sending credit card data across Net</td>
<td>97%</td>
</tr>
<tr>
<td>2. Preferred to see product before purchased</td>
<td>53%</td>
</tr>
<tr>
<td>3. Couldn’t talk to a sales representative</td>
<td>18%</td>
</tr>
<tr>
<td>4. Couldn’t get enough product information to make decision</td>
<td>16%</td>
</tr>
<tr>
<td>5. Product too expensive relative to alternatives</td>
<td>15%</td>
</tr>
<tr>
<td>6. Couldn’t get information or products suited to needs</td>
<td>13%</td>
</tr>
<tr>
<td>7. Couldn’t talk to other buyers of product about their views</td>
<td>12%</td>
</tr>
<tr>
<td>8. Process too long</td>
<td>11%</td>
</tr>
<tr>
<td>9. Had to download software</td>
<td>11%</td>
</tr>
<tr>
<td>10. Web site was hard to navigate through</td>
<td>10%</td>
</tr>
<tr>
<td>11. Process was too confusing</td>
<td>8%</td>
</tr>
<tr>
<td>12. Product information or products were not current</td>
<td>6%</td>
</tr>
</tbody>
</table>

*Source: “The Second Annual Ernst & Young Internet Shopping Study,” sponsored by the National Retail Federation, 1999, p. 11.*
B2C dot.com businesses have the ability to quickly change merchandise mixes and prices, as well as the appearance of their “store” (their Web site). Traditional merchants find such changes very costly and time-consuming.

**AUCTION SITE MODELS** Some entrepreneurs sell their wares over the Internet without either a Web site or a storefront, by means of e-commerce sites based on the auction site model. Internet auction sites are Web-based businesses offering participants—primarily final consumers, but also businesses—the ability to list products for bidding by potential buyers. Revenues to the auction site are derived from listing fees and commissions on sales.

The earliest e-commerce auction sites dealt with collectibles, but now such sites are conduits for almost any kind of product. EBay is one of the largest e-commerce businesses using this model. Yahoo!, the largest search engine on the Internet, also has an auction site, which offers free postings and no commissions.

Partners Michael O’Harro and Charles Shoup operate a profitable small business called Champions Stuff, which uses eBay to sell its vintage photographs. Without a storefront or Web site, Champions Stuff sells about a thousand photos per week. The company interacts with buyers via e-mail and offers a money-back guarantee.

At sites geared exclusively to businesses, suppliers compete online for manufacturers’ orders in live open auctions. Such business giants as General Motors, Raytheon, and Quaker Oats report saving more than 15 percent on parts, materials, and even services at Internet auctions sponsored by FreeMarkets, Inc.

**Approach to Profitability**

Despite the many exciting changes brought about by the electronic age, one issue remains of concern to both traditional and e-commerce firms: profitability. E-commerce firms seek profitability in a variety of ways. Revenue-based models emphasize revenue enhancement, while expense-based models focus on expense reduction. Growth-based models concentrate on growing the customer base.

**REVENUE-BASED MODEL** Like more traditional businesses, e-commerce ventures must generate revenues in order to survive. Revenue-based models are focused on generating, maintaining, and increasing revenues. However, these revenues may be derived in many different ways. In the early days of the Internet, the only sources of revenue for online sites were charges to access online content and user subscription fees. As e-commerce grew, other sources of revenue were identified.

For example, Web site owners learned that they could sell advertising on their sites, with the revenue tied to the number of hits, or Internet connections made to the site. First used in 1994, banner advertising has become an important source of revenue for Web site owners. Fees may be charged, or revenue may be derived from commissions on sales resulting from the advertising appearing on the site.

“Good banners are billboards on the Internet,” says Edward Ziv, a business technology consultant with Flash Creative Management, in Hackensack, New Jersey. “They’re short, with just a few words, and offer a clear message. And you’ll increase your results if two of those words are ‘Click Here,’” he says.

A popular form of site linkage today is called affiliation. In a formal agreement with the sponsoring firm, other Web site owners contract to include on their sites an icon that allows visitors quick access to the site of the sponsoring firm. Such a
relationship can be a substantial source of revenue for small firm affiliates. Amazon.com, for instance, pays affiliates up to a 15 percent commission for sales generated by traffic originating from their sites. In late 2000, Amazon.com had over 460,000 Web sites in its network.

Online flower store Florist.com features links to dozens of affiliated gift-related Web sites on its site. Affiliation is “a way for us to expand what’s sold on our site, at no cost to us,” says Aaron Benon, who runs the retail flower shop in Beverly Hills. “These are products we don’t have to fulfill or ship, yet we get a commission on them,” he says.9

Of course, the essence of e-commerce is the generation of revenue from selling products and services online. Transaction sales are the fastest-growing source of revenue for online businesses. Once a firm commits its Web site to transaction revenues, the performance of the site becomes extremely important.

**EXPENSE-BASED MODEL** Expense reduction is the factor motivating many small firms to enter cyberspace. Lowering costs always increases profitability, and **expense-based models** focus on reducing costs.

A number of business functions can be conducted more economically over the Internet. One costly process that can often be performed more cheaply online is providing information to customers in a timely manner. For example, airlines have found that they can provide updated scheduling and pricing information via the Internet at far less cost than is required to support a call center or mail brochures. Many small firms have discovered that they can save time and money by incorporating a Frequently Asked Questions (FAQ) feature on their Web site, thereby reducing the number of individual customer inquiries they have to answer.

B2B firms, in particular, use e-commerce to reduce costs associated with sales force management. In fact, some industries are seeing a reduction in the size of their sales force because Web sites are handling much of the selling activity more efficiently.

