CHAPTER 2

E-commerce Business Models and Concepts

LEARNING OBJECTIVES

After reading this chapter, you will be able to:

- Identify the key components of e-commerce business models.
- Describe the major B2C business models.
- Describe the major B2B business models.
- Understand key business concepts and strategies applicable to e-commerce.

Tweet Tweet:

Twitter's Business Model

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Twitter, the social network phenomenon based on 140-character text messages, continues in the long tradition of Internet developments that appear to spring out of nowhere and take the world by storm. Twitter provides a platform for users to express themselves by creating content and sharing it with followers, who sign up to receive "tweets."

Twitter began as a Web-based version of popular text messaging services provided by cell phone carriers. The basic idea was to marry short text messaging on cell phones with the Web and its ability to create social groups. You start by establishing a Twitter account online. By typing a short message called a tweet online or to a code on your cell phone (40404), you can tell your followers what you are doing, your location, or whatever else you might want to say. You are limited to 140 characters, but there is no installation required and no charge.

Coming up with solid numbers for Twitter is not easy. By 2013, Twitter had an estimated 550 million registered users worldwide, although it is not clear how many continue to actively use the service after signing up. According to Twitter itself, it had 200 million "active" users worldwide as of July 2013. Industry observers believe Twitter is the third largest social network worldwide, behind Facebook and Google+.

What started out in 2006 with 5,000 tweets has turned into a deluge of 400 million daily tweets worldwide. There were more than 150 million tweets about the 2012 Olympics, and more than 80,000 tweets per minute about Usain Bolt's 200-meter victory. Between October 27 and November 1, 2012, there were more than 20 million tweets sent about the impact and aftermath of Superstorm Sandy. Some celebrities, such as Justin Bieber, have millions of followers (in Justin Bieber's case, 42 million as of mid-2013). On the other hand, research indicates that the vast majority of tweets are generated by a small percentage of users: one study found that the top 15% of users account for 85% of all tweets. Another study found that Twitter had only a 40% retention rate: 60% of users failed to return the following month.

Since its founding, Twitter is reported to have raised more than $1.1 billion in venture capital funding, and as of mid-2013, the company is valued at close to $10 billion. This might seem somewhat preposterous given that Twitter has not yet generated a profit. Like many social network firms, Twitter began operating without any revenue stream. Over a period of about five years, however, it has developed a business model based primarily on advertising revenue that is finally taking off. It more than doubled ad revenue in 2012 to an estimated $288 million, with more than 50% coming from mobile advertising. Analysts estimate that Twitter's ad revenue could top $1 billion by 2015.

Twitter's main asset is user attention and audience size (eyeballs per day). An equally important asset is the database of tweets that contains the comments, observations, and opinions of the audience, and the search engine that mines those tweets for patterns. These are real-time and spontaneous observations.

Yet another asset has emerged: Twitter is a powerful alternative media platform for the distribution of news, videos, and pictures. Twitter has become like a global town square and was among the first to report on terrorist attacks in Mumbai, the Iranian rebellion in June 2009, the political violence in Bangkok and Kenya in May 2010, and the uprisings in Egypt, Tunisia, and other areas in the Mideast and Africa in 2011.

How can these assets be monetized? Not surprisingly, as noted previously, Twitter's revenue model is based primarily on advertising. In April 2010, Twitter announced its first foray into the big-time ad marketplace with Promoted Tweets. Promoted Tweets are Twitter's version of Google's text ads. In response to a query to Twitter's search function for tablet computers, for example, a Best Buy tweet about tablets will be displayed. Promoted Tweets look like all other tweets, are part of the tweet stream of messages, and are offered on a "cost-per-click" basis of between $.50 to $1.50 per click. Twitter has since expanded the display of Promoted Tweets to other sites in the Twitter ecosystem, such as HootSuite. Twitter also offers geo-targeted Promoted Tweets. Many companies are now using the service, ranging from Best Buy, to Ford, to Starbucks, to Virgin America. According to Twitter, Promoted Tweets are producing greater engagement with viewers than are traditional Web advertisements. In April 2013, Twitter added keyword targeting in timelines functionality for Promoted Tweets, which enables advertisers to send Promoted Tweets to specific users based on keywords in their recent tweets or tweets with which they have interacted. Twitter's research indicates that users are much more likely to engage with such Promoted Tweets.

