CHAPTER 15

LAUNCHING A SUCCESSFUL ONLINE BUSINESS AND EC PROJECTS

Content

Revised by Dr. Linda Lai of Macao Polytechnic Institute of China

Learning Objectives

Upon completion of this chapter, you will be able to:

1. Understand the fundamental requirements for initiating an online business.
2. Describe the process of initiating and funding a startup e-business or large e-project.
3. Understand the process of adding EC initiatives to an existing business.
4. Describe the issues and methods of transforming an organization into an e-business.
5. Describe the process of acquiring websites and evaluate building versus hosting options.
6. Understand the importance of providing and managing content and describe how to accomplish this.
7. Evaluate websites on design criteria, such as appearance, navigation, consistency, and performance.
8. Understand how search engine optimization may help a website obtain high placement in search engines.
9. Understand how to provide some support e-services.
10. Understand the process of building a webstore.
11. Know how to build a webstore with templates.

Opening Case

FACEBOOK: MAKING A BUSINESS OUT OF FRIENDSHIP

Facebook founder and CEO Mark Zuckerberg has been named *Time*'s "Person of the Year" for 2010. *Time* said Zuckerberg was chosen "for connecting more than half a billion people and mapping the social relations among them; for creating a new system of exchanging information; and for changing how we all live our lives" (*Time* 2010).

The Opportunity

Facebook (*facebook.com*), the world's most popular social networking site, opened in February 2004. Originally called "thefacebook," the site was conceived by Mark Zuckerberg as an online directory where Harvard students could connect with each other. It became an instant hit within a month, subsequently expanding to Columbia, Stanford, and Yale. Zuckerberg was soon joined by fellow Harvard students Dustin Moskovitz and Chris Hughes for site development. The site was renamed "Facebook" in August 2005, and the domain *facebook.com* was purchased for $200,000.

The Solution

To saturate colleges nationwide, Facebook needed financing. In August 2004, Zuckerberg met Peter Thiel. Seeing Facebook's potential, Thiel decided to invest $500,000 for a 10 percent stake in the company. Soon after, Facebook opened an office in Palo Alto, California. By the end of the year, the site had 1 million users. Facebook's second investment, $12.7 million for 13 percent corporate ownership, came in April 2005 from Accel Partners, a leading Silicon Valley venture capital firm. Facebook continued to grow rapidly and by mid-2006, it hosted about 7 million user accounts (Vogesltein, 2007). The site raised another $27.5 million in April 2006 from a joint financing by Greylock Partners and Meritech Capital Partners, and its existing investors Accel Partners and Clarium Capital. In the same month, Facebook expanded its reach beyond the nation to students of selected companies, and in September 2006, it opened registration to everyone worldwide.

Facebook capitalizes on its ability to connect each user to a network of friends called a social graph. "People use Facebook to keep up with friends, upload and share an unlimited number of photos, share links and videos, and learn more about the people they meet" (see *facebook.com/facebook#!/facebook?sk=info*). Facebook's revenues primarily come from sponsorships and banner advertising. It also allows outsiders to build applications inside Facebook and keep all the advertising revenues they earn. According to Zuckerberg, "[Facebook's] platform strategy isn't about winning all the content or owning all the applications" (Needle 2007). This has led to all kinds of widgets or applications. The Internet industry believes this is a clever move—one that others, including Google, are trying to copy. Facebook's second master stroke involves its various on-site features. The "news feed" feature, for example, an event stream on user pages, keeps users updated about what their friends are doing (e.g., uploading photos and adding widgets). For many users, this feature is addictive.

The Results

Facebook's total revenue in 2007 was estimated at $100 million, mostly from selling ad space with little profit. The ads are priced not just by cost per mile (CPM) (cost per 1,000 impressions), but also based on the success of "engagement." However, by 2009, owing to its explosive growth, revenues reached as much as $800 million (Oreskovic 2010). Facebook offers more integrated advertising opportunities to marketers with high campaign budgets. Marketers can also target users with Virtual Gifts purchased from Facebook. Moreover, marketers can make use of the many ad networks dedicated to serving the inventory created by Facebook platform applications. Inventory is sold on CPM, CPC (cost per click), CPA (cost per action), and CPI (cost per impression) bases. Currently, the Internet giants—Yahoo!, Microsoft, and Google—are offering to buy Facebook or a stake in it, for a price that would value the firm at billions.

By 2010, more than two-thirds of Facebook users are outside of college, and the fastest growing demographic is those 35 years old and older. It has more than 200 million active users, of which more than 100 million log in at least once each day. More than 850 million photos and more than 10 million videos are uploaded to the site each month.

Facebook is at the crossroads of its future. It can either sell itself off, like MySpace and YouTube did, build something to stay independent, or give away a stake to a big company. Facebook has turned down acquisition offers ranging from $750 million to $1 billion for building "something special." Some sources believe that an initial public offering (IPO) is imminent. Facebook's top priority now is developing its own ad platform, and industry experts believe Facebook wants to become a Web operating system (OS) in a few years. It appears that the company wants more than what Microsoft is willing to pay, as much as $15 billion. For now, Facebook's investors seem to be content to let Zuckerberg chart his own course. Some industry observers question Facebook's decision to stay independent. Others even fear it will bite the dust much like Friendster. However, it is believed that Facebook could still wind up not taking in investment from either Microsoft or Google and take an IPO route because its business is well established. If Zuckerberg's primary goal is freedom to build something big, then he should take an investment now from venture capitalists or go for an IPO. A venture capitalist investment would free Facebook to experiment outside the glare of the stock market and maintain independence, build up infrastructure, and make some quality hires and acquisitions as necessary. There are proponents who think Facebook needs to sell, arguing that social networking sites have the potential to become multibillion-dollar machines on their own. For now, as to what course Zuckerberg intends to take, observers can only speculate.

Sources: Compiled from *Time* (2010), Oreskovic (2010), Needle (2007), Vogelstein (2007), and *facebook.com* (accessed March 2011).

WHAT WE CAN LEARN . . .

The case of Facebook illustrates how a U.S. college student's portal evolved into a full-fledged social commerce site in less than 3 years (Sethuraman and Rathore 2008). In the digital economy, ideas are more highly valued than innovative technology. Facebook is popular not because it introduced a breakthrough technology, but because it was able to give people what they wanted—a way to collaborate and share information (*Forbes* 2007). Facebook is an example of a successful online business with a clear value proposition and focused differentiation. The case also outlines the dilemmas startups face as they experience growth potential (Sethuraman and Rathore 2008).

This chapter addresses the fundamental requirements for initiating an online business. It provides a guide on how to turn a good idea into a successful electronic business and to execute a business plan with IT skills, management know-how, a good entrepreneurial attitude, and an understanding of the Internet culture.

15.1 GETTING INTO E-COMMERCE AND STARTING A NEW ONLINE BUSINESS

As described in Chapter 1 and throughout the book, it is a terrific time to be an entrepreneur. The availability of cheap computer hardware, free or inexpensive software, and high-speed Internet access has created a powerful base from which to launch a new business and expand or transform existing ones. Belew and Elad (2009) provide a complete guide on how to start an online business. This chapter describes some of the steps involved in setting up an e-business.

GETTING INTO E-COMMERCE

Now that you are familiar with EC and its potential, you may want to know how to get into EC yourself. You can start an e-commerce venture in any number of ways; your only limit is your imagination. In this chapter, we will discuss some of the most common ways of starting an e-business. Specifically, this chapter presents the following topics:

- Starting a new online business (a startup; see Section 15.1)
- Adding e-commerce initiative(s) to an existing business (i.e., becoming a click-and-mortar organization; see Section 15.2)
- Transforming to an e-business (Section 15.2)
- Opening a webstore (Section 15.8)

Almost any e-commerce initiative will require support activities and services, as well as plans for attracting visitors to a website. This chapter presents the following with regard to these types of activities:

- Developing a website (Section 15.3)
- Hosting the website and selecting and registering a domain name (Section 15.4)
- Developing, updating, and managing the content of a website (Section 15.5)
- Designing a website for maximum usability (Section 15.6)
- Providing support services (Section 15.7)

According to Hise (2009), becoming an owner of a business has become a national obsession in the United States, and the percentage of Internet businesses is increasing.

STARTING A NEW ONLINE BUSINESS

Success in the online marketplace is never an assured outcome. As in the brick-and-mortar marketplace, the failure rate for online companies is high. Why do so few online companies succeed while many others fail? What does the entrepreneur need to know to launch a profitable online business?

Online businesses may be pure-play companies or click-and-mortar companies that add online projects, such as e-procurement or selling online, as an additional marketing channel.

AN E-STARTUP IS A STARTUP

Before we start our discussion, we need to emphasize that an e-startup is basically a startup and, as such, must consider all the issues faced by a physical startup. Many books, magazines, and articles are dedicated to starting a new business. Magazines such as *Entrepreneur* are fully dedicated to startups. The Internet is contributing to what Hise (2007) calls "America's love affair with entrepreneurship." In 2005, 672,000 new companies were developed versus 642,000 in 2004. However, not all are e-businesses. Also, note that 544,800 small businesses closed in 2005 (Hise 2007). In 2008 and 2009, more failures were recorded than newly created companies, mainly due to the economic crisis. Nagy (2011) provides some practical guidelines to avoid e-commerce failures. Specifically, he suggests looking at: (1) easy navigation website design, (2) customer loyalty and trust, (3) easy and logical order processing, and (4) appropriate method of payment.

Example: Microsoft Startup Center. The Microsoft Startup Center offers free step-by-step guidance, tips, and resources for starting a business, including an e-business. A wealth of information is provided under eight general headings: "The Rules," "Office Setup," "Your Brand," "Marketing," "Sales," "Finances," "The Details," and, last but not least, "Employees."

The Startup Center provides links to the IRS, the U.S. Patent and Trademark Office, Startup Nation, and other resources, including Bank of America's Small Business Resource Center, which also offers valuable step-by-step tips. From furniture resources to how to jumpstart marketing with a free website from Office Live, the Microsoft Startup Center is worth viewing.

Remember, new business owners should always seek the guidance of a professional tax consultant, accountant, and/or attorney to verify that all legal requirements have been met before starting and operating a business. For more information, see microsoft.com/smallbusiness/startup-toolkit.

One of the major steps in launching any startup is to find a viable product (service). This may take a long time, because the concept comes first, followed by a prototype, and then a market test. Also, finding the correct business model is critical (Chapter 1 and Online Tutorial T2).

Smith (2011) provides a practical guide to creating a successful online business. He covers topics such as setting up the website, getting a domain name, e-commerce, managing the website, and accounting and running the online business. For a free 14-session guide to starting a business, see myownbusiness.org/course_list.html. Several centers for information technology startups exist, some sponsored by major software companies.

CREATING A NEW COMPANY OR ADDING AN ONLINE PROJECT

Most new businesses—brick-and-mortar, pure play, or click-and-mortar—begin in a similar manner. The following three steps describe the process:

1. **Identify a consumer or business need in the marketplace.** Many businesses simply begin with a good idea. A magazine article, a personal observation, an unsolved problem, a small irritation, or a friend's suggestion may trigger an idea, and the prospective business owner sees a gap between what people want and what is available; for an example, see Case 15.1. Note that the key here is *innovation.* For many examples of innovations, see Williams (2006).
2. **Investigate the opportunity.** Just because a person perceives that an opportunity exists does not mean that it is real. Perhaps the potential number of individuals interested in purchasing the proposed product or service is too small. Perhaps the cost of manufacturing, marketing, and distributing the product or providing the service is too large. The revenue

CASE 15.1

EC Application

INNOVATION AND CREATIVITY AT AMAZON.COM

Call it fate or call it the right person having the right idea at the right time. Whatever you call it, the idea behind Amazon.com and its founder, Jeff Bezos, seemed destined for each other.

Bezos was born in January 1964 in Albuquerque, New Mexico. Even as a boy, his cleverness, intelligence, and entrepreneurial skills were obvious. At the age of 12, Bezos built a motorized mirrored Infinity Cube because he couldn't afford the $20 to buy one. A few years later, he graduated as valedictorian of his Florida high school. As a young entrepreneur, he created a summer camp for middle-school students and promoted it by saying that it "emphasizes the use of new ways of thinking in old areas," which was in many ways a prediction of his future success.

Bezos graduated from Princeton University with a degree in computer science, and his first employment was in e-commerce, building an EDI network for settling cross-border equity transactions. A few jobs later, he was a senior vice president at the hedge fund firm D. E. Shaw, responsible for exploring new business opportunities on the Internet. It was then that his intelligence, entrepreneurial talents, computing education, and e-commerce experience all came together in a brilliant idea: The most logical thing to sell over the Internet was books. Several years later he added dozens of other products.

Why books? Behind the thousands of brick-and-mortar bookstores are just two large book distributors, with an extensive list of books already online in the distributors' databases. Bezos was willing to bet that book buyers would be willing to give up the cozy, coffee-shop, browsing environment of the local bookstore if he could offer them the "earth's biggest bookstore," fantastic customer service, and features that no physical bookstore could match—customer book reviews, author interviews, personalized book recommendations, and more.

The rest of the story is the stuff of legend. Bezos left his six-figure Wall Street salary and wrote the Amazon.com business plan during a cross-country move to Seattle, Washington. The Amazon.com website was built in a cramped, poorly insulated garage. When Amazon.com launched in July 1995, a bell would ring every time the server recorded a sale. Within a few weeks the constant bell ringing became unbearable, and they turned it off. Today, on a busy day, Amazon.com sells hundreds of thousands of products to about 3 million customers.

In the late 1990s and early 2000s, Amazon.com invested $2 billion in physical warehouses and other expansion opportunities. This was in line with Bezos's vision for Amazon.com as "broader than books and music."

After years of large losses, Amazon.com announced its first small profit in the fourth quarter of 2001. In 2009, Amazon.com was one of the few companies to report increased sales and earnings. Amazon.com's revenue reached US$34.204 billion in 2010.

During its first decade of operation, Amazon.com changed its business model several times, adding innovative ideas. It also acquired other companies or stakes in companies in several countries (e.g., *joyo.com*—the largest e-tailer of books, music, and videos in China). Amazon Theater offers film viewing from its website, as well as many more innovations. In 2008, Amazon.com expanded into downloadable books (recall the Kindle 3 e-book reader, Chapter 5), music, and movies. In July 2010, Amazon.com announced that e-book sales for its Kindle reader outnumbered sales of hardcover books. Amazon.com claims that during that period, it sold 180 e-books for every 100 hardcover books.

Bezos is indeed an innovator. His most original idea is his vision of Blue Origin, a futuristic center for suborbital spaceships. In the last few years, he has worked on commercializing space trips. Bezos's Blue Origin commercial space venture is developing a vehicle to take occupants on a 10-minute ride to the edge of space, nearly 60 miles (96 kilometers) above the earth and back (see Quitter 2008). The most recently publicized timetable states that Blue Origin will fly unmanned in 2011, and manned in 2012. It all began with a smart entrepreneur whose life experiences gave him a brilliant idea that led to the founding of a legendary e-tailing company.

Sources: Compiled from Quitter (2008) and *amazon.com* (accessed March 2011.

Questions

1. What were the opportunities and needs in the consumer market that inspired Bezos to create Amazon.com?
2. What factors, at both personal and business levels, led Bezos to his brilliant idea?
3. Visit Amazon.com and find some of its recent innovations.

model may be wrong, others may have tried already and failed, satisfactory substitute products may be available, and so on. For example, online grocery shopping would seem like a wonderful opportunity—relieving busy professionals of the time-consuming and tiresome task of regular visits to a grocery store. Many have tried to provide large- and small-scale online grocery ventures (e.g., NetGrocer, Peapod, HomeGrocer, Webvan), but most have failed or continue to lose money because they misjudge the logistical problems associated with grocery warehousing and delivery. This is why it is so important to develop a business plan. One of the purposes of a *business plan* is to determine the feasibility and viability of a business opportunity in the marketplace.

3. **Determine the business owner's ability to meet the need.** Assuming that realistic business opportunity exists, does the prospective business owner have the ability to convert the opportunity into success? Some personal qualities are important: Is the business in an industry the prospective business owner knows well? Is it something the entrepreneur loves doing? Are family and friends supportive? Business skills in staff recruitment, management, negotiation, marketing, and financial management are required, as well as entrepreneurial attitudes such as innovation, risk taking, and being proactive. Many good ideas and realistic initiatives have failed in the execution stage because the owners or other principals of the business lacked sufficient business skills to make it a reality. Boo.com (no longer online), for example, seemingly had a great concept (retailing ultramodern, designer clothing) and superior software, but it failed because of the inability of management to organize the business and manage the projects necessary to bring Boo.com online before it burned through $120 million of startup capital.

The process for developing EC projects in existing companies is similar, except that step 3 changes to: "Determine the organization's ability to meet the need."

Some Tips for Success

Winnick (2006) provides the following five "secrets" to help you come up with the next big thing:

1. **Do your homework.** Research what's really happening in the world. Simple innovations are not understated. They have to be tangibly more effective than anything already on the market. For example, attend ExpoMart, where the annual Innovation New Product Exposition (INPEX) takes place.
2. **Aim for excitement.** Make your customers say "wow" or "finally," such as Bezos's initiative to take customers into space.
3. **Whittle, shape, iterate, repeat.** Test and improve the ideas and prototypes several times. Your designers and developers can do this.
4. **Get real.** Build physical prototypes to get feedback from friends, suppliers, and customers.
5. **Avoid creating a gizmo.** Beware of creating a product (service) with obvious faults, even if it looks like a brilliant design. Even though a product (service) must be attractive to customers, it must also work.

Beyond these general platitudes about what it takes to start a prosperous business, the owner of an online business must consider some requirements that reflect the online nature of the business. The first of these is the need to understand Internet culture. Activities such as spam, extensive use of graphics, forced visitor registration, and intrusive pop-up browser windows are counter to the accepted norms of behavior on the Internet.

A second requirement that the owner of an online business must consider is the nature of appropriate products and services. Although virtually anything is available for sale on the Internet, the degree of sales success is somewhat dependent on the type of item or service being offered. For example, digitized products (e.g., information, music, software) sell well and are delivered easily. Similarly, services (e.g., stock brokering, travel ticket sales), and commodities (e.g., books, CDs) have been quite successful. In contrast, experiential products, such as jewelry and perfume, do not sell well online. One of the greatest opportunities the Internet offers is in niche marketing (see the JetPens case in Chapter 1). Rare and quirky sales ideas, such as antique Coke bottles (antiquebottles.com), gadgets for left-handed individuals (anythingleft-handed.co.uk), Swedish gourmet food (wikstromsgourmet.com), toys for cats and dogs (cattoys.com and dogtoys.com), and gift items from Belize (belizenet.com), would rarely succeed in a physical storefront, but the Internet offers the owners of these sites an opportunity to pursue their business idea and be successful.

Cloning

Entrepreneurs all over the globe try to clone or copycat the Web's most successful websites, such as Facebook (see the opening case), Twitter, eBay, and Amazon.com. Examples are Amazon.gr (no longer live), which called itself "Greece's Biggest Bookstore," and had much the same look and feel as Amazon.com's site at the time when Amazon.com referred to itself as the "earth's biggest bookstore." Edmunds.com is a site with content provided by Edmunds for people who like cars. It has all the features you'd expect on a site like MySpace, but geared toward letting people make car friends and is still a popular site.