**GROWTH-BASED MODEL** At first glance, the **growth-based model**, which focuses on customer growth for profitability, appears to be out of focus. This is because many of the more established e-commerce firms are not yet making a profit or do not appear to be approaching profitability. These firms are concentrating on growth that they assume will eventually bring profits. The growth model partially explains the survival of firms like Amazon.com. Expenditures on marketing and technology have kept Amazon.com in the red. Although stock prices are falling, they are still relatively high, and the company is viewed as a leader in e-commerce.

Apparently, Amazon.com and other firms like it are establishing customer relationships on the Web with the hope of cashing in at a later date. The term *monetizing* is used to describe the essence of this e-commerce model. How long these firms can continue to survive without showing a profit is unclear.

By early 2001, the business morgue was filling with dot.coms, in part because of business models that didn’t bring in sufficient revenues. Pets.com, for example, was losing about 20 cents on every dollar of revenue at the time of its failure—the more it sold, the more it lost.

**Degree of Online Presence**

A third broad way of categorizing e-commerce models relates to the firm’s intended level of online presence. The role of a Web site can range from merely offering content and information to enabling complex business transactions.
CONTENT/INFORMATION-BASED MODEL  In a content/information-based model of e-commerce, a Web site provides access but not the ability to buy or sell products and services. During the early days of e-commerce, the content model was the model of choice. For example, America Online (AOL) began with this model. Originally, revenue for AOL came from fees paid by users for the privilege of connecting and gaining access to its content. Today, content models are found mostly in countries where Internet usage by small firms is less developed.

A slight variation of the content model is the information model. A Web site built on this model contains information about the business, its products, and other related matters but doesn’t charge for its use. It is typically just a complement to an existing brick-and-mortar store. For example, a small business named Duck Soup, located in Sudbury, Massachusetts, launched its Web site in June of 1999 after its retail store completely burned. The goal of the site was “to create an environment that’s . . . inviting and [as] much an expression of the owners’ personalities as the real store was.”10 The site told the story of the fire and kept customers informed of the company’s plans. A new brick-and-mortar store opened in early 2000. The company is now experimenting with the sale of coffee from its online store.

Another example of an information model is FunMail’s Web site. Betty J. Houck, of Cuyahoga Falls, Ohio, operates this home-based business that sells lawn ornaments. Information regarding the products is available on the site, but orders can be placed only by phone or fax.

TRANSACTION-BASED MODEL  In a transaction-based model of e-commerce, a Web site provides a mechanism for buying or selling products or services. The transaction-based model, which is at the very heart of e-commerce, calls for Web sites to be online stores where visitors go to shop, click, and buy.

Many dot.com stores sell a single product or service. For example, Huber and Jane Wilkinson, based in Waco, Texas, market their reading comprehension program, Ideachain, through their MindPrime, Inc. Web site. Similarly, Todd Green of Santa Monica, California sells his HeadBlade shaving device only from his Web site (see Case 3).

Other ventures are direct extensions of a brick-and-mortar store, creating a click-and-mortar strategy. For example, if you were interested in purchasing a new printer, you might research options on Office Depot’s Web site and then choose to either buy your selection online or drive to the neighborhood Office Depot store and pick up the printer there. Gradually, a small firm can add to and improve its Web site store until all of its products are available online.

PREPARING TO LAUNCH A DOT.COM BUSINESS

Numerous decisions must be made prior to launching a dot.com business. Many of these, such as financing, are beyond the scope of this chapter. However, three critical startup tasks related to Web sites are discussed here: (1) creating and registering a site name, (2) building a user-friendly site, and (3) promoting the site.

Creating and Registering a Site Name

Selecting the best name for a dot.com business is an important decision. Contrary to general opinion, plenty of Web site names remain available. Currently, a domain name can have a maximum of 67 characters preceding the final domain
Utilizing New Technology

Web Sites Can Create Channel Conflict

Does cyberspace marketing significantly impact traditional distribution policy? It can. Just ask Bob Duncan, owner of American Leather, a nine-year-old furniture company based in Dallas, Texas. He remembers what happened when one of his retailers went online.

American Leather set up a Web site in 1997 to serve as an online brochure only. Retailers carrying the branded furniture were happy with this policy. One day, a retailer in another state began offering a “lowball” price for American Leather furniture over its Web site to shoppers not located in its geographic market area. The retailer in one buyer’s local area was irate, considering the sale to be a violation of dealer exclusivity, which was a practice of American Leather. Duncan’s reaction was as follows:

The incident was a wake-up to me: with retailers flocking to cyberspace like birds flying south for the winter, how could we enforce our policy of dealer exclusivity? And perhaps even more challenging: how could American Leather itself take advantage of the growth opportunities offered by the Internet without destroying its relationships with its 600-plus retailers—the very heart of the distribution channel that we at the company had spent our entire careers developing?

American Leather has since redesigned its Internet site to include more detailed product information and a dealer locator to encourage customers to find the American Leather retailer nearest to them.

Duncan is also considering selling products directly over the Internet with the delivery and after-sale support handled by the dealer closest to the buyer. If he decided to implement this policy, Duncan says, “We would then pay the dealer the approximate margin that they would have made on the sale that had taken place in their showroom.”


Web sites can create channel conflict. Given all the letters, numbers, and hyphens that domain names can contain, it is estimated that 99 percent of all possible dot.com domain names are still available.

Since a domain name gives a small business its online identity, it is desirable to select a descriptive and appealing name. “It’s no harder to make up names for dot.coms than for colas,” says Ira Bachrack of San Francisco’s NameLab.11

Obviously, some of the shorter, more creative names have already been taken. But, like real estate, Web site names can be bought and sold. Marc Ostrofsky, former CEO of Information Publishing, owns more than 100 domain names. He purchased the name “business.com” in 1997 from a British Internet service provider for $150,000 and later sold it for $7.5 million.12

Once a desired name has been selected, it should be checked for availability and then registered. The Internet Corporation for Assigned Names and Numbers (ICANN) is the nonprofit corporation currently overseeing the global Internet. Recently, it approved seven new domain designations, including “.biz” for businesses, in response to a need to make available valuable addresses taken in existing domains. However, the rollouts of the new domain designations have encountered problems. Some companies complain that the planned application process is flawed,
and the introduction scheduled for October 2001 was delayed by the September 11th terrorist attacks.