A second Twitter monetization effort is called Promoted Trends. "Trends" is a section of the Twitter home page that lets users know what's hot, what a lot of people are talking about. A company can place a Promoted Trends banner at the top of the Trends section, and when users click on the banner, they are taken to the follower page for that company or product. A Promoted Trend must be purchased for an entire market for a day (for example, the United States) for a flat fee. In the United States, the fee is now $200,000, up from $80,000 when Promoted Trends were first introduced in June 2010. Promoted Trends are available for purchase in 50 different countries, enabling Twitter to increase its revenue stream.

In October 2010, Twitter launched Promoted Accounts, which are suggestions to follow various advertiser accounts based on the list of accounts that the user already

SOURCES: "Twitter Stats," Business.twitter.com/basics/what_is_twitter," July 15, 2013; "Twitter Amplify Partnerships: Great Content, Great Brands, Great Engagement," by Glenn Brown, blog.twitter.com, May 23, 2013; "TV Ad Targeting Uses 'Video Fingerprinting'," by Christopher Heine, Adweek.com, May 23, 2013; "Twitter's Latest Buy: Big Data Startup Lucky Sort," by Daniel

follows. Like Promoted Tweets, Promoted Accounts can be geo-targeted at both the country level and the Nielsen DMA (Designated Marketing Area, roughly equivalent to a city and its suburb) level. Promoted Accounts are priced on a cost-per-follower basis, with advertisers only paying for new followers gained. Prices range from $.50 to a maximum of $2.50. Twitter added Enhanced Profile Pages for brands in February 2012. For a reported $15,000 to $25,000, companies get their own banner to display images, and the ability to pin a tweet to the top of the company's Twitter stream. In March 2012, Twitter began testing Promoted Tweets and Promoted Accounts on iOS and Android devices, and by June 2012 was reporting that it was generating the majority of its revenues from ads on mobile devices rather than on its Web site. This is one of the reasons why investors are so "bullish" on Twitter's prospects.

In 2013, Twitter began a natural progression into the video ad market. Video clips that include video ads can now be embedded within tweets. Known as the Twitter Amplify program, in May 2013, Twitter announced an extension of the program that will include a number of major advertisers, including Conde Nast, MLB.com, Warner Music, and others. In May 2013, Twitter launched a beta version of a television ad targeting product that allows marketers to show Promoted Tweets to people who have been tweeting about a television show. The product leverages "video fingerprinting" technology created by Bluefin Labs, which Twitter acquired in February 2013 for $90 million.

Another monetizing service is real-time search. If there's one thing Twitter has uniquely among all the social network sites, it's real-time information. In 2010, Twitter entered into agreements with Google, Microsoft, and Yahoo to permit these search engines to index tweets and make them available to the entire Internet. This service gives free real-time content to the search engines as opposed to archival content. It is unclear who's doing whom a service here, and the financial arrangements are not public. Microsoft extended the deal for two years in September 2011, but Google let its deal with Twitter expire.

Other large players are experimenting. Dell created a Twitter outlet account, @DellOutlet, and is using it to sell open-box and discontinued computers. Dell also maintains several customer service accounts. Twitter could charge such accounts a commission on sales because Twitter is acting like an e-commerce sales platform similar to Amazon. Other firms have used their Twitter follower fan base to market discount air tickets (JetBlue) and greeting cards (Someecards).

Freemium is another possibility. Twitter could ask users to pay a subscription fee for premium services such as videos and music downloads. However, it may be too late for this idea because users have come to expect the service to be free.

But perhaps the biggest treasure trove that Twitter has still not quite figured out how to monetize is its database of billions of real-time tweets. Twitter is a fabulous listening post on the Internet frontier, and helping firms understand how their customers are reacting to products, services, and marketing efforts could provide a bonanza. In May 2013, Twitter purchased big data start-up Lucky Sort, hoping that it would help it in that effort.