PLANNING ONLINE BUSINESSES

Planning an online business is similar to planning for any startup venture in that it centers on a business plan (see Rutgers 2009).

Business Plan

Every new online business needs at least an informal *business plan.* A **business plan** is a written document that identifies a company's goals and outlines how the company intends to achieve those goals and at what cost. It includes both strategic elements (e.g., mission statement, business model, value proposition, and competitive positioning statement) and operational elements (e.g., operations plan, financial statements) of how a new business intends to do business. Medium and large businesses, or those seeking external funding, must have a formal business plan.

business plan
A written document that identifies a company's goals and outlines how the company intends to achieve the goals and at what cost.

The primary reason an entrepreneur writes a business plan is to use it to acquire funding from a bank, an angel investor, a venture capitalist, or the financial markets. Similarly, in an existing business, a business case needs to be written for any new large EC project so management can decide whether to fund it. A business plan also is important for a new venture as a tool to recruit senior management and to convince business partners to make a commitment to the business. A business plan helps ensure a thriving business by encouraging an entrepreneur to set goals, anticipate problems, set measures for success, and keep the business on track after starting it. A business plan forces the entrepreneur to be realistic about the business's prospects. Sometimes the most successful outcome of a business plan is a decision not to proceed. For all aspects of business plans for startup companies, see hjventures.com.

For a sample of business plan software, see planware.org, planmagic.com, and abs-usa.com. Palo Alto Software (paloalto.com) offers Business Plan Pro 2010 for less than $100. This software is constantly updated and includes more than 500 sample plans. Another resource is Microsoft's Small Business Center at microsoft.com/smallbusiness/hub.mspx. For more on getting started with a business plan in a small company, see smallbusiness.yahoo.com (search for Yahoo! answers). Also see en.wikipedia.org/wiki/Business_plan and Session 2 at myownbusiness.org/course_list.html.

The Business Case

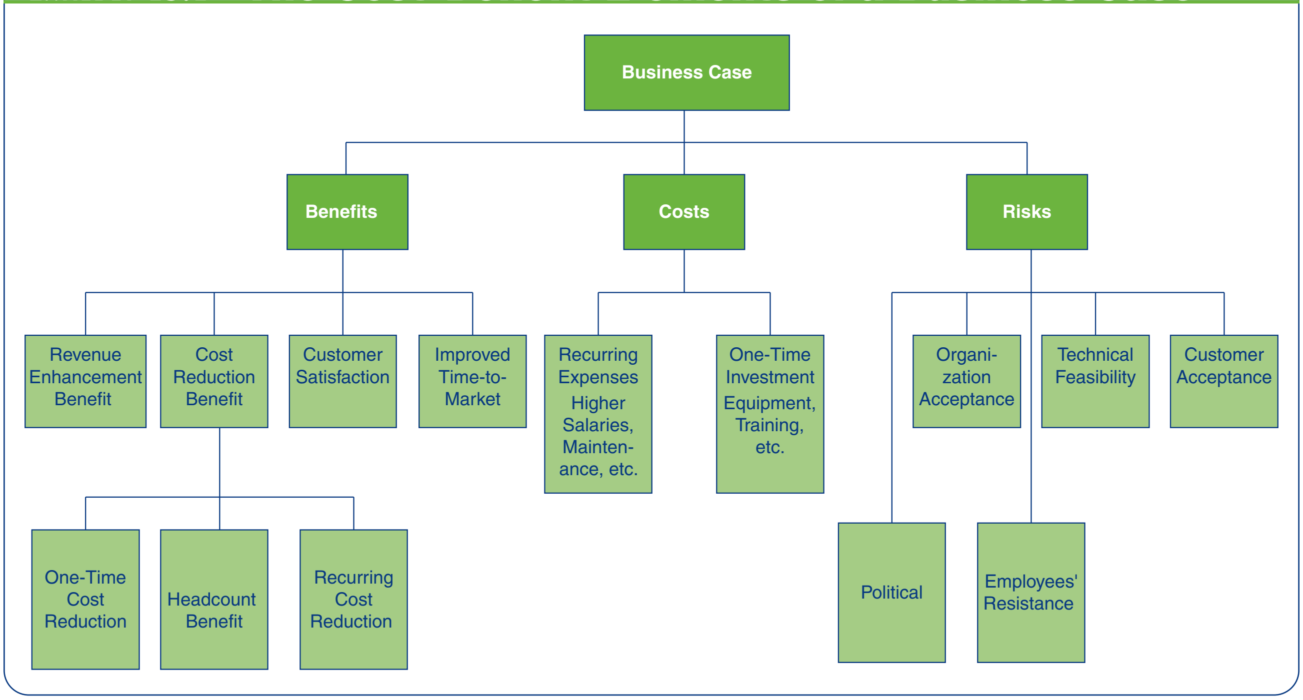
An existing brick-and-mortar business looking to move online (either to add EC projects or to transform itself to an e-business) needs a **business case**—a document that is used to *justify* the investment of organizational resources in a specific application or project (see Exhibit 15.1). A business case for a large, resource-intensive EC project resembles a business plan. For a small or medium-size project, the business case can be much simpler.

business case
A document that justifies the investment of internal, organizational resources in a specific application or project.

A High-Level Business Case Template. This template shows the justification for the expenditure of resources on a specific online project or initiative in an existing business. If the business is considering a number of different initiatives, you should prepare a separate business plan or case for each one. If the initiative is for a new business, it will require a more comprehensive business plan. The template includes the following components:

- **Goals.** Begin with a specific description of what the business intends to achieve through the initiative—increased sales, reinforcement of the brand or corporate image, improved customer support, reduction in communications and marketing costs, and so forth. A useful approach is to define the problem, propose a solution, and describe the expected outcomes or impacts. Conclude this section with goals—one or more statements that

EXHIBIT 15.1 The Cost–Benefit Elements of a Business Case



Source: Created by Linda Lai and Efraim Turban.

succinctly describe a desired future condition toward which the business will direct its efforts. Here, it will be advantageous to use a business model.

- **Cost savings.** If one or more goals include reduction of existing expenditures, then calculate the following: (1) an itemized and quantified list of existing costs that the project will affect and (2) the estimated levels of savings that the project will generate (e.g., reduce long-distance telephone costs by 45 percent). Multiply the costs by the saving levels to find the expected reduction of expenditures. You should estimate these savings for a short-term time frame, perhaps the first 3 years of the project's operation.
- **New revenue.** If one or more of the goals suggests an increased revenue stream, then calculate (1) an itemized and quantified list of existing net income (revenue from sales minus cost of sales) the application or project will affect and (2) the estimated levels of new sales that you expect (e.g., increase product sales by 12%). When you multiply the net income by the increased sales levels, you get the expected amount of increased revenue. Do this for the same multiyear time frame as used in the cost-savings calculation.
- **Extra benefits.** List and, if possible, quantify any additional fiscal benefits that are associated with the project (e.g., improved staff productivity, faster collection of outstanding debts). If these are difficult to estimate, it is best to list them but neither quantify them nor add them to the benefits identified previously. This approach will produce an overall more conservative estimate of benefits, building in an extra cushion for project success in the event that the business does not realize all quantified benefits.
- **Cost of the solution.** This is an itemized and quantified list of costs associated with the online project. You should estimate both direct costs (e.g., amortized costs of website development and website hosting) and indirect costs (e.g., staff training) for the period.
- **Net benefits.** Add together all benefits (i.e., cost savings, new revenue, extra benefits) and subtract the costs. The result should be a specific amount of expected monetary gains (or losses) resulting from successful implementation of the project in each year of the period being examined.
- **Recommendation.** Summarize the decision that is being recommended in light of the foregoing analysis. If the net benefit result is strongly positive, then a decision to proceed is likely, and you can start the next steps (e.g., a risk analysis, customer survey, staff

hiring). If the results are slightly positive or negative in one or all years of operation, you can still justify the decision to proceed on the basis of seeing the online initiative as a long-term strategy, a competitive imperative, or simply the cost of staying in business. If the bottom line is strongly negative, then the most likely outcome will be a decision that there is no justification for the project, saving the business a lot of time and money. Even that can be viewed as a positive outcome of a business case.

For more business case templates, see score.org/template_gallery.html.

FUNDING A NEW ONLINE BUSINESS

Launching an online business can be expensive. The brave entrepreneur is usually willing to invest personal funds from savings, personal lines of credit, or taking a second mortgage on his or her house, but these sources of "bootstrap funding" are unlikely to be sufficient. Entrepreneurs should "bootstrap" as long as possible, but not wait too long to tap into the venture community.

If the new venture involves significant risk, traditional sources of debt financing, such as a bank loan, can be difficult or impossible to get. See Rutgers (2009) for other sources of funding for a startup business. For an introduction to sources of e-business funding, see businesspartners.com.

First Round of Initial Funding: Angel Investors and Incubators

When the entrepreneur's personal funds are insufficient, the entrepreneur will go to friends, family members, or to *angel investors.* An **angel investor** is a wealthy individual who contributes personal funds and possibly expertise at the earliest stage of business development. Angel investors can be found through organizations such as the Angel Capital Association (angelcapitalassociation.org), newspapers, magazines, and business-oriented social networks (e.g., LinkedIn).

angel investor
A wealthy individual who contributes personal funds and possibly expertise at the earliest stage of business development.

A typical angel investor scenario begins with, for example, a young software developer who has identified a niche in the market for a new software application and has used his own money to get started but has insufficient funding to continue. An angel investor may provide the developer with an office, hardware, software, salary, and access to the human and financial resources required to write the software application. In most cases, the angel investor also provides guidance or access to management expertise. In addition to sometimes-altruistic goals, the angel investor is looking for a reasonable return on the investment. In other words, the angel investor is almost always a pre-venture-capital funding source and may be paid later from the infusion of venture capital funds. An angel investor is an excellent source of funding for the entrepreneur; however, angel funding is scarce and difficult to find.

Another important source of support, if not direct funding, for pre-venture-capital firms is an *incubator.* An **incubator** is a company, university, or nonprofit organization that supports promising businesses in their initial stages of development. Although some incubators offer startup funding, the primary purpose of most incubators is to offer a variety of support services—office space, accounting services, group purchasing programs, reception services, coaching, and information technology consulting—at little or no cost. In return, the incubator receives a modest fee, startup equity in the company, or both (en.wikipedia.org/wiki/Business_incubator).

incubator
A company, university, or nonprofit organization that supports businesses in their initial stages of development.

Second Round Financing: Venture Capital

One major source of funding new ventures is *venture capital.* **Venture capital (VC)** is money invested in a business by an individual, a group of individuals (venture capitalists), or a funding company in exchange for equity in the business. Venture capitalists tend to invest in companies that have identified what seems to be an outstanding business opportunity, have taken some action to make the opportunity happen (e.g., written a new software application, secured a patent, built an interesting social network that attracts many visitors, conducted some promising experiments, or recruited key personnel), and need an infusion of funds and management expertise to expand and launch the business. Some venture capitalists may have connections with CEOs who would be good strategic

venture capital (VC)
Money invested in a business by an individual, a group of individuals (venture capitalists), or a funding company in exchange for equity in the business.

guides for the business; others may be more market specific (e.g., experts on software development). It is therefore important to match your VC with your business. Venture capitalists usually invest large sums of money and in return can expect some management control and a profit on their investment within 3 to 5 years, when the successful startup goes public (an IPO) or when a larger company merges with it or acquires it. The startup company receives the funds and experienced management guidance it needs during its launch and expansion stages.

The downside for the startup business to acquire VC is minimal; it loses some control over the business in return for funds it is unlikely to acquire from any other source. The more difficult problem is finding VC. Due to the many dot-com failures in 2000 and onward, many VC sources have disappeared, and competition for venture capital is fierce.

Some well-known VC companies are vFinance Capital (vfinance.com), Westlake Securities (westlakesecurities.com), and Garage Technology Ventures (garage.com), which was founded by personal-computing guru Guy Kawasaki. Venture capitalists may be startups. Most of them lost large amounts of money for their investors during the dot-com bust. For more information, see the National Venture Capital Association (nvca.org), the Venture Capital Marketplace (v-capital.com.au), Mobius Venture Capital (mobiusvc.com), and VC Fodder (vcfodder.com).

Additional Funding: A Large Partner

As part of a VC investment or after the depletion of VC money, one or more large companies may step into the process. For example, Yahoo!, IBM, Microsoft, Motorola, Google, Time Warner News Corp., and Oracle have invested in hundreds of EC startup companies. Eventually, they may acquire the startup completely. Such investments are frequently done in complementary or competing areas. For example, Yahoo! is a major investor in Google and in Baidu (see Case 15.4, p. 15-36) in China; News Corp. acquired the startup MySpace; and Google invested in dozens of companies related to advertising, including the purchase of YouTube in 2006. Microsoft purchased a part in Facebook in 2008, and eBay owns 25 percent of Craigslist. Google and other EC companies are buying companies even before they try to get the VC support.

The opening case discusses the management challenges faced by Facebook as it sees itself grow (Sethuraman and Rathore 2008). The startup's dilemma is: Should it collaborate with larger partners such as Microsoft, Google or Yahoo!; or should it stay independent and eventually go public? It is important for a startup to make the right decision at the right time. Other EC startups like Friendster waited too long and have seen disastrous results.

The Initial Public Offer (IPO)

Once the company is well known and successful, it will go to a stock exchange to raise money via an initial public offer (IPO). In such offerings, investors will pay a much larger amount of money per share than that paid by the initial and secondary funding source, sometimes 5 or 10 times more per share. A vivid example is the launch of Alibaba (see the closing case and Chapter 5); its IPO was valued in the billions of dollars on the Hong Kong stock exchange in October 2007.

Section 15.1 ◗ REVIEW QUESTIONS

1. List the major steps in the process of building an online business.
2. Describe the formation process of a typical online business.
3. What special requirements must an online business consider in its formation? In e-business planning?
4. What is a business case and how does it contribute to business success?
5. Describe initial, secondary, and IPO funding options available to a startup.
6. What is an angel investor? An incubator?
7. How does a VC company support a startup?

15.2 ADDING E-COMMERCE INITIATIVES OR TRANSFORMING TO AN E-BUSINESS

Creating an e-business startup certainly is exciting, but it also is very risky. As with any other business, the failure rate is very high. However, in cyberspace the risks and uncertainties, plus lack of experience, may result in an even higher rate of failure. Nevertheless, thousands of new online businesses have been created since 1995, mostly small ones (see Chapter 12). A much more common strategy is adding one or several EC initiatives to an existing business.

ADDING EC INITIATIVES TO AN EXISTING BUSINESS

Almost all medium-to-large organizations have added or plan to add EC initiatives to the existing business. The most common additions are:

- **A webstore.** Adding an online sales channel is common in both B2C (e.g., godiva.com, walmart.com) and B2B (e.g., ibm.com). The required investment is fairly low, because inexpensive storefront hosting and software is available from many vendors (see Sections 15.4 and 15.8). A storefront can be built fairly quickly, and the damage in case of failure may not be too large. Because the required investment is not large, it may not be necessary to expend the time and money in developing a formal business case. This is a practical strategy for an SME. For a large-scale storefront, a company will need to follow the steps suggested in Section 15.1, especially the preparation of a business case, in order to secure internal funding and blessings from the top management. For further details on developing storefronts, see the "Getting Started" guide at smallbusiness.yahoo.com. A major issue in developing a storefront is deciding what support services to offer and how to provide them. Note that some well-known companies may create a special subsidiary for online activities using external funding. Such a strategy often results in an IPO.
- **A portal.** There are several types of corporate portals. Almost all companies today have one or several portals that they use for external and/or internal collaboration and communication. A storefront for employees or for external customers will include a portal. Adding a portal (or several portals) may be a necessity, and it may not be preceded by a formal business case. Issues of content and design, as well as security, are of utmost importance. Because many vendors offer portal-building services, vendor selection may be an important issue.
- **E-procurement.** This EC initiative is popular with large companies, as described in Chapter 4. E-procurement frequently requires a business plan and extensive integration (both internally and externally), so an EC architecture must be in place.
- **Auctions and reverse auctions.** Large corporations need to consider building their own auction or reverse auction (for e-procurement) sites. Although forward auctions can be added to a storefront at a reasonable cost, a reverse auction usually requires more integration with business partners and, consequently, a larger investment and a business case. Learn more about reverse auctions from whatisareverseauction.com.
- **M-commerce.** Many companies are embarking on the usage of internal wireless applications as well as on selling and advertising via m-commerce technologies. The resounding effect is seen nowhere more than on sites that have gone mobile. With the increasing popularity of the iPod and BlackBerry, from urban teenagers to publishing and government circles, studies have shown that Twitter and Facebook entries and blogs (in addition to customer reviews) are among the most effective tactics to talk up products online.
- **Social commerce.** Many large companies now offer blogs and wikis; others (e.g., Toyota, Coca-Cola, Wells Fargo Bank) operate enterprise social networks. Wikipedia describes the phenomenon of social commerce as "online media that supports social interaction and user contributions, to assist in the online buying and selling of services." Observers of the e-commerce scene have voiced predictions that social commerce,

a marriage of e-commerce and social media, will go mainstream. Now pair this with industry trends which state that the average consumer mentions specific brands more than 90 times per week in conversations with family, friends, and coworkers; there is a true marketing power from online social networks (see the opening case). Learn about the explosive growth of social commerce from bazaarvoice.com/resources/stats.

Organizations may consider many other EC initiatives, following the business models presented in Chapter 1. For example, Qantas (qantas.com.au) sells tickets online directly from its website and from a B2B exchange; it buys supplies and services from its e-procurement site as well as from several exchanges; it provides e-training for its employees; operates several corporate portals; offers online banking services to its employees; provides e-CRM and e-PRM; manages its frequent-flyer program; supports a wireless notification system to customers; and so on. Large companies, such as GE and IBM, have hundreds of active EC projects.

TRANSFORMATION TO AN E-BUSINESS

As the brick-and-mortar organization implements more EC projects, it becomes a click-and-mortar organization, and eventually an e-business. Being an e-business does not imply that the organization is a pure-play company; it just means that it conducts as many processes as possible online. A rapid or large-scale change from brick-and-mortar to e-business involves organizational transformation. For planning such a transformation, see Basu and Muylle (2007), who outline a detailed process for such a transformation.

What Is Organizational Transformation?

Organizational transformation is a comprehensive concept that implies a major organizational change. A *transformation* is not only a major change, but also a sharp break from the past. The key points in understanding organizational transformation are as follows:

- The organization's ways of thinking and vision will fundamentally change.
- There will be revolutionary changes to the process and context involved in creating a new organizational vision and rethinking business models and business strategy.
- The change must involve a substantial break from previous ways of acting. It will likely involve discovering and developing new opportunities and new ways of doing things.
- The change must permeate through and impact on the behavior of a majority of organizational members.
- The change will involve creating new systems, procedures, and structures that not only enable and dictate how new processes function, but that will also impact on the deeply embedded business models and understandings that drive the organization.