ICANN, however, does not register names; this must be done through a domain registration firm. Several domain registrars allow a search of the Internet to see if a proposed name is already taken. InterNic provides an Accredited Registrar Directory that lists ICANN-accredited domain registrars.

One U.S.-based registrar is Network Solutions (NSI). Figure 3-2, on page 70, shows the results of an NSI search on the name “longeneckermoorepetty.com.” As you can see, at the time this book went to press, the name was available. NSI owns Root Server A, the primary top-level Internet server, which allows Web users to access a Web address anywhere in the world. NSI had the original, exclusive franchise—given by the federal government—to register domain names. Since the exclusive franchise ended in 1999, Root Server A has remained in control of the global distribution of new Web addresses. Occasionally, NSI allows visitors to stand next to Root Server A and pose for pictures.13

Another ICANN-accredited domain name registrar is Namesecure, whose Web page is shown in Figure 3-3, on page 71. Note that the registration costs listed are relatively low.

Building a User-Friendly Web Site

First impressions are important, and high-quality Web design gives a small e-commerce business the opportunity to make a good first impression on each visitor.

The technical aspects of developing a Web site are beyond the scope of this chapter. Fortunately, there are many technical specialists available to help design and build a site. Our purpose here is simply to provide some useful tips about Web site design.
Shown in Table 3-3, on page 72, are 10 Web site design tips for e-commerce, excerpted from an article posted on Microsoft’s Web site.

Figure 3-4, on page 73, shows the home page of Shoebuy.com, a young entrepreneurial business that sells shoes online. It is a very good example of a user-friendly Web page.

There are many reasons why Web sites fail to retain customers. One of the most frequent problems is slow downloading. Online shoppers are a fickle bunch, and the slightest inconvenience sends them away. If a page takes more than 20 to 30 seconds to load, there’s a high chance of abandonment, as Rick Edler discovered. Edler launched a low-tech Web site for his business, Edler Group, at a cost of $285 in 1997. When he later decided he needed something fancier, he hired a Web developer who built a site filled with color graphics and motion—at a cost of $7,000. But it took too long to download. Traffic was below expectations. “So much was happening,” Edler says. “You just stared at it like you were watching a commercial. We
were scaring people away.”¹⁴ The site was finally scrapped and replaced by a new, simpler version.

Remember, Web sites will also fail if they do not satisfy visitors’ information needs. Frequently, this is because designers look inward to the business for Web design ideas, rather than outward to customer needs.
**TABLE 3-3  Web Site Design Tips**

<table>
<thead>
<tr>
<th>Tip 1: Make It Easy to Buy</th>
<th>Tip 6: Provide Visual Clues to Location</th>
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<tbody>
<tr>
<td>This tip may seem vague and ambiguous, but it truly is the most important recommendation. Put yourself in your customer's shoes and test your designs. Isolate issues that might block users from making a successful purchase. Ask questions, such as: • How many pages and clicks does it take to make a purchase? • How much information do users have to fill out initially, versus when they make a second-time purchase? • Can a quick purchase be made directly from the home page? • Does the site provide clear instructions on how to store selected items before completing a transaction? • How well does the site communicate with a user? • Does the site acknowledge users' actions and provide clear, concise feedback as users progress through the purchasing process? • Can users collect multiple items before checking out?</td>
<td>For stores that have multiple departments, it is important to create a sense of varying location. This can be accomplished by changing colors on the navigation bar or the background page, and by providing different titles with text or graphics.</td>
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<tr>
<th>Tip 2: Make a Strong First Impression</th>
<th>Tip 7: Show Off Products</th>
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<tr>
<td>The e-commerce home page must make a strong first impression. This is where users are grounded to your company and persuaded to start shopping. It is first and foremost important to provide branding for your store. Next, it is important to provide a clear visual definition of your store's categories or departments. This can be accomplished with tabs or within the navigation bar.</td>
<td>If at all possible, provide photographs of individual products. Place the photos in three sizes: thumbnail, medium, and large. A thumbnail photo is best used in a list of several products. At the individual product level, provide a medium size image, and the ability to click to view the enlarged version of the product. The larger view is not necessary, but worth considering if your product has details that are not reflected in the medium or thumbnail photograph.</td>
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<tr>
<th>Tip 3: Minimize Distractions: Advertising Isn't Always Necessary</th>
<th>Tip 8: Encourage Spontaneous Purchases</th>
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<tr>
<td>You may consider not providing any advertisements on the home page or in other places throughout the purchase process. Remember that the goal of your home page is to encourage shopping and purchasing. You don't want to deter or lose users by having them click on another company's advertisement.</td>
<td>This can be accomplished in various ways. If a product is mentioned on the home page, place product images and details, the sale price, and a direct link to purchase the item. In a news or feature article, include direct links to purchase products discussed within the article. Or on the side column, where advertisements for other companies traditionally would go, create intimate, focused advertisements for your products, with a direct link to purchase the items from advertisements.</td>
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<tr>
<th>Tip 4: Make It Personal</th>
<th>Tip 9: Alternate Background Colors in Long Lists</th>
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<tr>
<td>Looking for a way to build a strong rapport with your shoppers? Provide personalization for the user, after the user registers as a customer. Use this information to provide a personalized greeting to the home page or various department pages. Welcome, Nadja, enjoy your shopping experience. Provide a private place that requires a password, where each shopper can check past orders, order status, wish lists, gift certificates and so forth.</td>
<td>One good visual trick to make a long table of items easier to read is to alternate a light color background for each row or item. You can see an example of this if you search on an author's name at barnesandnoble.com. The search results return alternate item background colors of gray and white.</td>
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<tr>
<th>Tip 5: Avoid Long Instructions</th>
<th>Tip 10: Allow Users to Collect Items</th>
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<tr>
<td>If you need to include long instructions on how to use the site or make a purchase, it is time to rethink. Complete a quick purchase, a user needs minimal-to-no instructions. Most users will not read long instructions, and may turn away in confusion.</td>
<td>Provide a shopping basket or a place for users to collect items before checking out. Never make the user fill out the lengthy payment, shipping, and other forms more than once in a transaction! At the product level, provide a link to check out and a link to add that product to the shopping cart while continuing to shop.</td>
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**Promoting the Web Site**