Terdiman, News.cnet.com, May 13, 2013; "A Guide to the Twitter Advertising Ecosystem," by Alex Cocotas, *Business Insider*, May 9, 2013; "Mapping the Global Twitter Heartbeat: The Geography of Twitter," by Kalev H. Leetaru et al., *First Monday*, May 6, 2013; "Twitter's New Video Plan: Ads, Brought to You by Ads," by Peter Kafka, Allthingsd.com, April 16, 2013; "Twitter Forecast Up After Strong Mobile Showing," eMarketer.com, March 28, 2013; "Report: Twitter Now Charges $200,000 for Promoted Trends," by Seth Fiegerman, Mashable.com, February 11, 2013; "Twitter Embraces Changing Identity," by Nick Bilton, *New York Times*, July 30, 2012; "Analyst: Twitter Passed 500M Users in June 2012, 140M of Them in US; Jakarta 'Biggest Tweeting' City," by Ingrid Lunden, Techcrunch.com, July 30, 2012; "Apple Officials Said to Consider Stake in Twitter," by Evelyn M. Rusli and Nick Bilton, *New York Times*, July 27, 2012; "Twitter's Mobile Ads Begin to Click," by Shira Ovide, *Wall Street Journal*, June 28, 2012; "Microsoft's Bing Extends Twitter Search Deal," by David Roe, Cmswire.com, September 2011; "40 Fast Facts on Twitter," by Jennifer Lawinski, August 8, 2011; "Twitter Raises Big Bucks to Buy Back Shares," Denverpost.com, July 23, 2011; "How Twitter Makes Money," by Harry Gold, ClickZ.com, April 26, 2011, "Twitter to Launch Geo-targeted Promoted Tweets and Data for Marketers," by Sarah Shearnman, Brandrepublic.com, April 7, 2011; "Twitter Users: A Vocal Minority," by Paul Verna, eMarketer, March 2011; "Twitter as Tech Bubble Barometer," by Spencer E. Ante, Amir Efrati, and Anupreeta Das, *Wall Street Journal,* February 10, 2011; "Promoted Promotions," Blog.twitter.com, October 4, 2010; "The Blogosphere: Colliding with Social and Mainstream Media," by Paul Verna, eMarketer, September 21, 2010; "Will Twitter's Ad Strategy Work," by Erica Naone, *Technology Review*, April 15, 2010; "Twitter Rolls Out Ads," by Jessica Vascellaro and Emily Steel, *Wall Street Journal*, April 14, 2010.

The story of Twitter illustrates the difficulties of turning a good business idea with a huge audience into a successful business model that produces revenues and even profits.

Thousands of firms have discovered that they can spend other people's invested capital much faster than they can get customers to pay for their products or services. In most instances of failure, the business model of the firm is faulty from the beginning. In contrast, successful e-commerce firms have business models that are able to leverage the unique qualities of the Internet, the Web, and the mobile platform, provide customers real value, develop highly effective and efficient operations, avoid legal and social entanglements that can harm the firm, and produce profitable business results. In addition, successful business models must scale. The business must be able to achieve efficiencies as it grows in volume. But what is a business model, and how can you tell if a firm's business model is going to produce a profit?

In this chapter, we focus on business models and basic business concepts that you must be familiar with in order to understand e-commerce.

2.1 E-COMMERCE BUSINESS MODELS

INTRODUCTION

business model
a set of planned activities designed to result in a profit in a marketplace