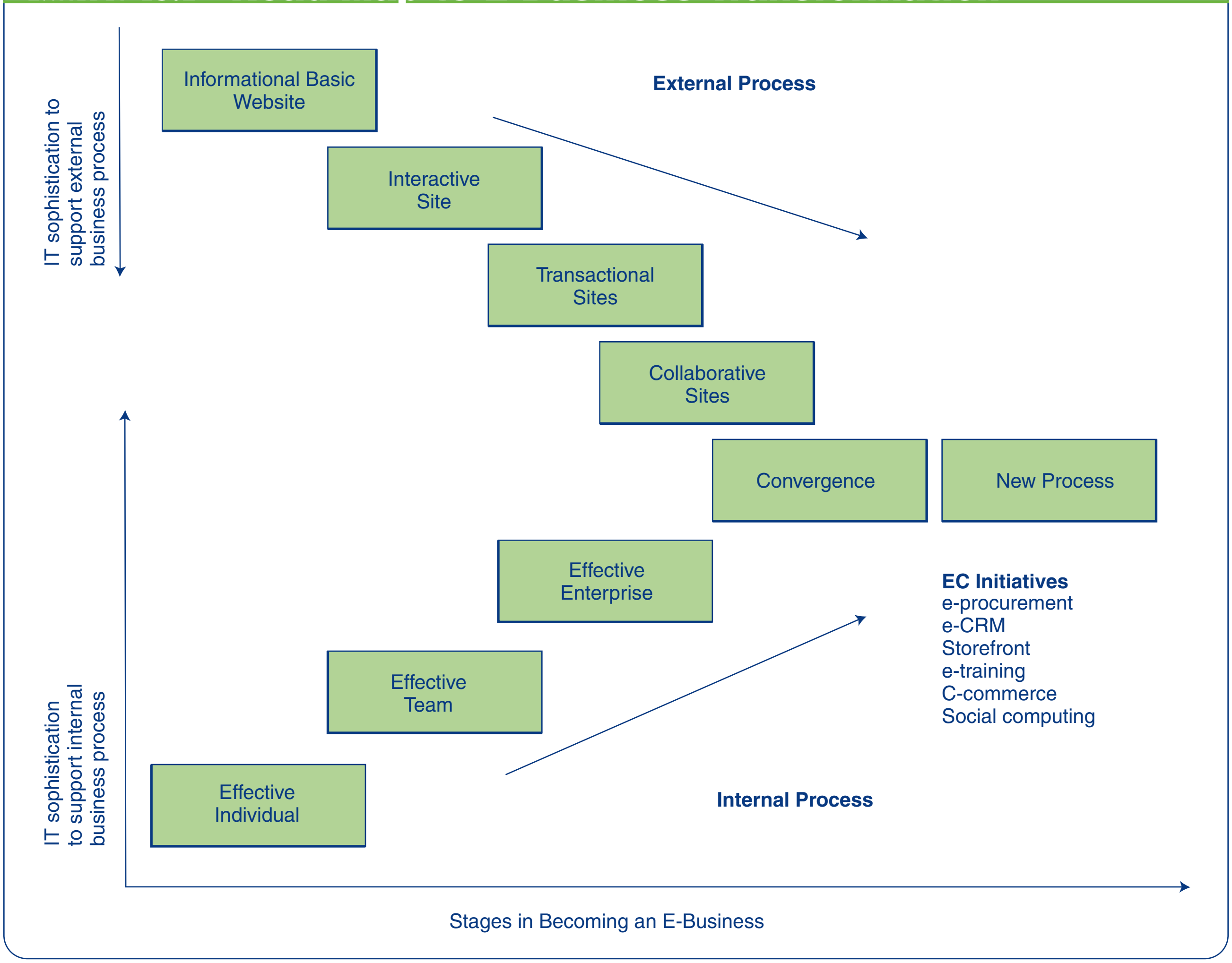
An e-business transformation is not solely about technology. Technologies must be integrated with possible changes in business strategy, processes, organizational culture, and infrastructure.

How an Organization Can Be Transformed into an E-Business

Transforming an organization, especially a large company, into an e-business can be a very complex endeavor. For an organization to transform itself into an e-business, it must transform several major processes, such as procurement, sales, customer relationship management (CRM), and manufacturing, as well as deal with *change management.*

Such a transformation involves strategic issues. The implementation of EC projects requires a disruptive and potentially hazardous change in core features. It is suggested that companies spin off EC activities as part of the transformation process. Exhibit 15.2 depicts a road map for transforming a business to an e-business. It shows the internal and external transformation processes supported by IT at each stage. *Baseline* (baselinemag.com) offers

EXHIBIT 15.2 Road Map to E-Business Transformation



Source: A. Ginige, et al. "A Road Map for Successfully Transforming SMEs into E-Business." *Cutter IT Journal* (May 2001). Used with permission of the author.

a calculator to measure the cost and value of business transformation. For details on business transformation, see Strassmann (2007).

Business Process Reengineering (BPR)

Several studies have examined the transformation to e-business. For example, Abeti, et al. (2009) explored the use of a semantic wiki for requirements elicitation and management's process of redesigning an organization for e-business. Others have explored the use of simulation modeling for enabling transformation to e-business, examining the BPR process and using simulation and process maps to support the process. Turban, et al. (2011) describe the use of business intelligence in BPR. Finally, organizational change issues in transformation to e-business need to be addressed.

Business Process Management

Business process management has been used to facilitate organizational transformation. The term **business process management (BPM)** refers to activities performed by businesses to improve their processes. Although such improvements are hardly new, software tools called *business process management systems* have made such activities faster and cheaper. BPM systems monitor the execution of the business processes so that managers can analyze and change processes in response to data, rather than in response to a hunch. BPM differs from BPR in that it deals not just with one-time changes to the organization, which

business process management (BPM) Method for business restructuring that combines workflow systems and redesign methods; covers three process categories—people-to-people, systems-to-systems, and systems-to-people interactions.

is what BPR does, but with long-term consequences. The major activities of BPM are process design, process execution, and process monitoring. For details, see en.wikipedia.org/wiki/Business_process_management and Jeston and Nelis (2008).

Software Tools for Facilitating the Transformation to E-Business

Several vendors offer methodologies and tools to facilitate the transformation to e-business. IBM is one, although there are many others such as Cisco and Oracle. Using special methodologies, organizations in the public sector, such as the Federal Aviation Administration (FAA), the Office of the Comptroller in New York City, as well as public utilities, can achieve dramatic cost and cycle time reductions.

Change Management

Transforming an existing business to an e-business or adding a major e-commerce initiative means a manager must change business processes and the manner in which people work, communicate, and are promoted and managed. According to Ash and Burn (2006), this requires systematic attention to learning processes, organizational culture, technology infrastructure, people's thinking, and systems. Employees, business partners, and even customers may resist such a change. Ash and Burn (2007) have developed a model of e-business change as well as a model for managing e-business change. Chu and Smithson (2007) provide a case study for organizational change in an automobile manufacturer. For more on change management, see en.wikipedia.org/wiki/Change_management.

Section 15.2 ◗ REVIEW QUESTIONS

1. Which EC initiatives are brick-and-mortar organizations most likely to add?
2. Describe the steps in becoming an e-business and the major activities involved in the process.
3. List some of the issues involved in transforming to an e-business.
4. Define BPR and BPM.
5. Describe the major characteristics (key points) of organizational transformation.

15.3 BUILDING OR ACQUIRING A WEBSITE

Every online business needs a website. A website is the primary way any firm doing business on the Internet advertises its products or services and attracts customers. Many websites also sell products and services. The website may be a webstore, a portal, an auction site, and so on. How can an organization build or acquire such a site (see Rutgers 2009)? First, let's examine the major different types of websites that exist. An entrepreneur can start a business for just $300 (Swanhill 2009).

CLASSIFICATION OF WEBSITES

Websites come in all shapes and sizes. One of the major distinctions made in website classification is the level of functionality inherent in the site:

informational website
A website that does little more than provide information about the business and its products and services.

interactive website
A website that provides opportunities for the customers and the business to communicate and share information.

- An **informational website** does little more than provide information about the business and its products and services. For many brick-and-mortar businesses, an informational "brochureware" website is perfectly satisfactory. The major purpose is to have a *presence* on the Web.
- An **interactive website** provides opportunities for the customers and the business to communicate and share information. An interactive site will contain all the information about products and services that an informational site does, but it also delivers informational features intended to encourage interaction between the business and customers or among customers, such as an e-newsletter, product demonstrations, blogs, and customer discussion forums. An interactive website will strongly encourage feedback by including contact e-mail addresses; providing feedback forms, wikis, and blogs; and promoting completion of online surveys. Features such as the ability

to search the site, a well-designed site map, and mouseovers (clickable buttons that change shape or color when a visitor passes a mouse cursor over the button) make navigation more interactive. Value-added tools such as currency converters, price comparisons, calendars, and various types of calculators (e.g., a mortgage calculator on a bank's website) can enhance interactivity.

- At a higher level of interactivity are **attractors**—website features that attract and interact with site visitors. Attractors such as games, puzzles, prize giveaways, contests, and electronic postcards (e-cards) encourage customers to find the website, visit again, and recommend the site to their friends. For example, Ragu's website (ragu.com) does not sell spaghetti sauce or other Ragu products, but the recipes, customer interaction ("talk to Mama"), unforgettable domain name (eat.com), and other features make this an attractor-loaded site that increases *brand awareness* and sells Ragu's products in the customer's next trip to the grocery store. Coca-Cola and Disney have similar sites.
- A **transactional website** sells products and services. These websites typically include information and interactivity features but also have sell-side features, such as a shopping cart, a product catalog, a customer-personalized account, a shipping calculator, and the ability to accept credit cards to complete the sale.
- A **collaborative website** is a site that allows business partners to collaborate (i.e., it includes many supportive tools; see Chapter 4). B2B exchanges may also provide collaboration capabilities.
- A **social-oriented website** is a site that provides users online tools for communication and sharing information on common interests. It empowers consumers to utilize their productive and leisure time around the converged media experience, within a social context of participation. Social-oriented websites like Facebook (see the opening case) have quickly emerged as one of the most powerful marketing channels.

attractors
Website features that attract and interact with visitors in the target stakeholder group.

transactional website
A website that sells products and services.

collaborative website
A site that allows business partners to collaborate.

social-oriented website
A site that provides users online tools for communication and sharing information on common interests.

BUILDING A WEBSITE

Assuming that a business has completed the preparatory work of business formation—writing a business plan, deciding what type of site it wants to build, and acquiring initial funding—it is ready to build a site.

Steps in Building a Website

1. **Select a Web host.** One of the first decisions that an online business will face is where to locate the website on the Internet. The website may be included in a virtual shopping mall, such as ourvirtualmall.com, or hosted in a collection of independent storefronts, as at Yahoo! (smallbusiness.yahoo.com), Amazon.com, or eBay (even if you do not do auctions). However, many medium-size and large businesses build stand-alone websites either with an independent hosting service or through self-hosting arrangements.
2. **Register a domain name.** Nearly concurrent with the selection of a Web host will be the domain name decision. In a mall or Web storefront, the business's name may be an extension of the host's name. A stand-alone website will have a stand-alone domain name (e.g., mybusiness.com), and decisions will have to be made about which top-level domain name to use and whether the domain name includes the business name or only some aspect of branding.
3. **Create and manage content.** The website also needs content—the text, catalog, images, sound, and video that deliver the information that site visitors need and expect. Content can come from a variety of sources, but getting the right content in place, making it easy for viewers to find, delivering it effectively, and managing content so it remains accurate and up-to-date are crucial to the success of the online business (see discussion in Section 15.5). Hosting services may provide templates that show where content is to be placed and some suggestions on how to organize content. Exhibit 15.3 lists the primary criteria website visitors use to evaluate the content of a website.
4. **Design the website.** This is the critically important and creative part of the process that determines what the site will look like (e.g., color schemes, graphics, typography) and how

EXHIBIT 15.3 How Website Visitors Evaluate Websites

How Website Visitors Evaluate Content

Criteria (and Related Subcriteria)	Explanation
Relevance (applicable, related, clear)	Concerned with issues such as relevancy, clearness, and "goodness" of the information.
Timeliness (current, continuously updated)	Concerned with the currentness of the information.
Reliability (believable, accurate, consistent)	Concerned with the degree of accuracy, dependability, and consistency of the information.
Personality	Delivery of content the way you like it.
Scope (sufficient, complete, covers a wide range, detailed)	Evaluates the extent of information, range of information, and level of detail provided by the website.
Perceived usefulness (informative, valuable, instrumental)	Visitors' assessment of the likelihood that the information will enhance their purchasing decision.

How Website Visitors Evaluate Website Design

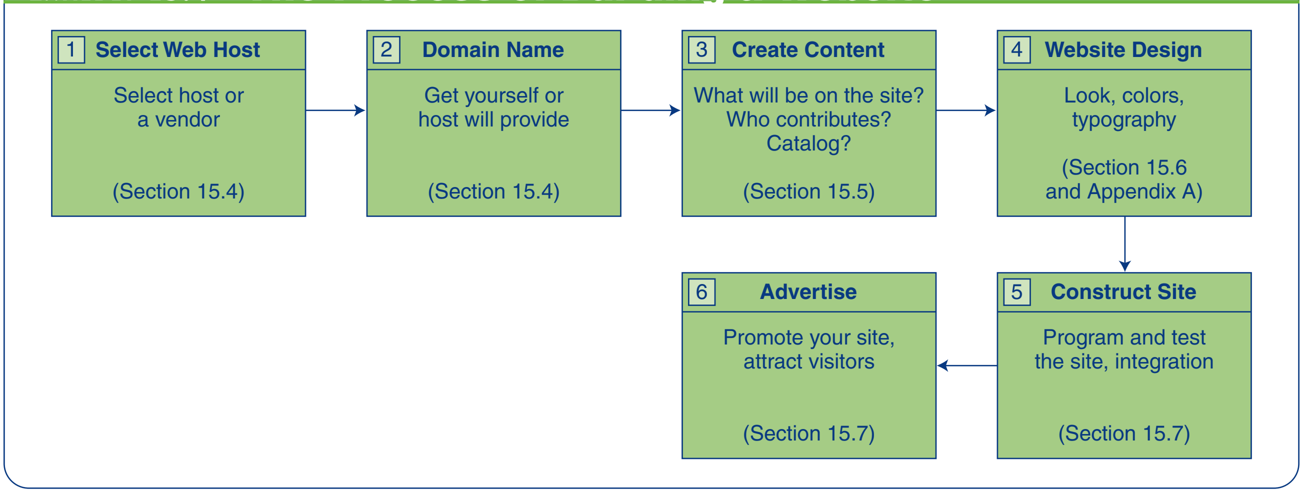
Criteria (and Related Subcriteria)	Explanation
Access (responsive, loads quickly) (see *w3.org/WAI*)	Refers to the speed of access and the availability of the website at all times.
Usability (simple layout, easy to use, well organized, visually attractive, fun, clear design)	Concerned with the extent to which the website is visually appealing, consistent, fun, and easy to use.
Navigation	Evaluates the links to needed information.
Interactivity (customized product; search engine; ability to create list of items, change list of items, and find related items)	Evaluates the search engine and the personal features (e.g., shopping cart) of the website.
Attractiveness, Appearance	Proper use of multimedia, colors.

visitors will use it (e.g., information architecture, navigation design). Mall or storefront businesses may have limited options, but the design choices for the stand-alone website are nearly unlimited. Exhibit 15.3 also lists the primary criteria that website visitors use to evaluate the design of a website (Section 15.6).

5. **Construct the website and test.** Businesses must also decide whether to design and construct the website internally, contract it out to a Web design firm, or some combination of both. When the business owners are satisfied with the website, it is transferred to the website host. At this point, the website is open for business, but it requires final testing to ensure that all the links work and that the processes function as expected (e.g., acceptance of credit cards). For details, see Section 15.8.
6. **Market and promote the website.** At this stage, the business promotes the location, or URL, of the website widely on products, business cards, letters, and promotional materials. A business can use any of the advertising strategies discussed in Chapter 3—banner exchanges, e-mail, chat rooms, viral marketing, or other methods. Another key strategy for attracting customers is increased visibility via search engine optimization, which is discussed in Section 15.8.

The process of building the site is illustrated in Exhibit 15.4. Templates are available at smallbusiness.yahoo.com/webhosting/websitetemplates.php.

EXHIBIT 15.4 The Process of Building a Website



The forthcoming sections discuss each of the steps illustrated in Exhibit 15.4.

Section 15.3 ◗ REVIEW QUESTIONS

1. Distinguish among informational, interactive, transactional, collaborative, and social-oriented websites.
2. List the six steps in building a website.

15.4 WEBSITE HOSTING AND OBTAINING A DOMAIN NAME

Every retail business—online or offline—has a webstore from which it sells goods and/or services. The business either owns or rents the storefront in a mall or at an independent location. The decisions about whether to own (self-host) or rent, where to host the website (storebuilder service, ISP, pure Web hosting service, or self-hosting), and the site's domain name are some of the first important decisions an online business owner has to make. This section discusses the considerations in making these decisions. For details, see Rutgers (2009).

WEB HOSTING OPTIONS

The following are the major Web hosting options.

Storebuilder Service

A **storebuilder service** (also called a *design-and-host service*) provides Web hosting as well as storage space, templates, and other services to help small businesses build a website quickly and inexpensively.

storebuilder service
A hosting service that provides disk space and services to help small and microbusinesses build a website quickly and cheaply.

An example of a company that offers comprehensive storebuilding hosting services and software is Yahoo! Web Hosting (smallbusiness.yahoo.com/webhosting). Yahoo! offers base services, additional services, and packages for professionals that includes security features. All levels of Yahoo! Web Hosting include access to template-based software, SiteBuilder, which offers more than 330 customizable templates. The software can be used to build a storefront quickly and easily (see Section 15.8 and Team Assignment 6). Yahoo!'s Web Hosting package also provides marketing tools, domain name selection assistance, a payment gate, storage (disk) space, and shipment services. The package also works with Yahoo! Merchant Solutions, which is described in Section 15.8. Yahoo! Web Hosting usually offers a website address, management tools, security features, and Internet connection maintenance. Yahoo! combines Web hosting and store building, but other vendors may separate the two functions, as shown later in this section.

The advantage of a storebuilder service is that it is a quick, easy, and inexpensive way to build a website. The disadvantages are the lack of a strong online identity, limited functionality (e.g., accepting credit cards may not be possible), dependence on the service for proper management of connectivity to the site, and some lack of differentiation (the website tends to look like other sites because everyone is using the same set of templates). Despite the disadvantages, storebuilder services are the prime choice of small and sometimes medium-size businesses.

The following are illustrative examples of how small companies build webstores using storebuilding services.

- Laura Modrell was looking for the best price for the Thomas the Tank Engine character her son adored. Searching the Web, she discovered that people were buying these toy trains and reselling them online at a huge profit. So she built a simple storefront in 1999 using free templates and began selling unique educational toys, including Thomas the Tank Engine and Friends. The business grew rapidly, and in 2000 she switched to Yahoo! Store. She not only needed the professional look, but also the support services. By using Yahoo! Store, Modrell has complete control over her site (trains4tots.com) with regard to product descriptions, prices, orders, and so on at a minimal cost and with limited computer knowledge. Trains4Tots.com has the estimated value of $4,977 and ranks 2,368,363 in the world (Alexa) in March 2011 (see valuethewebsite.com/www.trains4tots.com).
- Using Yahoo!'s SiteBuilder software, Springwater Woodcraft, an established Canadian furniture manufacturer, was able to add a new sales channel (springwaterwoodcraft.com). The software helped not only with sales but also with accounting. It also led the company into the international market.
- TailorMade-adidas Golf (TMaG) is the world's leading manufacturer of metal and wood golf clubs. When it launched the revolutionary r7 Quad, TMaG had to make sure that its customers (golf retailers) would understand the new product and its benefits in order to transform those benefits into customer sales. To do that, TMaG created courses that it offered online to educate the golf retailers. Using Yahoo! Merchant Solutions, it rapidly launched the e-training B2B project (tmagconnection.com). Participation in the course was high, and when the store opened online it attracted 15 percent of all TMaG customers, who placed $600,000 in orders in the first three months. The company has created several other storefronts (e.g., one for selling its products to employees of TMaG's parent company).