How do customers learn about a Web site? You have to tell them—and there are many ways to do this. A dot.com address can be promoted both to existing customers and to prospects by including the URL on existing print promotions,
business cards, letterhead, and packaging. Special direct mail and radio campaigns can also be designed for this purpose.

Additionally, a dot.com business can be promoted by placing banner advertisements on other Web sites, where a quick click will send users to the advertised Web
W E B S I T E L A U N C H S P U T T E R S

Businesses making the leap to the Web should leave plenty of time for working out problems, advises Dan Caulfield. Caulfield put up his own Web site way back in 1995. However, plans for a new Web page launch for his Chicago-based recruiting business, Hire Quality, Inc., did not go well. “We expected to put our system on the Internet and that people would be able to use it intuitively and quickly. . . . That didn’t happen. . . . We almost had to rewrite five years of code to make this work on the Web with multiple users,” he says.

Assisted by promotional support on cable TV, Caulfield waited for Web traffic to build. However, visitors to the site couldn’t figure out how to use it. Hire Quality’s customer service phone representatives were always busy trying to assist clients with the Web site.

The site was eventually improved, but programming costs consumed most of the marketing budget. Caulfield’s advice: “Give yourself an extra 30 days before you roll something out. Make sure the site is operational before you even tell anyone you’re doing it.”


http://www.hirequality.com

C R I M I N A L A N D E T H I C A L I S S U E S I N E - C O M M E R C E

The e-commerce community is young, but it has already demonstrated a vulnerability to crime and questionable business practices. With its low cost of entry and instant access to customers all over the globe, the Internet is a prime venue for criminal activity.

Cybercrime

Criminal activity on the Internet has come to be known as cybercrime. Cybercrimes having an important impact on e-commerce include hacking, scamming, and viola-
Hacking is a potential problem facing every e-commerce venture. It troubles dot.com businesses in three ways. First, hackers can get control of a site and deface or vandalize it. E-mail, which arrives unrequested, is frequently used by hackers to deliver destructive viruses to a site.

Second, hackers may steal electronic files. This is the cyberspace equivalent of breaking into a traditional brick-and-mortar store and carrying off the contents of the file cabinet. In December of 1999, an Internet music retailer based in Wallingford, Connecticut learned that someone had broken into its computer system and copied files containing customer credit card numbers. The hacker demanded $100,000 in ransom and threatened to publicize the credit card numbers.15

Third, some hackers seem to enjoy breaking into a dot.com site just to block customer access. The disruption may be achieved either by bombarding the site with traffic or by redirecting traffic to a competitor’s site. The attacks that temporarily crippled CNN.com, Amazon.com, and eBay were of the former type; the office-products retailer Staples suspected that the latter was happening to hits intended for its site. Web sites can guard against hackers with a firewall, which is a combination of hardware and software designed to keep unauthorized outsiders from tampering with a computer system.

Internet scamming is on the rise. “Many consumers shop online and have good experiences . . . but the increases we’ve seen in both the number of complaints and the amounts of money lost point to the need for more consumer protection and
increased education,” says Susan Grant, director of Internet Fraud Watch (IFW). An overwhelming 87 percent of the frauds reported to IFW in 1999 were related to online auction sales. Sales of general merchandise represented only 77 percent of the total complaints.

**Questionable E-Commerce Business Practices**

Several controversial e-commerce practices relate to Internet privacy. The enormous number of data exchanges in e-commerce raises serious questions about personal privacy. Many times, privacy loss involves information of little value to the provider. Nevertheless, there are fears that the Internet can and does go too far.

One potential threat to privacy bears a sweet name but a sour taste—cookies. A *cookie* is a data file that is electronically sent to the customer’s computer when other requested materials are downloaded from an Internet Web site.

Cookies were developed so that Web sites could recognize return visitors and thereby generate a customized and personalized response. Consider the following hypothetical scenario:

*Say a visitor goes to the fictional www.itsyourweather.com. The site asks the computer if it can store a cookie on the user’s hard drive. The file in effect says, “This is User #2135.”*

*While there, you, the user, tell the site you live in Omaha, travel to New Zealand and are fascinated by thunderstorms. It notes that User #2135 has these interests.*

<table>
<thead>
<tr>
<th>Problem</th>
<th>Legal Solution</th>
<th>Industry Solution</th>
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<tbody>
<tr>
<td><strong>Hacking</strong> (illegally breaking into computer systems)</td>
<td>Information can be stolen or damaged.</td>
<td>Use existing laws to pursue hackers.</td>
</tr>
<tr>
<td><strong>Scamming</strong> (deception to gain others’ assets)</td>
<td>Scammers can operate off-shore or outside of a particular country’s jurisdiction.</td>
<td>Use existing laws to pursue scammers.</td>
</tr>
<tr>
<td><strong>Violation of intellectual property rights</strong> (violation of copyrights, trademarks, trade secrets, patents)</td>
<td>Digital information can be easily copied, reproduced, and sent to others.</td>
<td>Make everything sent online copyright-protected.</td>
</tr>
</tbody>
</table>


http://www.fraud.org
Next time you visit, it asks your browser if it has a cookie stashed there. “I do indeed,” your browser replies and sends it over. “Ah,” the site thinks to itself. “User #2135 wants the weather in Omaha and New Zealand plus our latest thunderstorm map.”