business plan
a document that describes a firm's business model

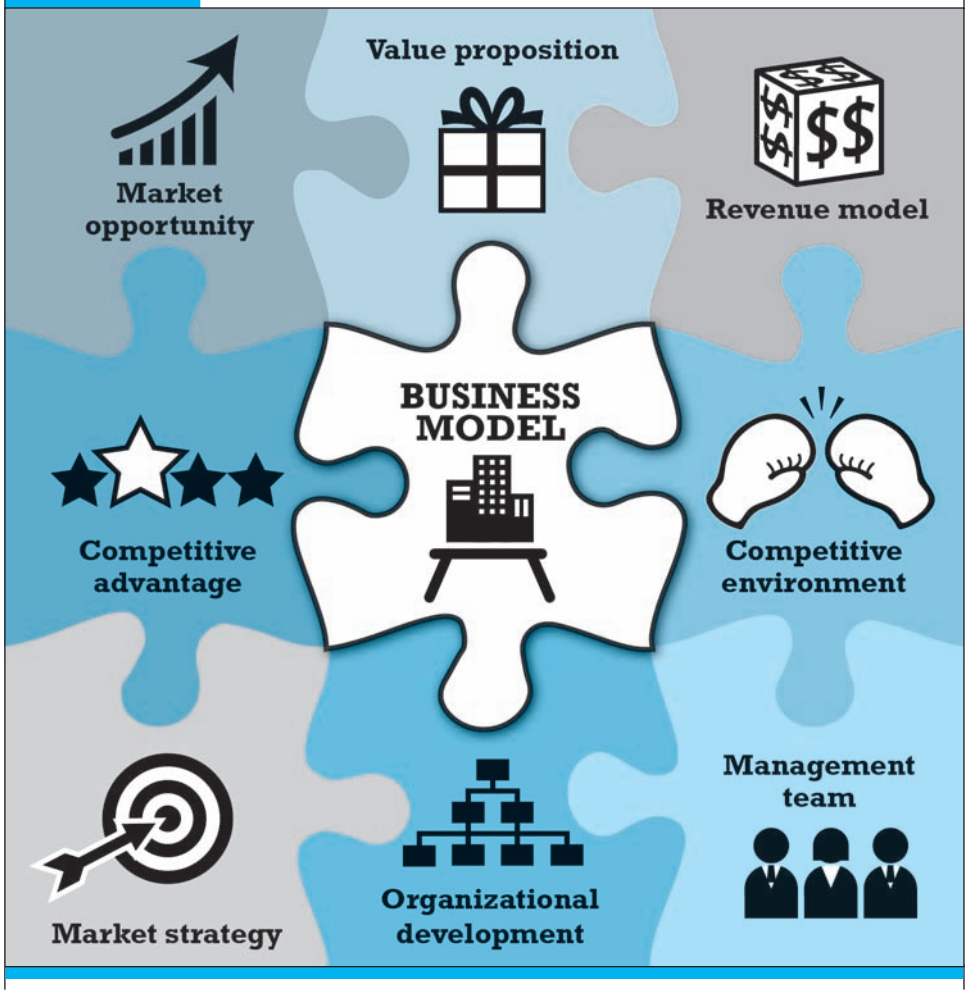
e-commerce business model
a business model that aims to use and leverage the unique qualities of the Internet and the World Wide Web

A **business model** is a set of planned activities (sometimes referred to as *business processes*) designed to result in a profit in a marketplace. A business model is not always the same as a business strategy, although in some cases they are very close insofar as the business model explicitly takes into account the competitive environment (Magretta, 2002). The business model is at the center of the business plan. A **business plan** is a document that describes a firm's business model. A business plan always takes into account the competitive environment. An **e-commerce business model** aims to use and leverage the unique qualities of the Internet, the Web, and the mobile platform.

EIGHT KEY ELEMENTS OF A BUSINESS MODEL

If you hope to develop a successful business model in any arena, not just e-commerce, you must make sure that the model effectively addresses the eight elements listed in **Figure 2.1**. These elements are value proposition, revenue model, market opportunity, competitive environment, competitive advantage, market strategy, organizational development, and management team. Many writers focus on a firm's value proposition and revenue model. While these may be the most important and most easily identifiable aspects of a company's business model, the other elements are equally important when evaluating business models and plans, or when attempting to understand why a particular company has succeeded or failed (Kim and Mauborgne, 2000). In the following sections, we describe each of the key business model elements more fully.

FIGURE 2.1 THE EIGHT KEY ELEMENTS OF A BUSINESS MODEL



A business model has eight key elements. Each element must be addressed if you hope to be successful.

Value Proposition

A company's value proposition is at the very heart of its business model. A **value proposition** defines how a company's product or service fulfills the needs of customers (Kambil, Ginsberg, and Bloch, 1998). To develop and/or analyze a firm's value proposition, you need to understand why customers will choose to do business with the firm instead of another company and what the firm provides that other firms do not and cannot. From the consumer point of view, successful e-commerce value propositions include personalization and customization of product offerings, reduction of product search costs, reduction of price discovery costs, and facilitation of transactions by managing product delivery (Kambil, 1997; Bakos, 1998).

value proposition defines how a company's product or service fulfills the needs of customers

For instance, before Amazon existed, most customers personally traveled to book retailers to place an order. In some cases, the desired book might not be available, and the customer would have to wait several days or weeks, and then return to the bookstore to pick it up. Amazon makes it possible for book lovers to shop for virtually any book in print from the comfort of their home or office, 24 hours a day, and to know immediately whether a book is in stock. Amazon's Kindle takes this one step further by making e-books instantly available with no shipping wait. Amazon's primary value propositions are unparalleled selection and convenience.