EBay also offers storefront software tools for its merchants. For more on eBay stores, see pages.ebay.com/storefronts/seller-landing.html. Amazon.com offers a similar service (see webstore.amazon.com/WebStore-for-eCommerce-Business). The advantage of going with storebuilders is that hosting at Yahoo! Store, Amazon.com, or e-Bay exposes the sellers to the large number of potential buyers who visit these sites. Storebuilders are a special case of a pure hosting service.

Web hosting service
A dedicated website hosting company that offers a wide range of hosting services and functionality to businesses of all sizes.

mirror site
An exact duplicate of an original website that is physically located on a Web server on another continent or in another country.

A Dedicated Hosting Service

A **Web hosting service** is a dedicated website hosting company that offers a wide range of hosting services and functionality to businesses of all sizes. Companies such as Hostway (hostway.com), Go Daddy (godaddy.com), and 1&1 (1and1.com) offer more and better services than a storebuilder service because website hosting is their core business. Almost all Web hosting companies have internal Web design departments to ensure the cooperation between the designer and the host. Also, functionality such as database integration, shipping and tax calculators, sufficient bandwidth to support multimedia files, shopping carts, site search engines, and comprehensive site statistics are likely to be readily available. Major services are offered by vendors such as Microsoft (see microsoft.com/smallbusiness/startup-toolkit).

A Web hosting service can be the best option for an online business that needs one or more *mirror sites.* A **mirror site** is an exact duplicate of the original website, but it is physically located on a Web server located in another state or country. A business may decide that it needs a mirror site when large numbers of customers are a far distance from the original site. A mirror site reduces telecommunications costs and improves the speed of customer access, because the site reduces the distance between the Web server and the customer's browser. Typically, customers do not know, or care, that they are accessing a mirror site.

ISP Hosting Combined with Web Designer

The same company that delivers e-mail and Web access to a business probably can host the company's website. An **ISP hosting service** provides an independent, stand-alone website for small and medium-sized businesses. The ISP will probably provide additional hosting services (e.g., more storage space, simple site statistics, credit card gateway software) at the same or a slightly higher cost than the storebuilder services. The List of ISPs (thelist.com) provides lists of ISPs and providers of commercial Internet access.

ISP hosting service
A hosting service that provides an independent, stand-alone website for small and medium-sized businesses.

The major difference between a storebuilder and an ISP hosting service is that with the ISP service, the time-consuming and sometimes expensive task of designing and constructing the website becomes the responsibility of the EC business. The business owners, usually with the help of a contracted Web designer, must use a website construction tool to create the website (e.g., Ibuilt at ibuilt.net) or a Web page editor (e.g., Dreamweaver at adobe.com or FrontPage at microsoft.com). This is not necessarily a bad thing. Compared with a storebuilder template, the combination of an ISP hosting service and a Web designer or builder offers the business increased flexibility as to what it can do with the site, so the site can be distinctive and stand out from the competition. Sites hosted by an ISP also will have a branded domain name. However, one disadvantage of using an ISP is that most providers have limited functionality (e.g., an ISP may be unwilling to host a back-end database). Another consideration is the commitment of the ISP to maintaining quality service and keeping its hosting services up-to-date. Remember that the main business of an ISP is providing *Internet access*, not hosting websites.

Self-Hosting

With **self-hosting**, the business acquires the hardware, software, staff, and dedicated telecommunications services necessary to set up and manage its own website. Self-hosting is beneficial when a business has special requirements, such as maximum data security, protection of intellectual property, or, most likely, when the business intends to have a large and complex site.

self-hosting
When a business acquires the hardware, software, staff, and dedicated telecommunications services necessary to set up and manage its own website.

The disadvantages of self-hosting are the cost and the speed of construction. The other Web-hosting options allow the hosting company to amortize the costs of site hosting across hundreds or thousands of customers. A business that hosts its own website will have to bear these costs alone, not to mention concerns about security and full-time website management. These costs must be weighed against the benefits of better control over site performance and increased flexibility in site design, improvement, and functionalities.

REGISTERING A DOMAIN NAME

Selecting a domain name is an important marketing and branding consideration (e.g., Alibaba.com as discussed in the closing case) for any business. The domain name will be the business's online address, and it provides an opportunity to create an identity for the business.

Domain Names

A **domain name** is a name-based address that identifies an Internet-connected server. Usually, it is designated by the portion of the address that comes to the left of .com or .org and includes the .com or .org. The domain name should be an easy-to-remember name (e.g., congress.gov) that the *domain name system* (DNS) maps to a corresponding IP address (e.g., 140.147.248.209). Each domain name must include a top-level domain (TLD). This is either a general top-level domain (e.g., .com or .biz for commercial businesses, .org for nonprofit organizations, .name for individuals), or it is a country-code top-level domain (ccTLD) (e.g., .au for Australia, .jp for Japan). Most ccTLDs also have a *second-level domain name* that indicates the type of organization (e.g., redcross.org.au, yahoo.co.jp). At the left side of the domain name is the organization's name (e.g., dell.com), a brand name (e.g., coke.com for Coca-Cola), or a generic name (e.g., plumber.com).

domain name
A name-based address that identifies an Internet-connected server. Usually it refers to the portion of the address to the left of .com and .org, etc.

Domain Name System and Its Implementation

Domain Name System (DNS)
A hierarchical naming system for computers, services, or any resource participating in the Internet; it is like a directory.

The **Domain Name System (DNS)** is a hierarchical naming system for computers, services, or any resource participating in the Internet; it is like a directory. An often used analogy to explain the DNS is that it serves as the "phone book" for the Internet by translating human-friendly computer host names into IP addresses. The DNS makes it possible to assign domain names to groups of Internet users in a meaningful way, independent of each user's physical location.

Domain name assignment is under the authority of the Internet Corporation for Assigned Names and Numbers (ICANN; icann.org). ICANN has delegated responsibility for domain name registration procedures and database administration in the general TLDs to top-level domain administrators such as Afilias (for .info), Public Interest Registry (for .org), and VeriSign Global Registry Services (for .com and .net). Similarly, regional Internet registries administer the ccTLDs (e.g., Nominet for the .uk domain, China Internet Network Information for the .cn domain, Japan Registry Service for the .jp domain).

Hundreds of ICANN-accredited registrars carry out the actual registration of domain names. These are located in various countries, but most are in the United States. A list of these registrars is available at icann.org/registrars/accredited-list.html. A domain name registrar is a business that assists prospective website owners with finding and registering a domain name of their choice.

Some investors and speculators have made a fortune from buying domain names and then selling them. Sloan (2007) provides an overview of how this is done, including how the domain owner collects money from advertisers. Some domain name owners have over 5,000 names, and one owner built a $30 million empire.

A useful resource for learning more about domain names and the registration process is About Domains (aboutdomains.com), which offers "guides and resources for successful Internet presence," including a domain name glossary, a registration FAQ file, and "horror stories" from domain name owners who have had bad experiences with registrars. Also see "How to Register a Domain Name" at 2 Create a Website (2createawebsite.com). You can also get a domain name at smallbusiness.yahoo.com/domains.

Section 15.4 ◗ REVIEW QUESTIONS

1. What are the advantages and disadvantages of the different Web hosting options?
2. What is a mirror site? Why would a company use a mirror site?
3. What criteria should an online business consider in choosing a Web hosting service?
4. What is a domain name? Why is selecting a domain name an important step for going online?
5. How are domain names controlled in order to avoid duplication?

15.5 CONTENT CREATION, DELIVERY, AND MANAGEMENT

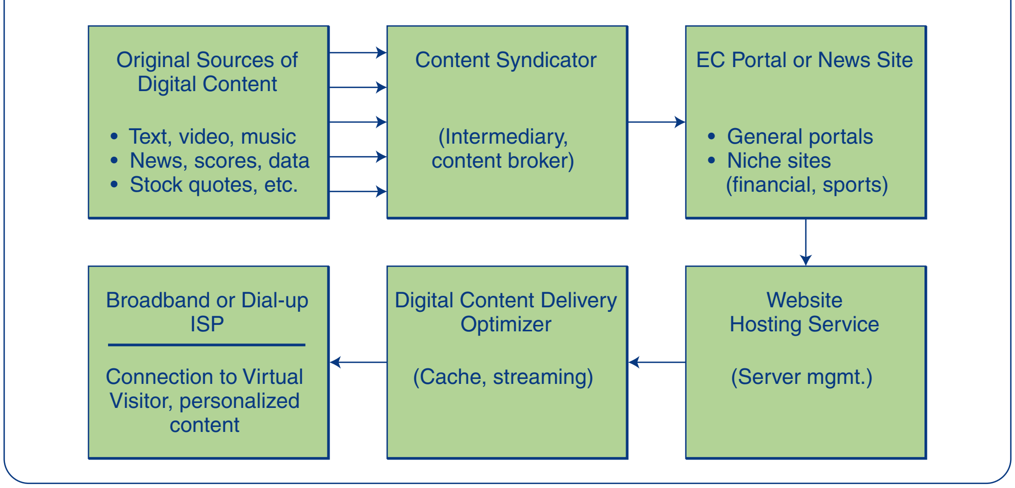
content
The text, images, sound, and video that make up a Web page.

Content is the text, images, sound, and video that comprises Web pages. Creating and managing content is critical to website success because content is what a visitor is looking for at a website, and content is what the website owners use to sell the site, the product or service, and the company that stands behind the site. A successful Internet presence has always been about effective delivery of the information the visitor wants—"Content is king!" This section describes the role content plays in successful online business operations and the key aspects of creating, delivering, and managing website content. For details, see Rutgers (2009).

CATEGORIES AND TYPES OF CONTENT

Providing content to EC sites may be a complex job because of the variety and quantity of sources from which to acquire content and the fact that the content must be updated frequently. Also, B2B content, especially in online catalogs, may include pictures, diagrams, and even sound. In addition, content may involve security, quality, and permission issues.

EXHIBIT 15.5 Digital Content Delivery Life Cycle



One of the difficulties in Web content management is that some content needs to be kept up-to-the-minute (e.g., news, stock prices, weather). This is referred to as **dynamic Web content**, as distinguished from *static Web content*, which is updated infrequently.

dynamic Web content
Content that must be kept up-to-date.

For each type of content, companies may use a different approach for content creation and delivery. Exhibit 15.5 shows the content life cycle. As shown in the exhibit, once content is created, it may appear in different formats (e.g., text, video, music). Then, it moves to a content syndicator. A syndicator (to be described later in this section) moves the content to a portal or news site. From there, a hosting service moves the content, possibly via an optimizer (such as akamai.com). The optimizer delivers the content to the final consumer. We will discuss this process and its elements in more detail a bit later.

Content may be in the public domain, or it may be proprietary in nature (e.g., information about the company and its employees and services). The sites that offer content may be general-purpose public portals, such as Yahoo! or Google, or they may be specialized portals designed to appeal to a specific audience, such as espn.com or ski.com.

Up-to-the-minute dynamic content is what attracts new and returning customers ("eyeballs") and makes them stay longer ("stickiness"). Therefore, dynamic content contributes to customer loyalty.

Primary and Secondary Content

Content should include more than information about the product itself (the *primary content*). A website also should include *secondary content* that offers marketing opportunities, such as the following:

- **Cross-selling.** Using content for **cross-selling** means offering similar or complementary products and services to increase sales. In the offline world, the McDonald's question, "Would you like your burger supplemented with fries?" exemplifies cross-selling. In the online world, Amazon.com offers book buyers options such as "customers who bought this book also bought . . . " and "look for similar books by subject." Accessories, add-on products, extended warranties, and gift wrapping are other examples of cross-selling opportunities that companies can offer to buyers on the product pages or in the purchase process. Another example is that if you buy a car online, you may be offered insurance and financing.

cross-selling
Offering similar or complementary products and services to increase sales.

- **Up-selling.** Creating content for **up-selling** means offering an upgraded version of the product in order to boost sales and profit. Amazon.com offers "great buy" book combinations (buy two complementary books for slightly more than the price of one). (It also practices *down-selling* by offering visitors cheaper, used copies of a book directly under the new book price.) Up-selling activities usually include offering products with a different design, color, fabric, or size.

up-selling
Offering an upgraded version of the product in order to boost sales and profit.

- **Promotion.** A coupon, rebate, discount, or special service is secondary content that can increase sales or improve customer service. Amazon.com frequently offers reduced or free shipping charges, and it promotes this offer on each product page.
- **Comment.** Reviews, testimonials, expert advice, or further explanation about the product can be offered after introducing the product. Amazon.com book pages always have editorial and customer reviews of the book, and the "look inside this book" feature sometimes allows website visitors to preview book contents online.

Creating effective content also means fulfilling the information needs and experiential expectations of the visitor.

CREATION OR ACQUISITION OF CONTENT

Where does content come from? The site's owners and developers create the content on most sites. Typically, it begins by collecting all the content that is currently available (e.g., product information, company information, logos). Then the value of additional content—e-newsletters, discussion forums, customer personalization features, FAQ pages, and external links—is assessed for inclusion in the website. Customers can generate content—through product reviews, testimonials, discussion forums, and other ways. Business partners downstream in the supply chain also can provide content (e.g., a chemical industry digital exchange would not need to duplicate product information but could simply source it from the chemical manufacturers).

Buying Content

Content can be purchased or licensed. Lonely Planet, the Australian travel guide company, and the popular Mobile Travel Guide both sell travel information to websites such as Travelocity. *Content syndicators* such as Wilson Internet Services (wilsonweb.com/syndicate) serve as intermediaries that link content creators with businesses interested in acquiring content. Finally, some individuals and businesses, such as Mike Valentine's WebSite 101 (website101.com/freecontent.html), provide free content and ask only for proper attribution in return.

Buying from a Syndicator

syndication
The sale of the same good (e.g., digital content) to many customers, who then integrate it with other offerings and resell it or give it away free.

Web syndication
A form of syndication in which a section of a website is available for other sites to use.

Really Simple Syndication (RSS)
A family of Web-feed formats used to publish frequently updated digital content.

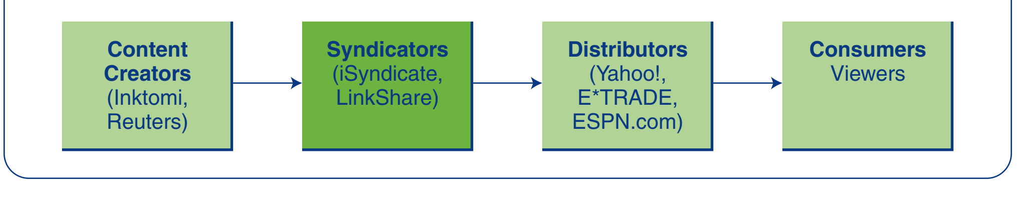
Syndication involves the sale of the same content (good) to many customers, who then integrate it with other offerings and resell it or give it away for free. Syndication has been extremely popular in the world of entertainment and publishing but was rare elsewhere until the arrival of the Internet. The digitization of products and services, and the resulting ease with which information can flow, makes syndication a popular business model (e.g., see yellowbrix.com). Exhibit 15.6 shows the syndication supply chain.

Web syndication is a form of syndication in which a section of a website is available for other sites to use (see en.wikipedia.org/wiki/Web_syndication). Web syndication is done in many cases by using RSS and podcasting. In such a case, content is arranged into a standardized structure of heading, content summary, and links to original sources.

RSS

Really Simple Syndication (RSS) is an XML format for syndicating Web content (the XML file is added to the RSS feed). A website that wants to allow other sites to publish some of its content creates an RSS document and registers the document with an RSS publisher. RSS is most often used to publish frequently updated digital content, such as blogs, news, or podcasts.

EXHIBIT 15.6 The Syndication Supply Chain



A user who can read RSS-distributed content can use the content on a different site. This enables the sharing of Web content. Users can view RSS feeds on a distributable "What's New" on a site, which is popular with bloggers. Major sites such as CNET, BBC, CNN, Disney, TechTarget, ZDNet, Red Herring, and Wired use RSS to share content among themselves. For details on RSS feeds, see Cong and Du (2008).

RSS offers a number of key benefits:

- **Timeliness.** Users can receive automatic updates from their favorite websites when new content becomes available rather than having to visit the website.
- **Efficiency.** Users can quickly scan over headlines and summaries and only read the content that interests them.
- **Coverage.** Users can receive updates from multiple websites at one location—the RSS reader or aggregator.

This technology solves problems such as traffic delays caused by increased site traffic and expedites the gathering and distributing of news. RSS has been listed as one of the top e-business trends over the past few years (Turban, et al 2011). Mozilla's Firefox Web browser includes RSS, making it very popular. Several advertisers have begun to use it as a platform for targeted advertisements. For details, see en.wikipedia.org/wiki/RSS_(file_format).

Podcasting

A **podcast** is a media file that is distributed by subscription (paid or unpaid) over the Internet using syndication feeds (such as RSS news feeds) for playback on mobile devices and personal computers. Like "radio," it can mean both the content and the method of syndication. It is a collection of audio files in MP3 format, represented by an RSS 2.0 news feed. The host or author of a podcast is often called a *podcaster,* who can offer direct download or streaming of its content. A podcast distinguishes itself from other digital audio formats by its ability to download automatically using software capable of reading feed formats such as RSS.

podcast
A media file that is distributed over the Internet using syndication feeds for playback on mobile devices and personal computers. As with the term *radio,* it can mean both the content and the method of syndication. A collection of audio files in MP3 format.

Podcasting is emerging as an e-commerce tool. For example, podcasts create a new channel for websites to communicate with customers. Because podcasts are audio-based, it enables companies to deliver audio-specific content, including music, speeches, radio-style presentations, and more (see en.wikipedia.org/wiki/Podcasting).

Representative Content-Related Vendors

A large number of vendors support content creation and management that facilitates the sharing of an organization's digital assets. Thus far, we have discussed the role of intermediaries and other third-party B2B providers in channeling digital content to the sites that display the content to consumers. Our discussion now turns to the next step in the content delivery chain, the task of delivering digital content to customers.

Content Delivery Networks

Content delivery is a service that hosting companies sometimes offer to help customers manage their content. Using *content delivery networks (CDNs)*, companies can update content, improve the quality of the site, increase consistency, control content, and decrease the time needed to create or maintain a site. Akamai (akamai.com) provides CDNs. Later in this section, we will discuss the case of Akamai.

In B2B, the information contained in electronic catalogs is of extreme importance. Companies can create and maintain the content in-house, or they can outsource such tasks.