Customers who object to having cookies on their hard drive can use three methods to control their computer’s consumption of cookies:

1. Periodically delete the cookies manually.
2. Set the browser to stop cookies.
3. Install a cookie-manager program (available free on the Web).

Any entrepreneur starting an e-commerce business needs to address privacy issues. The venture’s commitment to satisfying consumers’ online privacy concerns will create an environment of trust and consumer confidence.

Wonderful opportunities abound in e-commerce. Moore’s Law says that computing power doubles every 18 months. If this trend continues, the 21st century will bring entirely new industries online. Well-known engineer/entrepreneur Raymond Kurzweil offers some amazing projections for the digital world over the next 20 years. Some highlights from his projections are given in Table 3-6.

How will aspiring entrepreneurs use e-commerce to build their businesses? You hold the answers. In cyberspace, the concept of “build it and they will come” has created hundreds of dot.com failures. Technology is wonderful but will never substitute for traditional customer service and retention strategies. The appendix to this chapter briefly describes three dot.com failures so that you may learn from their shortcomings.

<table>
<thead>
<tr>
<th>2009 — the digital conversion is nearly complete</th>
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<tbody>
<tr>
<td>• A $1,000 computer will perform a trillion operations per second.</td>
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<tr>
<td>• The majority of text will be entered with continuous speech recognition.</td>
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<tr>
<td>• Most routine business transactions (purchases, travel, reservations) will take place between a human and a virtual personality.</td>
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<tr>
<td>• There will be high-speed wireless access to the Web.</td>
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<tr>
<td>• Translating telephones will be common (speech-to-speech translation).</td>
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<th>2019 — the network moves to three dimensions</th>
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<tr>
<td>• A $1,000 computer will have roughly the computing power of the human brain.</td>
</tr>
<tr>
<td>• Computers will be largely invisible — and embedded almost everywhere.</td>
</tr>
<tr>
<td>• Three-dimensional virtual-reality displays — using glasses and contacts — will be used routinely.</td>
</tr>
<tr>
<td>• Most learning will come through simulated, software-based teachers.</td>
</tr>
<tr>
<td>• The vast majority of transactions will include a simulated person.</td>
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1. **Explain how the Internet developed and how it supports e-commerce activity.**
   - The Internet enables people to communicate with other connected computer users via electronic mail and real-time conversation.
   - The World Wide Web was conceived and initiated at CERN in Switzerland.
   - E-commerce is the paperless exchange of business information via the Internet.
   - E-commerce is much more than a new way to take customer orders.
   - Small firms can be successful online even if they are not first with an e-commerce idea.

2. **Understand the benefits of e-commerce to small firms.**
   - E-commerce offers small firms the opportunity to compete with bigger companies on a more level playing field.
   - Internet operations can help small firms with cash flow problems by compressing sales cycles.
   - E-commerce enables small firms to build stronger customer relationships.

3. **Describe the different business models followed by e-commerce firms.**
   - A business model describes a group of shared characteristics, behaviors, and goals that a firm follows in a particular business situation.
   - A poorly devised business model can be a major factor in business failure.
   - Online firms that have other businesses as their principal customers are called business-to-business (B2B) companies.
   - An online firm selling primarily to final consumers is called a business-to-consumer (B2C) business.
   - Auction sites are online firms that bring buyers and sellers together.
   - The three main advantages of online B2C firms are speed of access, speed of transaction, and continuous access to products and services, often referred to as 24/7 e-tailing.
   - New versions of the B2B model continue to develop and evolve.
   - Transaction sales are the fastest-growing source of revenue for online businesses.
   - Revenue-based models emphasize revenue enhancement; expense-based models focus on expense reduction; and growth-based models emphasize customer growth.
   - Affiliation involves a formal agreement with the sponsoring firm whereby other Web site owners contract to include an icon that allows visitors quick access to the site of the sponsoring firm.
   - In the early days of the Internet, online sites charged fees for access to online content and/or subscription fees. Other sources of revenue include banner advertising, sales commissions, and sales of products or services.
   - Expense reduction is the factor driving many firms to enter cyberspace. Providing information to customers online can reduce the cost of doing business.
   - Firms following the growth-based model are developing a customer base with the hope of cashing in at a later date.
   - The role of a Web site can range from merely offering content and information to permitting the buying and selling of products and services online.

4. **Identify the initial considerations in launching a dot.com business.**
   - Contrary to general opinion, plenty of names for dot.com domains remain available.
   - Since a domain name gives the small business online identity, it is desirable to select a descriptive and appealing name.
   - Once a desired name has been selected, it should be checked for availability and then registered.
   - There are several domain registration firms, which allow visitors to search the Internet to see if a proposed name is already taken.
   - High-quality Web design gives a small firm the opportunity to make a good first impression on each visitor.
   - Slow downloading is a frequent problem with Web sites.
   - Web site design should reflect customer needs.
   - A dot.com address should be promoted through placement on search engines.
Discuss criminal and ethical issues related to e-commerce.

- With its low cost of entry and instant access to customers all over the globe, the Internet is a prime venue for criminal activity.
- Hackers hinder e-commerce through theft, vandalism, and blocking customer access.
- The enormous number of data exchanges in e-commerce raises serious questions about personal privacy.
- Cookies were developed so that Web sites could recognize return visitors and thereby generate a customized and personalized response.