Revenue Model

revenue model
describes how the firm will earn revenue, produce profits, and produce a superior return on invested capital

A firm's **revenue model** describes how the firm will earn revenue, generate profits, and produce a superior return on invested capital. We use the terms *revenue model* and *financial model* interchangeably. The function of business organizations is both to generate profits and to produce returns on invested capital that exceed alternative investments. Profits alone are not sufficient to make a company "successful" (Porter, 1985). In order to be considered successful, a firm must produce returns greater than alternative investments. Firms that fail this test go out of existence.

Although there are many different e-commerce revenue models that have been developed, most companies rely on one, or some combination, of the following major revenue models: the advertising model, the subscription model, the transaction fee model, the sales model, and the affiliate model.

advertising revenue model
a company provides a forum for advertisements and receives fees from advertisers

In the **advertising revenue model**, a company that offers content, services, and/or products also provides a forum for advertisements and receives fees from advertisers. Companies that are able to attract the greatest viewership or that have a highly specialized, differentiated viewership and are able to retain user attention ("stickiness") are able to charge higher advertising rates. Yahoo, for instance, derives a significant amount of revenue from display and video advertising.

subscription revenue model
a company offers its users content or services and charges a subscription fee for access to some or all of its offerings

In the **subscription revenue model**, a company that offers content or services charges a subscription fee for access to some or all of its offerings. For instance, the digital version of *Consumer Reports* provides online and mobile access to premium content, such as detailed ratings, reviews, and recommendations, only to subscribers, who have a choice of paying a $6.95 monthly subscription fee or a $30.00 annual fee. Experience with the subscription revenue model indicates that to successfully overcome the disinclination of users to pay for content, the content offered must be perceived as a high-value-added, premium offering that is not readily available elsewhere nor easily replicated. Companies successfully offering content or services online on a subscription basis include Match.com and eHarmony (dating services), Ancestry.com (see **Figure 2.2**) and Genealogy.com (genealogy research), Microsoft's Xboxlive.com (video games), Rhapsody.com (music), and Hulu.com.

transaction fee revenue model
a company receives a fee for enabling or executing a transaction

In the **transaction fee revenue model**, a company receives a fee for enabling or executing a transaction. For example, eBay provides an auction marketplace and receives a small transaction fee from a seller if the seller is successful in selling the item. E*Trade, a financial services provider, receives transaction fees each time it executes a stock transaction on behalf of a customer.

FIGURE 2.2 ANCESTRY.COM SUBSCRIPTION SERVICES

Ancestry.com offers a variety of different membership options for different subscription fees.
SOURCE: Ancestry.com, 2012.

In the **sales revenue model**, companies derive revenue by selling goods, content, or services to customers. Companies such as Amazon (which sells books, music, and other products), LLBean.com, and Gap.com all have sales revenue models.

In the **affiliate revenue model**, companies that steer business to an "affiliate" receive a referral fee or percentage of the revenue from any resulting sales. For example, MyPoints makes money by connecting companies with potential customers by offering special deals to its members. When they take advantage of an offer and make a purchase, members earn "points" they can redeem for freebies, and MyPoints receives a fee. Community feedback companies such as Epinions receive much of their revenue from steering potential customers to Web sites where they make a purchase.

Table 2.1 on page 64 summarizes these major revenue models. The *Insight on Society* case, *Foursquare: Check Your Privacy at the Door,* examines some of the issues associated with Foursquare's business and revenue model.