Personalizing Content

Personalized content is Web content that is prepared to match the needs and expectations of the individual visitor. Such content enables visitors to find the information they need faster than at traditional sites, resulting in more visitors coming to the site. The process begins by tracking the visitor's behavior on the website via cookies. This information is provided to server software that generates dynamic Web pages that contain content the visitor can use. Amazon.com's website is the king of personalized content, offering content

personalized content
Web content that matches the needs and expectations of the individual visitor.

such as recommendations for products based on previous purchases, recently viewed items, and even a personalized "Welcome Back" message for repeat visitors. The downside of personalization is that it is expensive and can slow performance.

Delivering Content by E-Newsletter

e-newsletter
A collection of short, informative articles sent at regular intervals by e-mail to individuals who have an interest in the newsletter's topic.

One of the most effective strategies for delivering content of interest to potential customers is an *e-mail newsletter.* An **e-newsletter** is a collection of short, informative content sent at regular intervals via e-mail to individuals who have an interest in the newsletter's topic. Examples are *E-Marketer Daily* and *Commerce Minutes.* An e-newsletter can support the business and the product.

CONTENT MANAGEMENT AND MAINTENANCE

content management
The process of adding, revising, and removing content from a website to keep content fresh, accurate, compelling, and credible.

Content management is the process of collecting, publishing, revising, updating, and removing content from a website to keep content fresh, accurate, compelling, and credible. Almost all sites begin with a high level of relevant content, but over time material becomes dated, irrelevant, or incorrect. Content management makes sure a site remains relevant and accurate long after the initial push to launch the site is over. For details on content management, see Henri and Heroux (2008).

Content Testing and Updating

An obvious task in content management is testing the content. Web managers need to make extensive and frequent checks of material for accuracy, clarity, typos, poor punctuation, misspelled words, and inconsistencies. Employees knowledgeable about the content should read site material to test it for accuracy; customer focus groups and professional editors should read it to check for clarity; and everyone should read new content to find mistakes. See optimost.com for more on content testing.

Measuring Content Quality

How does a company know if the content on its website is meeting its e-commerce goals? How does a company know if it is delivering what its customers need? They do it by comparing the content to quality standards. In addition, content must meet privacy requirements, copyright and other legal requirements, language translation needs, and much more. You may use guidelines for knowledge management as well. Metrics are available from W3C (w3c.org/PICS) and periodically in *Baseline* magazine. Measuring the quality of content also requires appropriate Web traffic measurement tools. For specific suggestions on how to effectively use metrics to measure content quality, see Norguet, et al. (2006).

Pitfalls of Content Management

Companies face various content management pitfalls. Some top content management pitfalls and the best practices for avoiding them are found in Exhibit 15.7.

Content Removal

An important task within content management is removing old, out-of-date pages from the Web server. Even if all references to the page in the website have been removed, the page is still visible to search engines, searches on the site itself, and links from other Web pages. Delete or remove expired pages to an offline location that can serve as an archive.

Content Management Software

Content management software allows nontechnical staff to create, edit, and delete content on the company's website. The driving forces behind content management software (CMS) include the desire for companies to empower content owners to manage their own content and the inability of the computing services staff to keep up with demands for new or changed content on the website. There is specific software available on the market that helps measure content management. See slideshare.net/abelsp/content-quality-management-using-software-to-manage-quality-and-track-metrics for more information.

EXHIBIT 15.7 Content Management Pitfalls and Their Solutions

Problem or Pitfall	Solution
Picking content management software before developing solid requirements and the business case	Convert some of the resources currently being expended on software evaluation to a deeper examination of the company's own content and business needs.
Not getting a clear mandate from the top to proceed	Get business leaders onboard; you will need their strategic direction and a mandate for change.
Underestimating integration and professional service needs	Budget two to four times the cost of software license for consulting, customization, and integration.
Hiring inexperienced developers to integrate and extend the software	Hire good developers with content management software experience to implement mediocre software. This is always preferable to excellent software in the hands of novice integrators.
Depending entirely on an outside company to make changes to the system	Involve your own technical people closely in the initial development, even if you are outsourcing the integration. Do not skimp on training.
Thinking your migration will be painless despite what the content management system provider tells you	Start to prepare yourself for a content management system by cleaning up your HTML code and organizing your content. This takes longer than you might think!

Sources: Robb (2011) and Nielsen (2005).

CATALOG CONTENT AND ITS MANAGEMENT

Much of the content in B2B and B2C sites is catalog based. Chapter 2 discussed the benefits of electronic catalogs. Although there are many positive aspects of e-catalogs, poorly organized ones may deter buyers. Companies need to make sure that their catalog content is well managed.

For B2B buyers who aggregate suppliers' catalogs on their own websites, content management begins with engaging suppliers and then collecting, standardizing, classifying, hosting, and continually updating their catalog data. That is no small task, considering that most large buying organizations have hundreds, or even thousands, of suppliers, each using different data formats and nomenclature to describe their catalog items. The management of catalog content has some unique aspects and options.

CONTENT MAXIMIZATION AND STREAMING SERVICES

Many companies provide media-rich content, such as video clips, music, or Flash media, in an effort to reach their target audience with an appealing marketing message. For example, automakers want to provide a virtual driving experience as seen from the car's interior; realtors want to provide 360-degree views of their properties; and music sellers want to provide easily downloadable samples of their songs. Public portals (e.g., AOL and Google) and others are using considerable amounts of media-rich information as well. Finally, B2B e-catalogs may include thousands of photos.

These and other content providers are concerned about the download time from the user's perspective. Impatient or fickle Web surfers may click "Stop" before the multimedia has had a chance to fully download. Remember that B2C and B2B customers not only want their news stories, music, video clips, reference information, financial information, and sports scores delivered to them over the Web, but they also want them delivered quickly and effortlessly.

CASE 15.2

EC Application

AKAMAI TECHNOLOGIES

An Internet company decided to name itself after a Hawaiian word that means "intelligent, clever, or cool"—Akamai (AH-kuh-my). And indeed, the company has created a clever product. Let's explain.

As user interest in high-speed Internet connections has grown, demand for bandwidth-heavy applications and media also has begun to surge. Paul Kagen Associates estimate that revenues from streaming media services will reach $70 billion by 2014.

However, user connection speeds are only part of the streaming media picture. How will the networks handle the influx of bandwidth-chewing material? With a growing number of users and an abundance of rich media, the Internet is becoming extremely congested. Network traffic control is needed. Akamai and its competitors (Digital Island, iBeam, and Mirror Image) are stepping in to manage Internet traffic.

Akamai products act as Internet traffic cops by using complicated mathematical algorithms to speed Web pages from the closest Akamai-owned server to a customer's location, thereby passing through fewer router hops. This process also helps to eliminate Internet gridlock. Today, caching and content distribution are the only practical ways to reduce network delay.

How does it work? To provide the service, Akamai maintains a global network of over 77,000 servers in 77 countries (in 2011) and leases space on them to giant portals, such as Yahoo! and CNN. These sites use the servers to store graphic-rich information closer to Internet users' computers in order to circumvent Web traffic jams and enable faster page loads, reducing delivery time to users by 20 to 30 percent.

Using Akamai's FreeFlow Launcher, website designers "Akamaize" their sites by marking content for delivery using the Akamai network. FreeFlow takes this content and stores it on Akamai Web servers around the world. When a user visits a website that has been "Akamaized," the images and multimedia content are downloaded from an Akamai server near the user for faster content delivery. Akamai allows customer data to move to and from big websites through its global network for a fee.

Unfortunately, the service is not 100 percent reliable. The speed for the end user depends on how many people are using the user's LAN at any given point in time and also on the speed of the server downloading any given website. A number of competing technologies are trying to provide the same solutions, and only a limited number of large companies that use lots of rich media are willing to pay for the service.

Another advantage of using Akamai or a similar service is the added security. For example, on June 15, 2004, a cyber-criminal attacked some of Akamai's major clients, including Microsoft, Google, and Apple, using a denial-of-service (DoS) attack (see Chapter 9). Within minutes, Akamai deleted the attacks and solved the problem. Akamai controlled 80 percent of the content delivery networks.

In 2001, Akamai started to diversify, offering a comprehensive suite of content delivery, streaming audio and video, traffic management, and other services, such as dynamic page view, bundled in a package called EdgeAdvantage. Akamai and its competitors were losing money in early 2001, but their revenues were increasing rapidly. In 2011, Akamai delivers more than 20 percent of all Web traffic; delivers daily Web traffic greater than a Tier-1 ISP, at times reaching more than 2 terabits per second; and delivers hundreds of billions of daily Internet interactions. Akamai's revenue reached $285 million in the last quarter of 2010.

Sources: Compiled Jones (2008) and *akamai.com/html/technology/index.html* (accessed March 2011).

Questions

1. What services does Akamai provide?
2. What is the company's revenue model?
3. What are the services' limitations?

Therefore, it is important that content providers and marketers use technical delivery solutions that will not cause "traffic jams" during downloading. Several technical solutions are available from vendors who are referred to as *content maximizers* or *streaming services.* They use what is called "content delivery networks" (see Pallis and Vakali 2006). The leading vendor is Akamai, described in Case 15.2. To manage content that includes multimedia, one can use products such as those offered by Kontiki (kontiki.com).

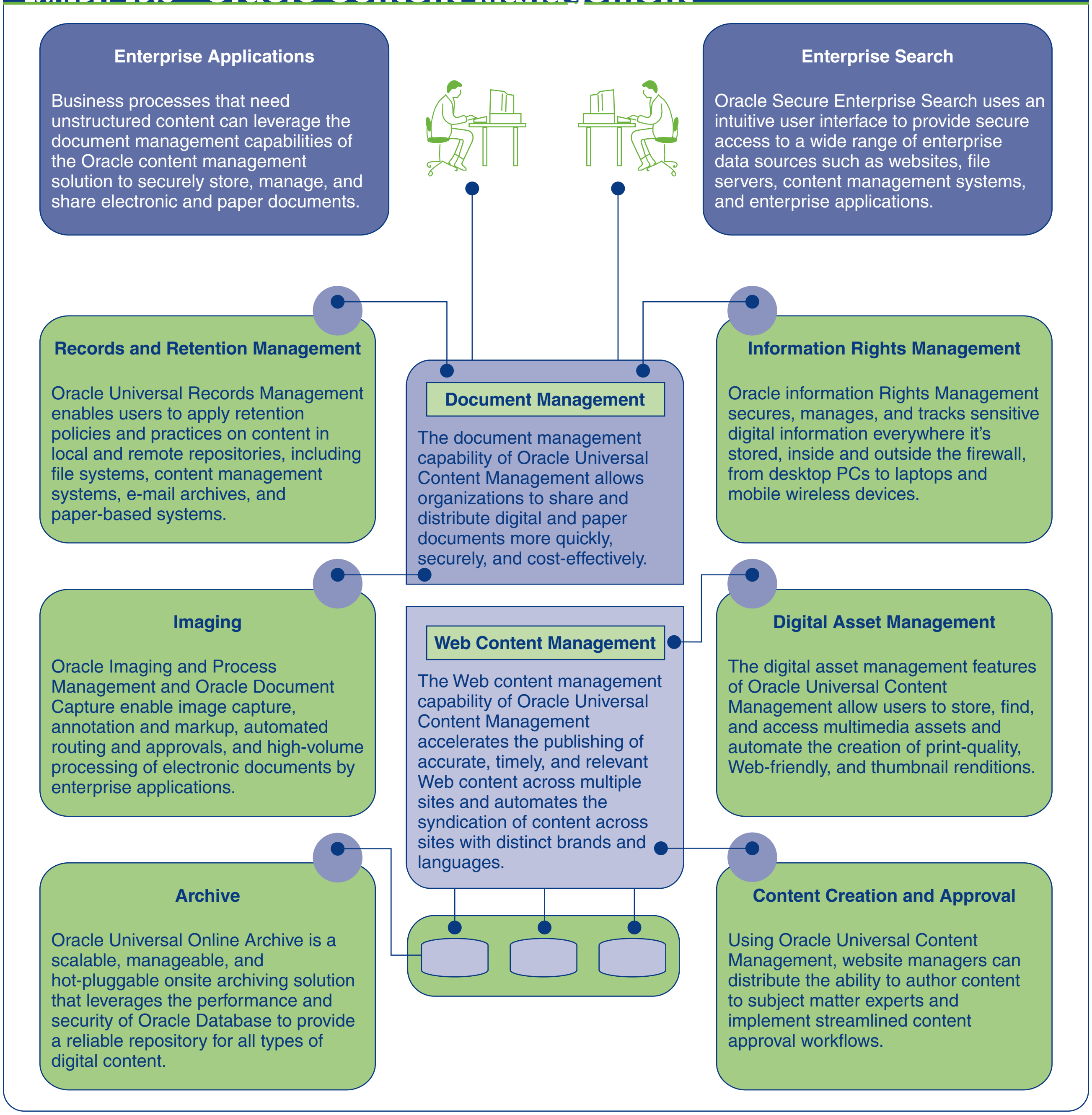
Content for Large EC Sites

Content creation and management for a large EC site can be slow and expensive. Many software vendors provide content management tools. One example is Oracle, whose content management system is illustrated in Exhibit 15.8.

Section 15.5 ◗ REVIEW QUESTIONS

1. What is content? Dynamic content? Personalized content?
2. How can a business use content for cross-selling? For up-selling? For promotion?
3. Where does content come from? Identify four sources of website content. What is content creation?

EXHIBIT 15.8 Oracle Content Management



Source: *oracle.com/technology/oramag/oracle/08-sep/images/o58share20_f1.pdf* (no longer online). Courtesy of Oracle Corporation. Used with permission.

4. What is syndication? How does it relate to content?
5. What e-newsletter content does a subscriber value most?
6. What is the purpose of content management?
7. Describe content maximization.

15.6 WEBSITE DESIGN

The goal of any website is to deliver quality content to its intended audience and to do so with an elegant design (Wiedemann 2007). With the website's content in hand, the website owner's next task is website design, which includes information architecture, navigation design, use of colors and graphics, and maximizing site performance. The purpose of this section is to enable you to contribute to the design of a website when working with professionals. For details, see Rutgers (2009).

Successful website design is about meeting customer expectations. Design starts with identifying customer needs, expectations, and problems. Then a site is designed to meet those needs and expectations or to solve the customers' problems. Pratt (2007) provides the following guidelines for a successful website:

1. Build it for users (useful for the user, not necessarily the company).
2. Make it useful (e.g., usability test).
3. Make information easy to find.
4. Accommodate all users, including those with disabilities.
5. Build a comprehensive, responsive, and effective site.
6. Measure the site against the best of its peer group.
7. Build trust; be up front about security, privacy, and marketing policies.
8. Assign ownership to users, but work as a team with the technical people.
9. Set priorities; do the most beneficial stuff first.
10. Watch for new developments and encourage innovation.

Exhibit 15.9 shows a list of important website design criteria, with relevant questions.

EXHIBIT 15.9 Website Design Criteria

Navigation	Is it easy for visitors to find their way around the site? Does the site comply with the three-click rule?
Consistency	Are design elements, especially look and feel, consistent across all pages?
Response time	How long does it take for the page to appear? Does the site comply with the 12-second rule? With the 4-second rule?
Appearance	Is the site aesthetically pleasing? Are the colors pleasant to the eye? Does the site's look and feel express the company's desired image? Is the site easy to read, easy to navigate, and easy to understand?
Quality assurance	Do the site's calculators, navigation links, visitor registration processes, search tools, etc., work properly?
Availability	Are all dead links fixed promptly? Is the site available for full service 24 hours a day, 7 days a week?
Interactivity	Does the site encourage the visitor to play an active role in learning about the business's products or services? Are all appropriate contact details available on the website so that visitors can submit feedback and ask questions?
Content	How much multimedia? How timely and relevant is the content? Is it easy to read? Informative?
Usability	How easy is it to use the site? How easy is it to learn the site? To make errors and to avoid them?
Security	Is customer information protected? Does the customer feel safe in actions such as submitting credit card information?
Scalability	Does the site design provide a seamless path for enhancements or upgrades in the future? Will site growth and increased usage protect the initial investment in site construction?

CASE 15.3

EC Application

THE WEBSITE DESIGN OF ALIBABA.COM

Alibaba.com Limited (*alibaba.com*) is the global leader in business-to-business (B2B) e-commerce and the flagship company of Alibaba Group. It provides an online trading platform for small and medium enterprises (SMEs) in China and the outside world. The competitiveness of Alibaba can be traced to its continuing technology innovation.

The company is continuously developing high-level and complex systems that improve online transactions by putting in place adequate security measures (Einhorn 2009). For example, the TrustPass of Alibaba.com gives the security that online customers demand. Alibaba.com also has an antifraud and antispam technology. The technology can detect and monitor fraudulent activities and filter spam messages. The company's IT team is always working on ways to maintain and improve the accuracy and effectiveness of such technologies through machine-learning capability and customizable rules.

The Website Design

Alibaba.com's website is simply structured and clean looking. It has three main categories, namely, products, suppliers, and buyers. It allows users to have their accounts and manage their transactions through a drop-down menu with the heading, "My Alibaba." The listings display a wide range of products and services offered by Alibaba's users.

Basic Features for Buyers

The website features several services for buyers. First, buyers can search through an extensive database of suppliers and listings specific to their needs. Second, registered buyers can subscribe to trade alerts that send buyer updates on their selected suppliers and listings. The subscription can be customized using appropriate keywords. Third, they can request quotations and other information from potential suppliers by posting "buy" listings. A buyer can customize his or her buy listings and include specific keywords.

Basic Features for Suppliers

With Alibaba's features, suppliers can practically have their own "mini-websites." First, registered suppliers can develop a webstore that can carry their company profiles, contact information, and a virtual showroom of their products and services. Second, they can also post product and service listings for free. The listings can show selling leads or product descriptions and photographs.

Customer Relationship Management

Registered users can use available account management tools to manage their profiles, identification information, and online stores and listings. This function has a feature that allows users who have online accounts with Alipay to pay for goods or services bought through the site.

Communication

Registered users can communicate with trading partners in real time through TradeManager, Alibaba's instant messaging tool.

Online Forums, User Groups, and Blogs

Alibaba also hosts online forums and user groups to foster interaction among its registered users. Registered users can also create their individual blogs.

Services and Products for Paying Members

Alibaba assists global importers and exporters in conducting business minus the staggering fees and overhead costs. It has different membership packages suitable for different users and the features and services they require.

Sources: Compiled from Einhorn (2009) and *alibaba.com* (accessed March 2011).

Questions

1. Go to *alibaba.com* and examine the layout and features of the site. Is the site navigation effective?
2. Alibaba.com is designed to help China's small and medium enterprises (SMEs). Do you think the interface design is appropriate for nontechnical users?
3. Do the user communities of the website help to promote loyalty and trust of its users?
4. Comment on the use of color and graphics on the website.

Examples of well-designed sites are those of Intel, Sears, HP, Medco, Procter & Gamble, Johnson & Johnson, IBM, Pfizer, and Bank of America. Case 15.3 shows a simply structured and clean looking website of the world's most visited B2B marketplace, Alibaba.com.

INFORMATION ARCHITECTURE

A website's **information architecture** determines how a site organizes, labels, and navigates its Web pages to support browsing and searching. Information architecture begins with designing the site's structure. The most common site structure is hierarchical.

information architecture How the site and its Web pages are organized, labeled, and navigated to support browsing and searching throughout the website.