**Key Terms**

- Internet, p. 57
- World Wide Web (WWW), p. 58
- e-commerce, p. 58
- brick-and-mortar store, p. 58
- Electronic Customer Relationship Marketing (eCRM), p. 60
- business model, p. 62
- business-to-business (B2B) model, p. 63
- business-to-consumer (B2C) model, p. 64
- 24/7 e-tailing, p. 64
- auction sites, p. 65
- revenue-based model, p. 65
- hits, p. 65
- affiliation, p. 65
- expense-based model, p. 66
- growth-based model, p. 66
- content/information-based model, p. 67
- transaction-based model, p. 67
- cybercrime, p. 74
- firewall, p. 75
- cookie, p. 76
- Moore’s Law, p. 77

**Discussion Questions**

1. What is the Internet, and what part does it play in e-commerce?
2. Identify and dispel three myths surrounding e-commerce opportunities for small firms.
3. Identify the benefits that small firms gain from e-commerce.
4. Discuss the three different ways of categorizing business models used for e-commerce.
6. What are some of the different approaches to generating revenue adopted by companies using revenue-based models?
7. Are there dot.com firms currently operating under the content/information-based model? If so, give some examples.
8. Explain how a newly organized dot.com venture would register a name it wanted to use for its business.
10. What are some of the criminal and ethical issues facing the e-commerce world?
Part 2

Entrepreneurial Strategy

You Make the Call

SITUATION 1
Estate Administrators and Liquidators is based in Sacramento, California and is owned and operated by entrepreneur Sally Wheeler-Valine. Since 1990, the firm has served people seeking to sell the household goods of deceased friends or relatives.

The business auctions items at the site, splitting the proceeds with the family. Any unsold items are taken back to the firm’s store and sold, generating a commission based on the selling price.

To accommodate the large volume of merchandise she sells, Wheeler-Valine operates out of a new 13,000-square-foot store. Business revenues climbed for several years, peaking in 1997. However, in 1999, revenues slumped drastically.


**Question 1** What impact, if any, do you think the Internet had on Wheeler-Valine’s business?

**Question 2** In what way(s) could she use e-commerce to grow her business?

**Question 3** How much presence on the Web, if any, do you think she should consider?

**Question 4** What do you think will happen to this firm if it ignores the Internet?

SITUATION 2
Karen Duke owns and runs Duke Chimney Services in Mechanicsville, Virginia. Her business is selling a wide range of fireplace inserts and related products. The company, which she operates with her husband, employs six people and has revenues of approximately $500,000 a year.

Karen wants to use the Internet in her business but is not exactly sure how to go about it. Most of her business comes from retail customers.


**Question 1** What kinds of e-commerce strategies would you recommend to Duke for her business?

**Question 2** In what way could she use banner advertising in her e-commerce strategy? Be specific.

**Question 3** A friend familiar with computer technology has some ideas about incorporating digital photography into Duke’s Web site. What do you think he’s talking about?

SITUATION 3
A venture capitalist has invested in a company that manufactures picture framing materials in Mississippi. The company’s products are sold directly to art publishers and framing shops. Additionally, the firm owns a few retail shops and leases some space in department and hardware stores. Business is slow, and the firm is considering an online store of some sort. The venture capitalist wonders about a new Internet strategy under consideration by the manufacturer.

As part of the planned Internet venture, the firm is considering entering into a partnership with another company that owns an e-commerce catalog of digital images. The digital image firm already has a site on the Web, where visitors can search for an image, enter a credit card number for payment, and then download the image they have selected. The picture frame company is wondering how it can increase its sales of picture framing materials through this partnership.


**Question 1** What are the limitations, if any, of the current business strategy of the digital image company?

**Question 2** Do you see any benefits for the picture frame manufacturer in pursuing this partnership? Why or why not?

**Question 3** If the partnership has merit, what e-commerce strategy would you suggest? In other words, what form should the partnership take?
EXPERIENTIAL EXERCISES

1. Interview a local small business that you believe might benefit from e-commerce. Prepare a report on the e-commerce strategy being pursued or the reasons this particular business is not involved in e-commerce.

2. Contact the Chamber of Commerce office in your local area and ask what e-commerce assistance it provides to small firms. Report on your findings.

3. Search your local Yellow Pages directory for a Web site designer. Call the designer and ask for a personal interview where you can find out about the services offered. Report on your findings.

EXPLORING THE WEB

1. Compare the following Web sites that offer e-commerce services to companies.
   a. Examine http://www.cybercash.com and http://www.authorize.net. What service do both sites provide? List the individual services that each company offers.
   d. Explain which of the previous three categories you would choose to implement first, and why.

2. Emerging Business magazine at http://www.ebmagz.com offers a series of articles about online services and e-commerce.
   a. Using the Search feature, enter "Promotion" and then read the article entitled "Promote Your Site." List the hints that are different from those in this chapter.
   b. Under the keyword "Promotion," read the article entitled "The Interactive Edge." List the 10 interactive features you can use to engage the customer.
   c. Using the Search feature, enter "charge it" and read the article by that name.
   d. Read one of the other articles and write a paragraph summary.

   a. When was the Internet (NSFNET) first opened to commercial use?
   b. When did the first graphical browser required for the World Wide Web as we know it come into common use?
   c. What role did Al Gore play in the creation of the Internet?
   d. Compare the date of the first commercial use of the Internet given on this site with that found on UUNET’s site at http://www.uu.net/us/about/facts/timeline. What is UUNET?
HEADBLADE COMPANY (p. 645)

This case describes how a young entrepreneur built a Web site to sell a new razor designed specifically to shave heads.