Market Opportunity

The term **market opportunity** refers to the company's intended **marketspace** (i.e., an area of actual or potential commercial value) and the overall potential financial opportunities available to the firm in that marketspace. The market opportunity is

sales revenue model
a company derives revenue by selling goods, information, or services

affiliate revenue model
a company steers business to an affiliate and receives a referral fee or percentage of the revenue from any resulting sales

market opportunity
refers to the company's intended marketspace and the overall potential financial opportunities available to the firm in that marketspace

marketspace
the area of actual or potential commercial value in which a company intends to operate

INSIGHT ON SOCIETY

FOURSQUARE: CHECK YOUR PRIVACY AT THE DOOR

Foursquare is one of a host of companies that combine a social network business model with location-based technology. Foursquare's niche: a mobile social application that allows you to check in to a restaurant or other location, and automatically lets friends on Facebook and other programs learn where you are. If you're in a new town, the app transmits your location and sends you information about popular spots close by, with reviews from other Foursquare users. After starting up Foursquare on a smartphone, you'll see a list of local bars and restaurants based on your cell phone's GPS position. Select a location, "check in," and a message is sent to your friends. Enhancements to the original Foursquare app allow you to be directed to a new location, browse locations by category, conduct specific searches, and discover recently opened locations in your area. Foursquare also has a widely accepted loyalty program. Each check-in awards you points and badges. Visitors compete to become "Mayors" of a venue based on how many times they have checked in over a month's time. Mayors receive special offers.

Foursquare was founded by Dennis Crowley and Naveen Selvadurai. They began building the first version of the application in Fall 2008, originally working in the kitchen of Crowley's East Village New York apartment. They debuted the application at the South by Southwest Interactive Festival in March 2009, and soon attracted venture capital. As of July 2013, Foursquare had over 33 million members worldwide, split fairly evenly between the United States and the rest of the world, who have checked in over 3.5 billion times.

Foursquare shares many similarities with other social networks like Facebook and Twitter, which began operating without a revenue model in place. Like those companies, Foursquare has been able to command high valuations from venture capital investors (reportedly as high as $760 million at one point), despite its lack of significant revenue or profit. How is this possible? The answer lies in the coupling of its social network business model with smartphone-based technology that can identify where you are located within a few yards. There's potentially a great deal of money to be made from knowing where you are. Location-based data has extraordinary commercial value because advertisers can then send you advertisements, coupons, and flash bargains, based on where you are located. The revenue from location-based marketing and advertising is expected to rise to 6.5 billion by 2017.

Just as Facebook and Twitter are monetizing their user bases with an advertising-based, social retail-based revenue model, so too is Foursquare. In June 2011, Foursquare partnered with American Express to offer discounts to cardholders when they check in on their cell phone to certain shops and restaurants. In July 2012, Foursquare announced the next steps in the monetization of its business model: Local Updates and Promoted Updates (now called Foursquare Ads). Local Updates allow retailers to deliver geo-targeted offers and messages to customers, while Foursquare Ads, similar to Twitter's Promoted Tweets, are geo-targeted paid advertisements. People are shown ads based on their location and how likely they are to become customers, based on their previous check-in behavior. In April 2013, Foursquare announced it was working on a new ad product that will use its location and behavioral data to retarget ads to users on third-party Web sites. Foursquare claims it will not target users on an individual basis, but rather place users into various consumer segments, such as "luxury"

(continued)

or "business traveler," allowing advertisers to serve those users display and video ads based on those segments. Foursquare hopes this new initiative will help increase its revenue beyond the $2 million it reportedly earned in 2012.

As the popularity of location-based services like Foursquare has grown, so too have concerns about privacy. The revelations by the *Wall Street Journal* in Spring 2011 that Apple and Google were surreptitiously and continuously collecting personal, private location data from iPhone and Android phones spurred privacy groups and Congress to launch investigations. In June 2011, the Federal Communications Commission, in cooperation with the Federal Trade Commission, sponsored a forum to discuss the social impact of location-based services, both positive and negative. Industry representatives from Facebook, Google, and Foursquare argued that existing apps as well as corporate policies were adequate to protect personal privacy because they rely on user permissions to share location (opt-in services). The industry argued as well that consumers get real benefits from sharing location data, otherwise they would not voluntarily give this data. Privacy advocates pointed out that many apps have no privacy policy, that most of the popular apps transmit location data to their developers after which the information is not well controlled, and that these services are creating a situation where government, marketers, creditors, and telecommunications firms will end up knowing nearly everything about citizens, including their whereabouts.