EXHIBIT 15.10 A Simple Hierarchical Website Structure

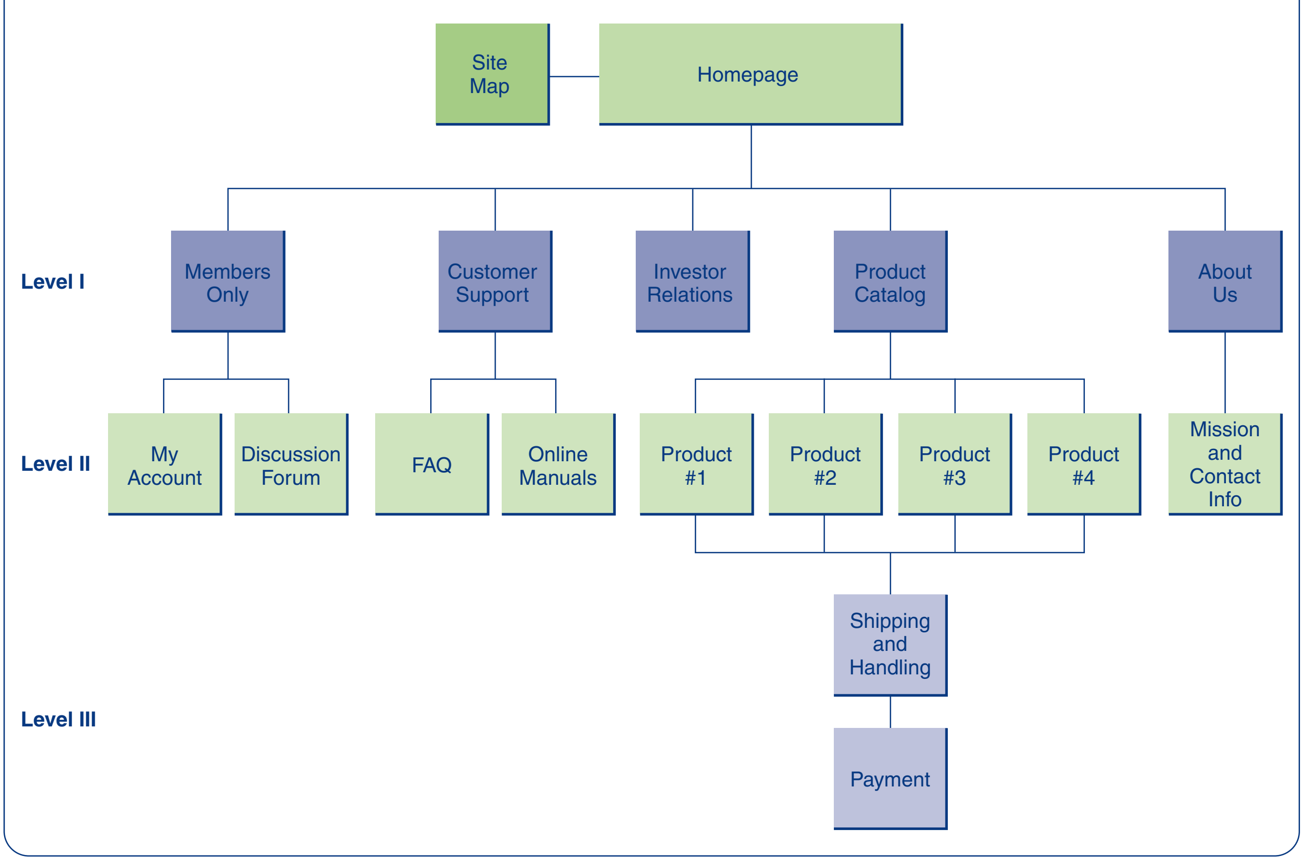


Exhibit 15.10 shows a typical hierarchical structure for a webstore. Most hierarchical websites are built wide and shallow, putting 3 to 10 sections in the second level and limiting most sections to two or three levels. Other, less frequently used structures are circular and linear ones. A circular structure is useful when presenting training materials. A linear structure is useful when telling a story or presenting a tutorial. For example, Exhibit 15.11 presents an abbreviated version of the linear structure of the e-business plan discussed in Section 15.1.

EXHIBIT 15.11 A Simple Linear Website Structure

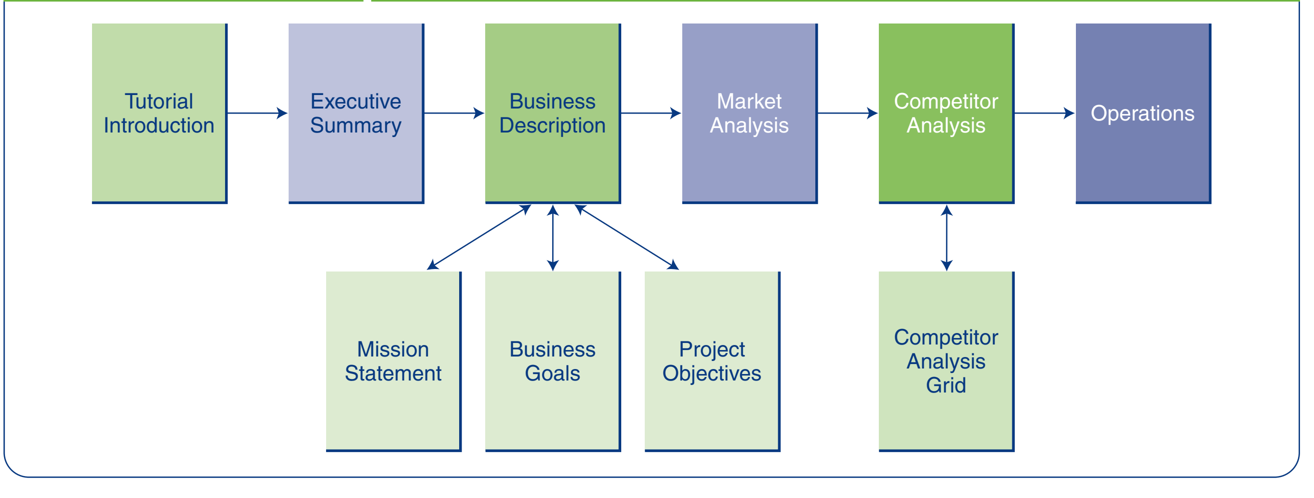
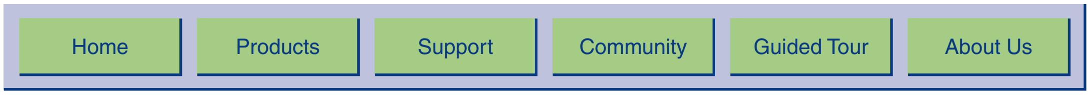


EXHIBIT 15.12 A Typical Navigation Bar



A website typically includes a *homepage* that welcomes a visitor and introduces the site; *help* pages that assist the visitor to use or navigate through the site; *company* pages that inform the visitor about the online business; *transaction* pages that lead the customer through the purchase process; and *content* pages that deliver information about products and services at all stages of the purchase process, from information search to postpurchase service and evaluation.

SITE NAVIGATION

The purpose of **site navigation** is to help visitors quickly and easily find the information they need on a website. Among the questions considered in site navigation are: How will visitors enter a site? How will visitors use the site? How will they find what is available at the site? How will they get from one page to another and from one section to another? How will visitors find what they are looking for? Site navigation has to help visitors find information quickly, because visitors do not want to take the time to figure out how to move around on a site. Site navigation has to be easy; visitors want moving around the site to be predictable, consistent, and intuitive enough that they do not have to think about it.

site navigation
Aids that help visitors find the information they need quickly and easily.

The simplest navigation aid is a navigation bar. A navigation bar (see Exhibit 15.12) provides the visitor an opportunity to link to likely destinations (e.g., homepage, "about us") and major sections of the website (e.g., product catalog, customer support).

Site Map and Navigation

A navigation bar almost always appears at the top of the page where it will load first in the browser window and be visible "above the fold." However, if the page contains banner ads, then the navigation bar should be placed prominently below the ads. Why? Frequent Web users develop "banner ad blindness" in which they ignore banner ads and everything above them.

A second navigation bar should appear at the bottom of every page. Then, visitors who have read the page and have not found what they are looking for can easily be guided to where they need to go next. An effective navigation scheme is to offer a simple, attractive, graphical navigation bar at the top of the page and a longer, text navigation bar at the bottom of each page.

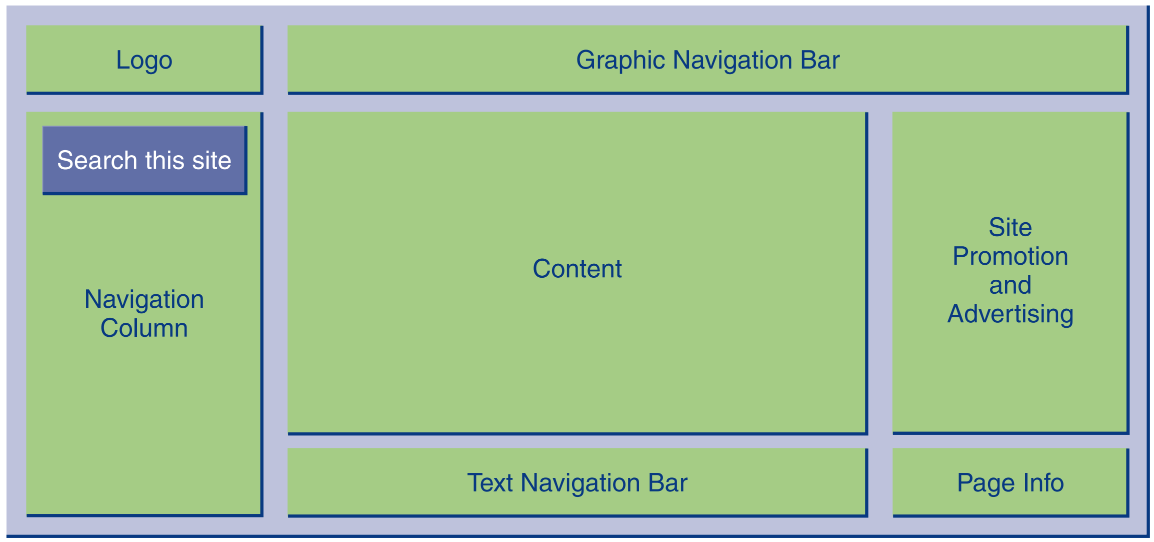
If the site's contents need more options than what can fit on a navigation bar, subsections can be placed in each section of the navigation bar (e.g., customer support might include subsections such as customer service FAQ, product information, order status). The subsections can appear on the navigation bar via a pull-down menu or a mouseover (when a visitor passes a mouse cursor over the button, a submenu will pop up). Large and medium-size sites should include a site map page so that the visitor who is unsure of where to go can see all the available options.

Exhibit 15.13 illustrates the major information architecture and navigation concepts discussed here.

PERFORMANCE (SPEED)

Speed ranks at or near the top of every list of essential design considerations, for good reason. Visitors who have to wait more than a few seconds for a Web page to load are likely to hit the "stop" or "back" button and go somewhere else.

EXHIBIT 15.13 Web Page Layout Grid



A number of factors affect the speed at which the page transfers from the Web server to the client's browser. Factors out of the control of the Web designer and site owner are the visitor's modem speed, the bandwidth available at the customer's ISP, and, to some degree, the current bandwidth available at the Web host's location. The critical factor that is under the control of the Web designer is the content and design of the page. A competent Web designer will know what can be done to improve a page's download speed or at least give it the appearance of loading fast.

The most widely recognized cause of long download times is a large graphic or a large number of small graphics on a single page. Create graphics at the lowest possible resolution so that the visitor can clearly see the picture, art, or icon so that the graphic file is only a few kilobytes in size. If a large, high-resolution graphic image is important, thumbnail images can be put on the page and linked to full-size, higher-resolution images available at the visitor's discretion.

COLORS AND GRAPHICS

The Web is a colorful and graphic world, and colors, pictures, artwork, and video can be used effectively if used correctly.

The key to effective use of color and graphics is to design the site to match the expectations of the target audience. Financial services sites tend to use formal colors (e.g., green, blue) with simple charts to illustrate the text but not many pictures. Sites directed at a female audience tend to feature lighter colors, usually pastels, with many pictures and an open design featuring lots of white space. Game sites are one type of site that can get away with in-your-face colors, Flash effects, and highly animated graphics.

WEBSITE USABILITY

Usability measures the quality of a user's experience when interacting with a product or system—whether a website, software application, mobile technology, or any user-operated device.

usability (of website) The quality and usefulness of the user's experience when interacting with the website.

In general, **usability** refers to how well users can learn and use a product or a website to achieve their goals as well as how satisfied they are with that process. Usability means that people who use the website can do so quickly and easily to accomplish their tasks and may also consider such factors as cost-effectiveness and usefulness.

According to Ivory (2011) and usability.gov, the following factors determine usability:

- **Ease of learning.** How fast can a user who has never seen the user interface before learn it sufficiently well to accomplish basic tasks? How easy and intuitive is it to learn to use the website?
- **Efficiency of use.** Once an experienced user has learned to use the system, how fast can he or she accomplish tasks?
- **Memorability.** If a user has used the system before, can he or she remember enough to use it effectively the next time, or does the user have to start over again learning everything?
- **Error frequency and severity.** How often do users make errors while using the system, how serious are these errors, and how can users recover from these errors?
- **Subjective satisfaction.** How much does the user like using the system? How pleasant is it to use the website design?

On the Web, usability is a necessary condition for survival. If a website is difficult to use, people leave. This results in negative financial performance. For further details, see usability.gov and useit.com/alertbox. Usable sites need to meet customer demands (see Stoller 2008).

What Annoys EC Customers?

One approach to a good Web design is to eliminate things that annoy customers—pop-up ads, the need to install extra software, deal links, mandatory registration requirements, confusing navigation, slow moves from page to page, obsolete content, and a poor search tool. See Ivory (2011) and Online Tutorial T4 for details.

Section 15.6 ◗ REVIEW QUESTIONS

1. Describe 10 criteria used to judge website design.
2. Name four site navigation aids.
3. Why is performance a key design criterion? What slows performance? What can decrease download time?
4. Describe some issues for proper use of color and graphics on a website.
5. What is usability? List the major criteria used to determine usability.

15.7 PROVIDING E-COMMERCE SUPPORT SERVICES

Creating content and designing the website are the creative aspects of building a website. Determining how the website actually will be built and by whom are the implementation parts of website construction. Website construction is usually about three options—internal development, outsourcing, and partnering—spread over two time periods—startup construction and ongoing maintenance.

WHO BUILDS THE WEBSITE?

Early in the website development process, the online business owner has to decide whether to build the website with internal staff, an outside contractor, or a combination of these two options. This involves managerial considerations such as control, speed, and desired organizational competencies, as generally described in information technology textbooks.

PAYMENTS: ACCEPTING CREDIT CARDS

Another important service is payments (see Chapter 10). You can't do business if you can't get paid. This truism means that every online business has to face decisions about electronic payment systems. The dominant form of B2C payment is accepting credit cards over the Internet.

Chapter 10 described the process for accepting credit card payments. As noted there, processing credit card payments on the Internet differs only slightly from the process in traditional, face-to-face transactions. What are these differences from a merchant's perspective? What are the basic requirements for an online business to be able to accept credit cards for payment?

First, in the online process, the credit card reader in the store is replaced with credit card processing software (a credit card gateway) that is capable of accepting input from a Web page and submitting it into the credit card system (the merchant's bank, the customer's bank, and the credit card interchange, such as Visa or MasterCard).

Second, with online transactions, a signature and verification of the signature by the merchant is not required, resulting in what is known as a **card-not-present (CNP) transaction**. This situation removes a considerable amount of certainty and security from the process. In response to this increased risk, banks are more selective about who gets an online merchant account, and they require that the entire process be as secure as possible (e.g., checking that the shipping address provided by the customer matches the billing address on file at the customer's bank). In addition, banks charge higher transaction fees for CNP transactions to offset the increased risks.

card-not-present (CNP) transaction
A credit card transaction in which the merchant does not verify the customer's signature.

WEBSITE PROMOTION

Every successful online business needs a highly visible website. Chapter 3 discussed website promotion through advertising (e.g., banner ads, pop-up ads) and marketing strategies (e.g., banner swapping; use of blogs, chat rooms, or groups in social networks and virtual worlds). This section focuses on internal website promotion ("selling" the website on the site) and search engine optimization (getting the website to the top of the search engine listings).

Internal Website Promotion

Internal website promotion begins by including content that establishes the site as a useful site for customers so that they remember the site and return and make a purchase. To do this, the website should become not only a place to buy something, but also an indispensable resource with compelling content, useful links to other websites, and features that will make customers want to return.

Promoting the website internally often includes a page of testimonials from satisfied customers. If the site or the business has received any awards, draw the visitor's attention to them. If the business owner's background or credentials relate to the business, then list any degrees, professional affiliations, and awards that relate to the online business.

Site promotion continues with a marketing plan that includes the URL on every product, business card, letterhead, package, and e-mail message that leaves the business. A **signature file** is a simple text message that an e-mail program adds automatically to outgoing messages. A typical signature file includes the person's name, title, contact details, and name and URL of the business.

signature file
A simple text message an e-mail program automatically adds to outgoing messages.

Promotions can be based on Web analytics. **Web analytics** is the measurement, collection, analysis, and reporting of Internet data for the purposes of understanding and optimizing Web usage (en.wikipedia.org/wiki/Web_analytics). Web analytics vendors include IBM, Oracle, Microsoft, MicroStrategy, SAS, Applix, and Webtrends. Read Chapter 13 for more about Web analytics.

Web analytics
The measurement, collection, analysis, and reporting of Internet data for the purposes of understanding and optimizing Web usage.

Search Engine Optimization

How is a website found by customers in the vast world of cyberspace? How does a new online business get noticed ahead of its more well-established competitors? In addition to promotional and advertising strategies discussed in this and other chapters, perhaps the most important and cost-effective way to attract new customers is *search engine optimization.* **Search engine optimization (SEO)** is the use of strategies intended to position a website at the top of Web search engines' results such as Google, AllTheWeb, and Teoma. Search engines are the primary way many Web users find relevant websites; an online business cannot ignore SEO strategies. For details on SEO, see Chapter 4, Kay (2007), and en.wikipedia.org/search_engine_optimization.

search engine optimization (SEO)
The application of strategies intended to position a website at the top of Web search engines.

The strategies to optimize a website's ranking in search engines should be part of content creation, website design, and site construction. Optimizing search engine rankings through keyword placement and link building is much easier, less time consuming, and less expensive if it is integrated into the website development process.

Several SEO services, such as WebPosition (webposition.com) and Search Summit (searchsummit.com), will supervise the entire SEO process for a website. However, SEO requires constant monitoring to be effective, and decisions such as which companies are acceptable linking partners are management decisions that should not be left to neutral parties. SEO services can assist, but successful SEO requires supervision and involvement by the site owner. For further details, see Covel (2007) and en.wikipedia.org/SEO.

Case 15.4 describes the rise of Baidu (baidu.com) from a small startup to the world's most popular Chinese language search engine.