Alternative Case for Chapter 3:
Case 20, “Maricopa Ready Mix,” p. 693
APPENDIX 3A

Dot.Coms Become Not.Coms

Three E-Commerce Companies That Didn’t Survive

WEBVAN ROLLS TO A STOP

“We believe we had a brilliant concept. We were just ahead of our time.” So said Webvan spokesman Bud Grebey at last week’s announcement that his company had suspended its operations. In fact, Webvan was about 40 years behind its time.

The “pick-pack-ship” model of home delivery was common in the 1950s and 1960s. Dairy and bread companies routinely delivered groceries. But the service eventually declined because it no longer fit consumers’ lifestyles, or the new economic realities of distribution. Home delivery was an old business strategy, and migrating it to the Web did not make it futuristic.

Webvan would have us believe that a few years down the road, when bandwidth and Internet access become more prevalent, it would have overcome its problems and become profitable. Yet none of this would change the average $30–$35 delivery cost for complex, heterogeneous orders.

The problem wasn’t the technology or the service—many of Webvan’s customers were very satisfied with its ordering and delivery systems. If you take a survey, many people will say sure, they like the idea of having someone pick, pack, and deliver their groceries. The problem is that few are willing to pay the true costs associated with such a service. For the small group available to accept deliveries and willing to cough up the extra cash, Webvan was great. But such a limited market couldn’t generate enough revenue to cover Webvan’s cost of doing business.

The downfall of Webvan offers lessons for nearly every type of business. Here are a few of them:

- **Focus on the “commerce,” not just the “e.”** If you can’t master inventory management, sourcing, transportation and distribution, customer attraction and retention, warehousing, and logistics, it doesn’t matter how great your Website is.

- **Don’t absorb the cost of functions that consumers are willing to do for free.** After years of availability of phone-in orders and home delivery, a vast majority of consumers have chosen to shop for groceries in a store. They perform the picking and delivery functions at no cost to the retailer. Enter Webvan, which took on these functions at a steep loss to increase trial and acceptance of the service. How could Webvan compete effectively in the long term against stores that get these functions completed for free?

- **Don’t offer consumers a new technology unless it solves their problems better than their current solution.** Technology determines only what can be offered
to consumers, but consumers determine which technologies are accepted. Most people migrate to Internet buying only when they are dissatisfied with present solutions. Yet studies show that 75–80 percent of consumers like today’s grocery stores. They like the social interaction and the chance to physically examine items before they buy them—especially high-margin items like baked and deli goods and produce. That leaves just 20–25 percent of consumers potentially receptive to online buying and home delivery, begging the question of how many of them will convert to online buying.

- Create e-tail strategies that match the lifestyle realities of market segments. Once commonplace, home delivery gave way to large grocery stores because of lifestyle shifts, many triggered by more women working outside of the home. Most consumers who can afford extras like home delivery aren’t home during the day and have limited windows of time to accept deliveries. They also consume fewer groceries than other segments because they dine out more than they eat at home. Webvan appealed mostly to a small segment of the market—high-income households with two or more children, a way to accept deliveries (either a nanny or refrigerated storage box), and a willingness to spend nights shopping online the computer.

- Don’t enter a mature, highly efficient industry with an inefficient strategy. In the grocery business, the major chains are consolidating into a few extremely efficient giants. Their purchasing power, market coverage, and economies of scale can easily out-]muscule miniscule e-tailers. Margins are squeezed so thin by this fierce competition that Webvan’s competitors—such as Kroger, Albertsons, Safeway, and Winn-Dixie—average net profits of just 1.08 percent. Opportunities for new firms to enter and transform an industry usually occur when existing firms have high margins, are inefficient, or both.

Webvan’s fate was foreseeable to anyone who understood why the home delivery system vanished 30 years ago. However, that doesn’t mean that retailers should abandon online business. In fact, it means the opposite. Retailers should embrace the Internet for certain marketing and branding strategies, but never at the peril of ignoring how customers buy and use their products and services.

In the end, consumers will vote with their wallets which solutions best meet their needs and wants. Webvan lost that election, but not without providing valuable lessons about the commerce side of e-commerce.

Massachusetts, leaped from 1 in 1999 to 149 in 2000, steep even by dot.com standards, says Barbara Sinnott, president of the Central New England BBB. Most brick-and-mortar companies get three to four complaints a year, tops. The leading complaint: delivery problems, followed by product quality and bill disputes. (Attempts to reach Furniture.com CEO Andrew Brooks were unsuccessful.)

While executives built the Furniture.com brand like nobody’s business, they neglected to create the infrastructure to support it. The company failed to factor in the logistics and costs involved in shipping such a bulky commodity across-country and had no way to track orders.

“Right down to the very last day, they still couldn’t make a decision on an information tracking platform,” says Ian Nickerson, president of Global Logistics Solutions of Dennis, Massachusetts, one of Furniture.com’s regional logistics partners. “We invested a lot of money in technology to track orders so that they could let customers know where their delivery was in the system. But we ended up having to do everything manually.”

Furniture.com also created a cancellation policy no furniture company could afford. Contrary to the no-return policy we had reported, customers could cancel orders right until delivery day. With six-week waits turning into six-month delays, a third of all orders were cancelled. Local logistics companies had warehouses of unwanted furniture, according to Nickerson. The result: storage costs that surpassed the already astronomical shipping costs Furniture.com footed for customers.

“They didn’t understand the supply chain dynamics well enough, and they didn’t understand fundamental operations strategy,” says David Pyke, a professor at Dartmouth’s Amos Tuck School of Business Administration, who specializes in e-commerce and supply chain management. “Free shipping, free returns, low prices and lots of variety! How can you go wrong? Well, the customer might be happy—if the promises were fulfilled—but the company can’t make money like that.”