CUSTOMER RELATIONSHIP MANAGEMENT

Customer relationship management (CRM) is a customer service approach that focuses on building long-term and sustainable customer relationships that add value for the customer and the company. This section focuses on what every startup online business needs to know in order to initiate an effective CRM program. After getting these fundamentals right, successful online firms will be ready to move into more advanced CRM techniques, which include services such as contact management, data mining, and personalization.

Using Content to Build Customer Relationships

The first step to building customer relationships is to give customers good reasons to visit and return to the website. In other words, the site should be rich in information and have more content than a visitor can absorb in a single visit. The site should include not just product information, but also value-added content from which visitors can get valuable information and services for free. Exhibit 15.14 lists some ways in which online businesses can build customer relationships through content.

Section 15.7 ◗ REVIEW QUESTIONS

1. List the three options for website construction.
2. What factors favor internal development of a website? What factors favor external development?
3. Describe the process required for an online business to accept credit cards over the Internet.
4. List four types of website content that can promote the website internally.
5. What is search engine optimization? Why is it important?
6. List some ways websites can use content to manage customer relationships.

15.8 OPENING A WEBSTORE

The most common EC project on the Internet is the *storefront* (also known as the *webstore*). Millions of webstores exist on the Internet, mostly those of small businesses. However, large corporations, as well as many individuals, including students and even children, have storefronts as well. As we have seen throughout the book, most online entrepreneurs, such as the initiators of Campusfood.com, Amazon.com, CatToys.com, and JetPens.com, started with a storefront. Storefronts appear in all different shapes, and their construction and operating expenses vary greatly. Storefronts primarily sell products or services (see en.wikipedia.org/wiki/Electronic_commerce), yet their functionalities differ considerably.

OPTIONS FOR ACQUIRING WEBSTORES

Webstores can be acquired in several ways:

- **Build them from scratch.** Pioneering storefronts, such as hothothot.com, wine.com, and amazon.com, built their stores from scratch. Specifically, they designed them and then hired programmers to program all the necessary software. The major advantage of this approach is that the site owner can customize the site to his or her liking.

CASE 15.4

EC Application

BAIDU'S SEARCH FOR SUCCESS

Inspired by a poem written during the Song Dynasty (960–1279) of China, Baidu—literally meaning "hundreds of times"—rose to become China's leading Internet search engine from a startup business. The company was established by Robin Li and Eric Xu in December 1999 in Silicon Valley. It was incorporated as Baidu.com, Inc., in the Cayman Islands on January 18, 2000.

Baidu's market leadership philosophy is premised on localization. Li believes that the company must focus on the one thing it can do best and do it better than anyone else, that is, Chinese search services. Hence, Baidu's history is marked with a continuous struggle to improve.

The Funding and Growth

Financially, Baidu took the road from venture capital (VC) firms to initial public offering (IPO). In 2001, the company raised $1.2 million from VC firm financing, and another $10 million from four VC companies led by Draper Fisher Jurvetson and International Data Group. In 2004, Baidu acquired Hao123.com, a popular Chinese Web directory, then 25th at Alexa.com's global Internet traffic ranking. In March 2005, Baidu began its preparation to go public, and finally in August, it achieved IPO victory in the United States, opening at $66 and closing at $120 per share (Cheng 2005).

Indisputably, Baidu has become "China's Google." By the third quarter of 2010, its share in China's search traffic rose to 73 percent while Google's fell to 21 percent (*China Daily* 2010). Moreover, during the same quarter alone, Baidu's total revenues reached $337.2 million, a 76.4 percent increase from the corresponding period in 2009 (*China Daily* 2010).

The Business Model

Baidu's services include algorithmic search, pay for performance, enterprise search, and a host of specialized services, including news, multimedia, and image search. Baidu's focus on a Chinese language search engine service is its biggest advantage. Moreover, the company's local connections and homegrown business practices, combined with the strength of its technology, give it an edge over its rivals.

Although Baidu is nicknamed "China's Google," when it comes to strategy, Baidu is adopting a different approach. First, Baidu and Google differ in the way they sell advertising to customers. Google distributes a great deal of the company's advertising services through a direct sales structure, whereas Baidu sells ads in China largely through distributors. Second, in direct contrast to Google's practice, Baidu does not require clients to use credit cards to pay for their ads. Third, Baidu offers paid search placement, or the selling of search engine results for particular keywords to the highest bidder, which is not offered by Google. Finally, whereas Google has been providing innovative services ranging from Google Mail to Google Maps, Baidu remains focused on search services—the one that it does best.

Competitiveness and Constraints

The Chinese government filters certain Internet content, and Baidu has adopted a strategy in successfully dealing with the constraints of censorship. Consequently, the company has recently received the government's "China Internet Self-Discipline Award."

Baidu had been plagued by copyright problems. Shanghai Busheng Music and Culture Media Company filed a lawsuit against Baidu in June 2005, alleging that the search engine allowed unauthorized downloads of pirated music. Universal, EMI, Warner, and Sony BMG sued Baidu for copyright infringement involving 137 songs. Beijing New Picture Film Company also filed a copyright infringement suit against Baidu for unauthorized downloads of movies. All suits were settled, but similar issues in the future could adversely affect Baidu's popularity.

Baidu Benefits from Google's Exit from China

Google's exit from China has strengthened Baidu, whose stock price rose, reaching a high of $82 in mid-May 2010, more than twice the level it was trading at in January before Google's decision (Wells 2010). With Google's withdrawal, Baidu is clearly well positioned to take over an even greater share of the search engine market in China. Baidu's market has become even bigger than that of the United States, with 384 million online users and more than twice as many mobile phone users (Wells 2010). From all appearances, Baidu indeed benefited greatly from Google's exit. However, with heightening calls against Internet censorship and Google's still unmatched position on the Web, Baidu cannot stay complacent.

Sources: Compiled from Wells (2010), *China Daily* (2010), Cheng (2005), and *baidu.com* (accessed March 2011).

Questions

1. Baidu is nicknamed "China's Google." How is Baidu's business model different from that of Google?
2. Baidu offers paid search placement. Do you think such website ranking services will promote unfair competition?
3. Baidu's localization strategy (focus on Chinese language search engine service) is its biggest competitive advantage. Explain why.
4. What lessons does the Baidu case offer to e-commerce startups and entrepreneurs?

EXHIBIT 15.14 Building CRM Through Content

Content Strategy	Description	CRM Benefits
Provide membership	Offer registration at the site to gain access to premium content and services.	Community building, targeted marketing, paid subscription opportunity
Personalize the user experience	Present content that the site visitor has indicated an interest in through previous browsing or member profiles.	Community building, targeted commerce offers, customer and site loyalty
Attract visitors	Provide free games, shows, and blogs.	Customer loyalty, revisits, tell friends
Support users	Provide responsive and convenient customer service.	Community building, customer and site loyalty, repeat purchases
Communicate via the community	Allow visitors to communicate with each other and the publisher through the site.	Community building, customer and site loyalty
Reward visitors	Provide visitors with rewards for visiting and using the website.	Customer and site loyalty, promotional product up-selland cross-sell opportunities
Consumer education	Educate consumer on important topics (e.g., medical, diets).	Community building
Market effectively	Promote the site's content and products without alienating current and potential customers.	Customer and site loyalty, promotional product up-sell and cross-sell opportunity
Set up smart affiliate relationships	Establish affiliate relationships with both private (consumer) and commercial Web publishers.	Customer and site loyalty, new revenue stream
User participation	User generated content, and authors' experiences.	Increase trust in content, customer perspective is improved.

Sources: Robb (2011) and Ariguzo, et al. (2006).

The disadvantages are that the process is slow, expensive, and error prone and requires constant maintenance. Consequently, today only large corporations build their storefronts from scratch. Most companies use other alternatives.

- **Build them from components.** This option is faster and less expensive than the first one. The site owner purchases off-the-shelf components (or sometimes obtains them for free), such as a shopping cart, an e-catalog, and a payment gate, and then assembles them. The site owner can replace the components if they become obsolete; therefore, the site owner can save on maintenance. The downside is that the resulting site may not fit the online business owner's needs very well. An example of this type of solution is Microsoft's Site Server Commerce Edition, which has a built-in wizard that helps users model their own online business processes graphically. This approach, however, is usually more costly than building from templates and may take longer. In addition, it usually requires some in-house technical expertise for installation of the required hardware and software as well as for continued operation and maintenance. Network Solutions (networksolutions.com) provides many such components.
- **Build with templates (storebuilders).** As described earlier in the chapter, using storebuilders is one of the most viable options for starting an online business. Several vendors provide storebuilding templates. Some provide them free, free for 30 days, or for a nominal monthly fee that includes hosting the site on their servers. Using this approach is especially attractive to small businesses because the cost is relatively low, the business can

construct the store in one or a few days, and it does not require extensive programming skills. The site owner basically fills out forms and attaches pictures. Another major benefit of this approach is that hosting is usually provided, as well as support services such as payment collection, shipments, and security. Furthermore, the vendor will take care of all software maintenance. Many vendors also offer store and inventory management as well as other features, as described later in this section. Finally, and perhaps most important, if the site owner uses a vendor such as Yahoo!, eBay, or Amazon.com, the site will be included in the vendor's e-marketplace, which provides a great deal of exposure. The downside of this approach is that it limits the site owner to the available templates and tools. However, some vendors provide a professional version that allows customization. Representative vendors that provide templates are:

- Yahoo! Small Business offers Yahoo! Merchant Solutions (smallbusiness.yahoo.com/ecommerce)
- eBay ProStores (prostores.com)
- Hostway (hostway.com)
- GoEmerchant (goemerchant.com)
- StoreFront eCommerce (storefront.net)
- 1&1 Hosting (1and1.com)
- Go Daddy (godaddy.com)
- Shopping.com (shopping.com)
- Amazon.com ProMerchant (amazonservices.com)
- ShoppingCartsPlus (shoppingcartsplus.com)

For a comparison and evaluation of these vendors and others, see **ecommerce-software-review.toptenreviews.com**. The major criteria used for comparison are: feature set, ease of use, ease of installation, ease of set up, documentation, and fraud protection.

Selecting a Development Option

Before choosing the appropriate development option, you need to consider a number of issues in order to generate a list of requirements and capabilities. The following is a list of representative questions that need to be addressed when defining requirements:

- **Customers.** Who are the target customers? What are their needs? What kind of marketing tactics should a business use to promote the store and attract customers? How can a business enhance customer loyalty?
- **Merchandising.** What kinds of products or services will the business sell online? Are soft (digitized) goods or hard goods sold? Are soft goods downloadable?
- **Sales service.** Can customers order online? How? Can they pay online? Can they check the status of their order online? How are customer inquiries handled? Are warranties, service agreements, and guarantees available for the products? What are the refund procedures?
- **Promotion.** How are the products and services promoted? How will the site attract customers? Are coupons, manufacturer's rebates, or quantity discounts offered? Is cross-selling possible?
- **Transaction processing.** Is transaction processing in real time? How are taxes, shipping and handling fees, and payments processed? Are all items taxable? What kinds of shipping methods will the site offer? What kinds of payment methods, such as checks, credit cards, or cybercash, will the site accept? How will the site handle order fulfillment?
- **Marketing data and analysis.** What information, such as sales, customer data, and advertising trends, will the site collect? How would the site use such information for future marketing?
- **Branding.** What image should the webstore reinforce? How is the storefront different from those of the competition?

The initial list of requirements should be as comprehensive as possible. It is preferable to validate the identified requirements through focus-group discussions or surveys with potential customers. The business can then prioritize the requirements based on the customers' preferences. The final list of prioritized requirements serves as the basis for selecting and customizing the appropriate package or designing a storefront from scratch.

In the remainder of this section, we will introduce the Yahoo! package for small business.

YAHOO! SMALL BUSINESS

Yahoo! offers one of the most popular storefront packages at smallbusiness.yahoo.com. It offers three levels of merchant solutions: starter, standard, and professional. The capabilities and fees of each plan are available on Yahoo!'s website. Yahoo! offers a step-by-step guide that explains how Yahoo! Merchant Solutions ("sell online") works and how you can use it to build, manage, and market an online business. Yahoo! also offers three related services: Web hosting, sponsored advertising, and posting of job ads. Read on to gain valuable tips and guidance that will help you succeed in developing your own online storefront.

Getting Started

Yahoo! provides a summary of the e-commerce basics guide (as of March 2011); do the walk-through at smallbusiness.yahoo.com/ecommerce/basics.php.

Take a Tour and See the Videos

To see all the features that come with Yahoo! Merchant Solutions, take a tour (click "Tour"). Once welcomed, you will see a slideshow that lists its capabilities. Notable features include the following: Web hosting and domain name registration; e-mail; EC tools (shopping cart, payment processing, inventory management); business tools and services (site design, marketing, site management); order processing tools; site development tools (site editor, templates, uploading content, for example, with Yahoo! SiteBuilder); finding and keeping customers (per Chapter 3; from e-mail campaigns to cross-selling suggestions); payment acceptance tools; tax calculators; order notification and confirmations; and performance-tracking tools (statistics, drill-downs, measuring the effectiveness of marketing campaigns). Finally, watch the videos about success stories of small businesses.

Using the Templates

You can build your store in several ways. Your primary tool is the easy-to-use Store Editor. You can create a homepage, set up various store sections, and add to them. You can upload content developed in Microsoft FrontPage, Macromedia Dreamweaver, or Yahoo! SiteBuilder.

Section 15.8 ◗ REVIEW QUESTIONS

1. List the various options for acquiring a webstore.
2. What are the advantages of building with templates? What are the disadvantages?
3. List the typical features of a webstore.
4. What are some of the selection criteria for a software option?

MANAGERIAL ISSUES

Some managerial issues related to this chapter are as follows:

1. **What does it take to create a successful online business?** The ability of a business to survive, and thrive, in the marketplace depends on the strength of the business concept, the capabilities of the entrepreneur, and successful execution of the business plan. Creativity, entrepreneurial attitudes, and management skills represent a human capital investment that every potentially successful business needs. This is true for both online and offline businesses. However, to succeed in online business, management needs to consider

additional factors, such as e-business models, revenue models, synergy and conflict between the online and offline channels, website management, and integration of information systems for EC and back-end systems.

2. **Is creating a website a technical task or a management task?** It is both. Although somewhat expensive, the technical skills required to build a website are readily available in the marketplace. The prerequisite managerial skills are somewhat more difficult to find. Online business owners need to possess traditional business skills as well as understand the technical aspects of building a website in order to be able to hire and work with information architects, Web designers, and website hosting services. Management should be able to map the business goals with a combination of solution sets, such as e-marketplaces, CRM, SCM, and ERP. The integration policy should connect the internal entities and enable collaboration with external partners.
3. **How do we attract visitors to the website?** Search engine optimization is important, but the key to attracting visitors, getting them to return, and encouraging them to tell others about the site is to offer credible content that fulfills a value-exchange proposition. That is, both the site owner and the customer must receive value from the visit. What the site says (content) is important, but so is how it says it. Web design delivers content in a compelling manner that enhances the readability of the content and the quality of the customer experience. Personalized services support will be important in order to provide relevant information and to motivate users to visit again.
4. **How do we turn visitors into buyers?** Getting people to come to the website is only half the battle. Visitors become buyers when a website offers products and services that customers need, with promotions and a price that entice visitors to buy there rather than go somewhere else, in an environment that promotes trust. Customer contact services for resolution of complaints will contribute to retaining the customer and generating repurchases. A well-designed CRM system needs to support the services.
5. **Are best practices useful?** For an inexperienced EC person or company, the best practices of others can be extremely useful. The experiences of vendors, companies, academicians, and others are most useful. Free advice is available from many sources, including ECommercePartners.net (*ecommercepartners.net*). A comprehensive set of benchmark e-business cases can be found in Lee, et al. (2006).
6. **What should my new business give to funders?** It depends on the stage of the business. In the early stage, funders are concerned about the sales growth rate and market share. Losses may be tolerated as long as the growth is high and the vision of future profit is clear. However, the eventual concern will be the realized profit and stock price. The important thing is to maintain control by keeping 51 percent of the shares (at least up to the IPO).
7. **What are important factors for successful Web management?** To manage the website successfully, the online business owner needs to select an appropriate Web hosting service, maintain value-creating contents, and promote the website so that new customers will visit. The alternatives to Web hosting are storebuilder services, dedicated hosting, ISP hosting services, and self-hosting. To maintain the quality of the site's content, a policy for acquiring, testing, and updating content should be established. Personalization is also important. Social networking may be adopted as an important source of content collection from the open public.

SUMMARY

In this chapter, you learned about the following EC issues as they relate to the chapter's learning objectives.

1. **Fundamental requirements for initiating an online business.** A good idea becomes a successful online business when owners with the required skills, attitudes, and understanding of Internet culture execute a powerful business plan.
2. **Funding options for a startup online business.** Incubators usually provide support services, whereas angel investors and venture capitalists provide funds for a prospective online business. The business and business owners usually benefit greatly from these arrangements, but the funding sources are scarce and competition for funds is stiff.
3. **Adding e-initiatives.** Adding e-initiatives (or projects) is common. A large project requires a business case. Additions are made gradually that eventually make the business a click-and-mortar one. Common projects are e-procurement, e-CRM, and a webstore.
4. **Transformation to e-business.** In an e-business, all possible processes are conducted online. Achieving such a state in a large organization is a complex process involving change management.
5. **Website hosting options for an online business.** Storebuilder services, ISPs, dedicated website hosting

services, and self-hosting give online business owners a range of options in deciding how and where to host the website. A well-chosen domain name is an "address for success," a way of making the site easy to find and remember. Choosing a domain name is an important step in setting up the hosting site.

6. **Provide content that attracts and keeps website visitors.** Content is king. Content can be created, purchased, or acquired for free and used for site promotion, sales, and building customer relationships. Successful websites offer content that the site's target audience wants and expects.
7. **Design a visitor-friendly site.** Although text is content rich and inexpensive, a text-only site is a barren and unmemorable site. Select graphics and colors with the site's business goals and visitors' needs in mind. Website owners and designers should never overestimate the attention span of the site visitor, so it is best to include small graphics that are few in number so that the end result is an attractive page but one that also will load fast. The key to visitor-friendly navigation is to project a visitor's mental map on the website: where they are, where they were, where they should go next, and how to get to where they want to be.
8. **High placement in search engines is key.** Keyword occurrence and placement on a merchant's site and promoting link popularity are the fundamental strategies for search engine optimization. High placement on search engine keyword searches will guarantee visitors, the essential first step toward online business success.
9. **Provision of support services.** Like offline businesses, online businesses need support services. These include payment, security, content creation, website design, advertisement (promotion), search engine optimization, and CRM.
10. **The process of building a webstore.** Assuming that you know what you want to sell and how to do it, you need to obtain a domain name and arrange for hosting. Then you need to design the site and fill it with appropriate content. Your storefront needs to have support services (such as payment) and be secure. You must also promote the site in order to attract buyers.
11. **Using templates to build a webstore.** Small sites can be built quickly, easily, and inexpensively using templates. The disadvantages are that the site will look like many others that use the same templates and it might not fit the needs of the company.

KEY TERMS

Angel investor	**15-9**
Attractors	**15-15**
Business case	**15-7**
Business plan	**15-7**
Business process management (BPM)	**15-13**
Card-not-present (CNP) transaction	**15-34**
Collaborative website	**15-15**
Content	**15-20**
Content management	**15-24**
Cross-selling	**15-21**
Domain name	**15-19**
Domain Name System (DNS)	**15-20**
Dynamic Web content	**15-21**
E-newsletter	**15-24**
Incubator	**15-9**
Information architecture	**15-29**
Informational website	**15-14**
Interactive website	**15-14**
ISP hosting service	**15-19**
Mirror site	**15-18**
Personalized content	**15-23**
Podcast	**15-23**
Really Simple Syndication (RSS)	**15-22**
Search engine optimization (SEO)	**15-34**
Self-hosting	**15-19**
Signature file	**15-34**
Site navigation	**15-31**
Social-oriented website	**15-15**
Storebuilder service	**15-17**
Syndication	**15-22**
Transactional website	**15-15**
Up-selling	**15-21**
Usability (of a website)	**15-32**
Venture capital (VC)	**15-9**
Web analytics	**15-34**
Web hosting service	**15-18**
Web syndication	**15-22**

DISCUSSION QUESTIONS

1. Compare and contrast setting up a traditional, brick-and-mortar business and an online business. Consider factors such as entrepreneurial skills, facilities and equipment, and business processes.
2. How is an e-business plan different from a traditional business plan?
3. Describe organizational transformation, and discuss some of the difficulties involved.
4. How would you decide which website hosting option an online business should use? List and briefly explain factors to consider in your decision.

5. Who should be on a website development team for a small business? For a large business?
6. Several times in this chapter we advise online business owners to gather competitive intelligence from competitors (e.g., in SEO, what sites link to competitor sites). Is this ethical? Why or why not?
7. Why is a store such as **cattoys.com** not economically feasible offline?
8. What are the advantages and disadvantages of using templates to build a storefront?
9. Yahoo! provides many services, including website hosting, storebuilding tools, and an online mall. List the benefits of these services. What are the drawbacks, if any?
10. How is usability related to website design?

TOPICS FOR CLASS DISCUSSION AND DEBATES

1. Compare and contrast the creation of a new online business and the establishment of an online initiative in an existing company. Consider factors such as resource acquisition, startup processes, and competitor analysis.
2. Discuss the logic of outsourcing the combined Web hosting and site construction. What are some of the disadvantages?
3. What are the trade-offs in giving the customer everything possible (e.g., personalized content, high-resolution graphics, a feature-full site) and the fundamental rules of Web design?
4. What is a good time for entrepreneurial startups to go public? You may refer to the cases of Alibaba.com (the closing case), Baidu (Case 15.4), and Facebook (the opening case) for your discussion.
5. Debate: Could the success of Facebook (the opening case), Amazon.com (Case 15.1), Baidu (Case 15.4), and Alibaba.com (the closing case) be traced to the entrepreneurial attitudes of their founders? Would it be possible for other EC entrepreneurs to duplicate Zuckerberg, Bezos, Li, and Ma's success on the strength of similar traits and characteristics?
6. Debate: Should a small business maintain its own website? Why or why not? Should a large business maintain its own website? Why or why not?

INTERNET EXERCISES

1. Go to vFinance Capital (**vfinance.com**) and the National Venture Capital Association (**nvca.com**) and identify any trends or opportunities in acquiring startup funding.
2. Go to a Yahoo! category, such as tourist agencies or insurance companies, and pick 10 sites. Classify them as informational, interactive, transactional, or social-oriented websites. Make a list of any informational, interactive, transactional, or social features.
3. Many individuals try to make a living simply by buying and selling goods on eBay. Visit **ebay.com** and make a list of the ways in which these entrepreneurs use cross-selling and up-selling in their sales activities.
4. Visit the Webmaster Forums (**webmaster-forums.net**). Register (for free) and visit the website critique area. Compare the design rules offered in this chapter with some of the websites offered for critique at the site. Offer at least one design suggestion to a Webmaster who is soliciting feedback.
5. Enter **networksolutions.com**. View the shopping cart demo. What features impress you the most and why? What related services does it provide? Compare it to **storefront.net** and **nexternal. com**.
6. Go to **godaddy.com**. Examine its Traffic Blazer product. How can it help you with an online business?
7. Enter **1and1.com**. Examine its hosting, development, and other tools. Take the Test Drive. Compare it with services offered by **jstreettech. com**. Write a report.
8. Enter **willmaster.com**. View its tutorials and comment on its usefulness to EC site builders.

9. Enter **omniture.com**. How does it help with site optimization? What other services does it provide?
10. Go to **checkout.google.com** and find the services offered to buyers. Why is shopping here faster than at Amazon.com or Yahoo!?
11. Enter **documentum.com** and find its enterprise content management products. Write a report.
12. Explore the Web to find five dedicated website hosting services. Compare them using the criteria listed in this chapter. Write a report based on your findings.

TEAM ASSIGNMENTS AND PROJECTS

1. **Assignment for the Opening Case**

   Read the opening case and answer the following questions.

   a. Log on to Facebook (**facebook.com**) and socialize on the website. Compare and contrast Facebook with other social networking sites such as MySpace, Friendster, Hi5, and LinkedIn.
   b. Comment on the website design of Facebook.
   c. Using Facebook as an example, discuss the revenue models of social networking sites.
   d. What contributes to the exponential growth of Facebook's user base over the past few years?
   e. Do you think Facebook's idea of opening up its inner workings to outside developers is a good idea?
   f. Comment on Mark Zuckerberg's decision to turn down acquisition offers from Microsoft and Google.
   g. What are the merits and demerits of a startup going for an initial public offering (IPO)? What is a good time for Facebook to go public? (See the closing case and note the success of **alibaba.com**'s IPO in Hong Kong in 2007.)
   h. What lessons does the Facebook experience offer to e-commerce startups and entrepreneurs?
   i. Watch the video "Mark Zuckerberg Named Time 'Person of Year'" (**youtube.com/watch?v=CzOuTx6mpXA&feature=related**). Do you think Mark Zuckerberg deserves the award?
2. Identify a product or service that is suitable for marketing on Facebook. Draft a promotion plan. Present your plan to the class.
3. Enter **entrepreneurs.about.com**. Each team member should select two or three of the "browse topics" and relate it to online businesses. Make a presentation to the class.
4. Enter **myownbusiness.org/s2/index.html**. Obtain a template and design a business plan for your class EC project.
5. Form two teams, a client team and a Web design team. After suitable preparation, both teams meet for their first website planning meeting. Afterward, both teams critique their own and the other team's performance in the meeting.
6. Enter **webhosting.yahoo.com/ps/sb/index.php** and download the SiteBuilder. As a team, build a storefront for your dream business. You can try it for free for 30 days. Use the design features available. Have visitors check out the site. The instructor and class will review the sites for design and usability. Awards will be given to the best stores. Alternatively, you may use the equivalent tools from eBay or **1and1.com**.

Closing Case

ALIBABA.COM: FROM A SMALL STARTUP TO AN INTERNATIONAL ENTERPRISE

The story of Alibaba.com demonstrates a credible example of how a small startup company can eventually make it big in the global economy through the Internet. Similar to the interesting and exotic Asian cuisine that continuously evolves from the diversity of Asia's people and their unique culture and personality, Alibaba has successfully transformed itself over the years, adapting to the changes in and demands of online business-to-business (B2B) commerce.

Story Behind the Name

Alibaba.com was founded by Jack Ma in 1998. It was not simply found through a straightforward "recipe." Instead, it took various forms and changes, and is still continuously evolving even up to this day. As narrated by Ma himself, he dreamt of having an international company, so he picked a name that is known to many nations. "Alibaba is easy to spell, and people everywhere associate that with 'Open, Sesame,' the command that Ali Baba used to open doors to hidden treasures in One Thousand and One Nights" (Fannin 2008). In the popular adventure tale Ali Baba and the Forty Thieves, the character of Ali Baba represents the ideology that honesty and goodness in a man can bring him good fortune. When it comes to business, the name certainly generates strong brand recall, and the success of Alibaba proves that choosing the right name (i.e., the domain name) for one's enterprise is crucial.

The Business Model

In 10 short years, Alibaba.com has grown into a premier e-commerce brand and a vibrant online marketplace for businesses from around the world. Alibaba.com is prospering from a business model dedicated to serving a vital, but disadvantaged, segment of China's economy: SMEs. Fewer than 1 million of the nation's 42 million small and medium-sized enterprises have Internet capability. Alibaba offers simple and efficient Internet solutions for such companies.

Alibaba.com's primary business goal is to provide efficient B2B e-commerce solutions to SMEs in China and the rest of the world. One of its useful features is a tool that can establish trust ratings for suppliers and buyers. This feature is important in a system where there is no physical interaction. Affordable subscription fees are also customized to the limited budget of SMEs, helping them grow their businesses with the usual marketing and advertising costs.

Lessons and Insights

The case of Alibaba and Jack Ma provides insights that can guide startups and aspiring entrepreneurs in the complex world of online trading. Here are some important lessons:

- **Enhancing the power of networking in B2B marketplaces.** Building networks is crucial in maintaining business success.
- **Building a powerful brand.** A powerful brand name is important to name recall and long-term success.
- **Focusing on SMEs.** Helping small businesses contributes to a stronger company and domestic economy.
- **Importance of building communities.** Buyers and sellers need to establish relationships, and e-commerce should provide venues for genuine interaction.
- **Strong sales and customer service teams.** Customer satisfaction should be the key driving force.
- **Continuing technology innovation.** Technology should continuously be improved.
- **Competent management team and commitment to corporate culture.** Companies should be committed, and happy employees deliver productive results.
- **Diversification and strong relationship with the parent group.** Businesses should always innovate and diversify but remain loyal to their roots.

Alibaba.com has made it possible for small businesses to thrive and own a permanent and significant place in the history of e-commerce. Jack Ma has indeed cooked a "dish" that not only transformed traditional business "ingredients" but also tested new paradigms and "recipes."

Sources: Compiled from Farhoomand and Lai (2010), *HKExnews* (2010), Fannin (2008), and *alibaba.com* (accessed March 2011).

Questions

1. Alibaba.com has a strong commitment to assist small and medium enterprises (SMEs) in B2B e-commerce. What are the advantages and disadvantages of this strategy?
2. Compare and contrast the business model of Alibaba.com with other B2B business models.
3. Alibaba.com is creating and maximizing a "network effect" that helps attract users and expand business. How?
4. Alibaba.com is a general type of e-commerce platform so it focuses on the horizontal coverage of specific industries. Does the horizontal coverage limit its vertical power?
5. What are the limitations of Alibaba.com's business in venturing beyond the Chinese boundaries?
6. What lessons does the Alibaba.com case offer to e-commerce startups and entrepreneurs?

ONLINE RESOURCES
available at pearsonhighered.com/turban

WWW

Comprehensive Educational Websites

bplans.com: Sample business plans.

libguides.rutgers.edu/ecommerce: A comprehensive EC guide.

microsoft.com/smallbusiness/startup-toolkit: Software for small startups.

smallbusiness.yahoo.com/ecommerce/features.php: E-store templates.

entrepreneur.com: Information on starting a business.

onlinebusiness.about.com: A guide for beginners.

networksolutions.com: Domain names and hosting.

entrepreneurs.about.com: All about starting a business.

myownbusiness.org/s2/index/html: How to write a business plan (templates provided).

REFERENCES

Abeti, L., P. Ciancarini, and R. Moretti. "Wiki-Based Requirements Management for Business Process Reengineering." *31st International Conference on Software Engineering*, Vancouver, Canada, May 16–24, 2009.

Ariguzo, G. C., E. G. Mallach, and D. S. White. "The First Decade of E-Commerce." *International Journal of Business Information Systems*, 1, no. 3 (2006).

Ash, C. G., and J. M. Burn. "Managing E-Business Change." In M. Khosrow-Pour (Ed.). *Encyclopedia of E-Commerce, E-Government, and Mobile Commerce.* Hershey, PA: Idea Group Reference, 2006.

Awad, E. M. *Electronic Commerce: From Vision to Fulfillment.* Upper Saddle River, NJ: Prentice Hall, 2006.

Basu, A., and S. Muylle. "How to Plan E-Business Initiatives in Established Companies." *MIT Sloan Management Review* (Fall 2007).

Belew, S., and J. Elad. *Starting an Online Business All-In-One Desk Reference for Dummies*, 2nd ed. Hoboken, NJ: Wiley & Sons, 2009.

Cheng, P. "Baidu's Six Years." *Blogspot*, September, 2005. **chinatechstory.blogspot.com/2005/09/baidus-six-years4.html** (accessed March 2011).

China Daily. "Baidu Gains More Search Market Share in Q3." October 2010. **chinadaily.com.cn/business/ 2010-10/19/content_11430298.htm** (accessed March 2011).

Chu, C., and S. Smithson. "E-Business and Organizational Change: A Structural Approach." *Information Systems Journal* (2007).

Cong, Y., and H. Du. "Web Syndication Using RSS." *Journal of Accountancy* (June 2008).

Covel, S. "Keyword Play: How an Acronym Helped Unlock Marketing Puzzle." *Wall Street Journal*, August 2007.

Drostdesigns.com. "Website Evaluation Criteria Discussion." 2006. **drostdesigns.com/web-site-evaluation-criteria/#more-42** (accessed March 2011).

Einhorn, B. "How China's Alibaba Is Surviving and Thriving." *Businessweek.com*, April 2009. **businessweek.com/magazine/content/09_16/b4127059272628.htm** (accessed March 2011).

Fannin, R. "How I Did It: Jack Ma, Alibaba.com. The Unlikely Rise of China's Hottest Internet Tycoon." *Trueknowledge.com*, January 2008. **trueknowledge.com/q/biography_of_jack_ma** (accessed March 2011).

Farhoomand, A., and R. Lai. (2010). "Alibaba's Jack Ma: Rise of the New Chinese Entrepreneur." *Asia Case Research Centre*, The University of Hong Kong, 2010.

Forbes. "Good Technology Is Nice; A Good Idea Is Better." September, 2007. **forbes.com/2007/08/09/google-yahoo-youtube-ent-fin-cx_kw_0809whartonvc.html** (accessed March 2011).

Henri, J-F., and S. Heroux. "Developing Control for Managing Website Content." *CMA Management* (June–July 2008).

Hise, P. "Everyone Wants to Start a Business." *Fortune Small Business*, January 2007. **money.cnn.com/2007/01/22/magazines/fsb/entrepreneurship.boom.fsb** (accessed March 2011).

HKExnews. "Alibaba's Global Offering Prospectus." October 2007. **hkexnews.hk/listedco/listconews/sehk/20071023/01688_237055/E113.pdf** (accessed March 2011).

Ivory, M. *Automated Website Evaluation: Researchers' and Practitioners' Perspectives.* New York: Springer, 2011.

Jeston, J., and Nelis, J. *Business Process Management: Practical Guides to Successful Implementation*, 2nd ed. Burlington, MA: Butterworth-Heinemann, 2008.

Jones, K. C. "Streaming Media to Draw $70 Billion in Revenue Before 2014." *InformationWeek*, April 2008. **informationweek.com/news/internet/webdev/showArticle.jhtml?articleID=207001008** (accessed March 2011).

Kay, R. "Search Engine Optimization." *Computerworld*, June, 2007.

Khosrow-Pour, M. (Ed.). *E-Commerce Trends for Organizational Advancement.* Hershey, PA: IGL Global, 2006.

Lee, J. K., et al. *Premier eBusiness Cases from Asia.* Upper Saddle River, NJ: Prentice Hall, 2006.

Nagy, S. "What Is E-Commerce Failure—The Six Main Reasons." *EzineArticles.com*, 2011. **ezinearticles.com/?What-is-E-commerce-Failure—-The-Six-Main-Reasons&id=4667530** (accessed March 2011).

Needle, D. "The Microsoft of Social Networks." *InternetNews*, May 2007. **internetnews.com/xSP/article.php/3679906** (accessed March 2011).

Nielsen, J. "Top Ten Mistakes in Web Design." *Useit.com*, 2005. **useit.com/alertbox/9605.html** (accessed March 2011).

Norguet, J.-P., E. Zimányi, and R. Steinberger. "Improving Websites with Web Usage Mining, Web Content Mining, and Semantic Analysis." *Proceedings of the 32nd Conference on Current Trends in Theory and Practice of Computer Science*, Merín, Czech Republic, January 21–27, 2006.

Oreskovic, A. "Facebook '09 Revenue Neared $800 Million." *Reuters*, June 2010. **reuters.com/article/idUSTRE65H01W20100618** (accessed March 2011).

Pallis, G., and A. Vakali. "Insights and Perspectives for Content Delivery Networks." *Communications of the ACM* (January 2006).

Pratt, M. K. "How to Build a Better Website." *Computerworld*, May 2007.

Quitter, J. "The Charmed Life of Amazon's Jeff Bezos." *Fortune*, April 2008. **cnnmoney.printhis.clickability.com/pt/cpt?action=cpt&title=The+charmed+dot-com** (no longer available online).

Robb, B. *Enterprise Content Management: Using Microsoft SharePoint 2010 to Organize and Search Information.* Redmond, WA: Microsoft Press, 2011.

Rutgers. "Electronic Commerce." 2009. **libraries.rutgers.edu/rul/rr_gateway/research_guides/busi/ecomm.shtml** (accessed March 2011).

Sethuraman, P., and R. S. Rathore. "Facebook: The Start-up's Strategic Dilemmas." *IBS Case Development Centre*, 2008.

Sloan, P. "The Man Who Owns the Internet." *Business 2.0*, June 2007.

Smith, J. *Start an Online Business in Easy Steps: Practical Help for Entrepreneurs.* Southam, Warwickshire, UK: In Easy Steps Limited, 2011.

Stoller, J. "More Companies Tailor Website Design to Meet Customer Demands." *CMA Management* (June–July 2008).

Strassmann, P. A. "Calculator: Measuring Business Transformation." *Baseline*, January 2007.

Swanhill, J. "Start a Business for Just $300—Start an E-Commerce Website." *EzineArticles.com*, 2009. **ezinearticles.com/?Start-a-Business-For-Just-$300—Start-an-Ecommerce-Website&id=1705830** (accessed March 2011).

Time. "Person of the Year 2010." December 2010. **time.com/time/specials/packages/article/0,28804,2036683_2037183_2037185,00.html** (accessed March 2011).

Turban, E., et al. *Business Intelligence: A Managerial Approach,* 2nd ed. Upper Saddle River, NJ: Prentice Hall, 2011.

USA.gov. "Web Managers Best Practice Awards—2008." **usa.gov/webcontent/improving/marketing/2008bestpractice.shtml** (accessed March 2011).

Vogelstein, F. "How Mark Zuckerberg Turned Facebook into the Web's Hottest Platform." *Wired.com*, September 2007. **wired.com/techbiz/startups/news/2007/09/ff_facebook** (accessed March 2011).

Wells, T. "Baidu Profits from Google's China Exit." *Seochat.com*, July 2010. **seochat.com/c/a/Search-Engine-News/Baidu-Profits-From-Googles-China-Exit** (accessed March 2011).

Wiedemann, J. *Web Design: E-Commerce.* London: Taschen UK, 2007.

Williams, G. "Mother of Invention." *Entrepreneur*, May 2006.

Winnick, M. "5 Secrets to a Successful Launch." *Business 2.0*, October 2006.