Several rounds of layoffs and $27 million in makeshift funding furnished in June 2000 didn’t get Furniture.com any closer to profitability. The online retailer, which launched in January 1998, closed its doors on November 6, 2000 and filed bankruptcy on November 20. Early in 2001 the company hoped to fetch $1.5 million for its domain name and Web platform, says David Madoff of Cohn & Kelakos, the Boston law firm representing Furniture.com. The failed company was also crafting a plan to get furniture stuck in warehouses to customers still waiting for orders.


PURPLE TIE, INC. FOLDS

No matter which way you put this one through the spin cycle, the same thing comes out in the wash: When you’re growing a business, be patient, know the market, take it slow. If only PurpleTie founder Payam Zamani hadn’t let the late-20th-century wave of venture capital money rinse out this good sense.

Zamani, 29, had no experience in the dry cleaning business before founding PurpleTie. Then again, he was no car salesman before founding his first Internet startup, AutoWeb, in 1994. This time his goal was to tidy up the dirty laundry of the antediluvian and disjointed dry-cleaning industry. Big plans included his own dry cleaning processing centers and national expansion of the Pleasanton,
California–based company from its Bay Area base to 25 metropolitan markets in three years.

Although there are few hard numbers on the dry cleaning industry, recently released 1997 U.S. Economic Census figures indicate there were about 30,000 dry cleaners nationwide representing $7 billion in revenue. PurpleTie asserted that there were more like 100,000 shops worth $32 billion. In any case, it’s one of the largest industries still dominated by mom-and-pop shops, according to the Silver Spring, Maryland–based International Fabricare Institute (IFI). This was the arena Zamani tried to step into. But he stepped too quickly.

“We had grand visions, and we built too much infrastructure too fast,” says David Kallery, PurpleTie’s chief operations officer, who spent 25 years at stalwart companies like UPS and Visa before joining the startup. “We should have grown the business organically brick by brick, or as one investor said, route by route. Had we taken that approach, we would’ve made the $8 million last for several years and built a very successful business.”

The Plan

PurpleTie’s business plan was this: partner with 5,000-to 10,000-square-foot operations that were already handling work for hotels and large cleaners. “The average dry cleaning business has a half-million dollars in infrastructure. But the facility is used only 6 to 8 hours a day,” Zamani said last December. This excess capacity represented a huge opportunity for PurpleTie’s consumer business. In exchange for cash, an equity stake in PurpleTie, and a chance to join in a new market, the partners would handle customers’ garments to PurpleTie’s specifications.

For the consumer, PurpleTie’s service had a simple front end. After registering with PurpleTie’s Web site, consumers created an itemized list of garments to be cleaned and shoes to be shined, then selected one-hour pick-up and next-day delivery windows.

Reminiscent of FedEx’s “hub” system, the driver would take the items to a place PurpleTie called its “central sort and data capture center” in Livermore, California. There, systems gathered fabric and brand data and tagged garments with bar codes before whisking the items away to a dry cleaning processing center. Once clean, PurpleTie returned the items to central sort for packaging and routing back to customers. The systems allowed the dry cleaner to track processed garments and create a storehouse of regional consumer habits it hoped to market to apparel makers.

20–20 Hindsight

Founder Zamani, who was unavailable for comment after the March 2 shutdown, used much of the $8 million he’d raised to create the scalable technology and operations necessary for PurpleTie’s expansion plans.

PurpleTie used SPOT 2000 dry cleaning software, from Draper, Utah–based Westgate Software, as the center of its back-end technology. Last summer, vice president of technology Markus Zeitler worked closely with Kallery to build PurpleTie’s Web site, and install eGain customer service software, Descartes eScheduler mapping software and Descartes RIMMS 3.1 route tracking software. These were all linked to the SPOT 2000 system, housed on PurpleTie’s main servers at Exodus Communications in Santa Clara, California. Had PurpleTie expanded to Portland and Seattle during the first half of 2001 as planned, a SPOT 2000 station would
have been installed in each new central sort area and connected back to PurpleTie’s main servers.

PurpleTie spent $1 million trying to build its own state-of-the-art 100,000-square-foot dry cleaning facility in Manteca, California, before realizing those plans weren’t practical. “We spent an awful lot of time, effort, and money on trying to build that processing center,” says Kallery. “The biggest thing that we learned was that there was excess capacity in the market.”

When PurpleTie ceased operation, it was only about six months from cash flow breakeven and a year from total breakeven (including corporate overhead). Unfortunately, says Kallery, that $1 million spent on the defunct facility would have been enough to get PurpleTie out of the red. By then the company’s initial investors didn’t want to put up that additional amount, and Zamani and his team were hard pressed to find another source of funding.

The company tried to cool its burn rate by halving its staff size and trying to collaborate with larger scale dry-cleaning plants. Zamani attempted to paint PurpleTie as a traditional business with a strong e-commerce element. He emphasized its multi-channel approach; the company welcomed telephone and Web orders and planned to open small (500- to 800-square-foot) storefronts in each market.

But it was too late. “One of the keys for [PurpleTie] was selling its services through partner companies, and that proved too muddy a proposition for people to cotton to,” says Rob Leather, a San Francisco–based analyst in the digital commerce strategies group at Jupiter Media Metrix. “You have to have a lot clearer results and much clearer value that the investors can see. If you’re putting a very risky business model forth that requires consumers to change their behavior, now’s not really the time to do that.”

And so . . .

PurpleTie was serving 10,000 residential customers and covering 30 percent of the greater San Francisco area in January. On March 9, 2000-customer Clean Sleeves.com acquired the PurpleTie brand and some of its physical assets. “We have big plans, but ours is a self-funded approach and a much more traditional bootstrapping kind of thing,” says CleanSleeves.com CEO Kay Madegarian, who co-founded the company in March 1999 and has just six employees. “Our growth curve will be a lot slower.”

Madegarian hasn’t ruled out the idea of taking her company national, perhaps even under the PurpleTie name. But that won’t happen in the near future.