As a case in point, in April 2012, Foursquare was hit by a privacy landmine when an app called Girls Around Me surfaced that used Foursquare's application programming interface to show photos of women currently checked in around a particular neighborhood by pulling public photos of the women from their Facebook profiles linked to their Foursquare accounts. Foursquare quickly shut down the app and shortly thereafter made changes to its API to eliminate the ability of users to see strangers checked into a venue without being checked into the same place themselves. Illustrating the continuing issues Foursquare faces on the privacy front, the version of its mobile app introduced in June 2012 allowed users to see all of their friends' check-ins from the prior two weeks. As the ACLU noted, historical location data can reveal far more about a person than can individual location records. Many users may not truly understand how much of their location history is available to their friends. Nor is there an easy way for users to control the visibility of their location history—users are limited to either deleting specific check-ins individually or being off the grid completely.

In December 2012, Foursquare announced further changes to its privacy policy. It now shows a user's full name and also allows businesses to access data logs for individuals for a longer period of time. These changes tie into its monetization efforts—the more data Foursquare collects on its users, the more attractive its advertising products are likely to be. Although Foursquare does make it possible to customize privacy settings, its revenue model relies on the fact that most users will not.

SOURCES: "About Foursquare," Foursquare.com, accessed July 31, 2013; "Foursquare Selling Its Location Data Through Ad Targeting Firm Turn," Adage.com, July 31, 2013; "Location-Based Advertising and Marketing—2nd Edition, by Berg Insight AB, April 18, 2013; "Foursquare Planning to Offer Check-in Data to Target Ads on Other Platforms," Adage.com, April 12, 2013; "Foursquare to Start Using Full Names, Sharing More of Your Data with Venues from January 28, According to New Privacy Policy," by Ingrid Lunden, Techcrunch.com, December 30, 2012; "Three Reasons Why Foursquare's New Advertising Model Might Work," by Anne Marie Kelly, *Forbes*, August 22, 2012; "Foursquare Will Test Paid Ads," by Stuart Elliott, *New York Times*, July 25, 2012; "Wrap Up on Privacy and Location Based Services," by Prof. Peter Swire, Ohio State University, FCC Forum: Helping Consumers Harness the Potential of Location Based Services, June 28, 2011; "Technology and Privacy," by Prof. Matt Blaze, University of Pennsylvania, FCC Forum: Helping Consumers Harness the Potential of Location Based Services, June 28, 2011; "Companies Try to Allay Fears at FCC-FTC Hearing," by Brad Reed, *Network World*, June 28, 2011; "A Start-Up Matures, Working With AmEx," by Jenna Wortham, *New York Times*, June 22, 2011; "Apple, Google Collect User Data," by Julia Angwin and Jennifer Valentino-Devries, *Wall Street Journal*, April 22, 2011; "Telling Friends Where You Are (or Not)," by Jenna Wortham, *New York Times*, March 14, 2010.

TABLE 2.1 FIVE PRIMARY REVENUE MODELS

REVENUE MODEL	EXAMPLES	REVENUE SOURCE
Advertising	Yahoo	Fees from advertisers in exchange for advertisements
Subscription	WSJ.com Consumerreports.org	Fees from subscribers in exchange for access to content or services
Transaction Fee	eBay E*Trade	Fees (commissions) for enabling or executing a transaction
Sales	Amazon L.L.Bean Gap iTunes	Sales of goods, information, or services
Affiliate	MyPoints	Fees for business referrals

usually divided into smaller market niches. The realistic market opportunity is defined by the revenue potential in each of the market niches where you hope to compete.

For instance, let's assume you are analyzing a software training company that creates online software-learning systems for sale to businesses. The overall size of the software training market for all market segments is approximately $70 billion. The overall market can be broken down, however, into two major market segments: instructor-led training products, which comprise about 70% of the market ($49 billion in revenue), and computer-based training, which accounts for 30% ($21 billion). There are further market niches within each of those major market segments, such as the Fortune 500 computer-based training market and the small business computer-based training market. Because the firm is a start-up firm, it cannot compete effectively in the large business, computer-based training market (about $15 billion). Large brand-name training firms dominate this niche. The start-up firm's real market opportunity is to sell to the thousands of small business firms that spend about $6 billion on computer-based software training. This is the size of the firm's realistic market opportunity (see **Figure 2.3**).

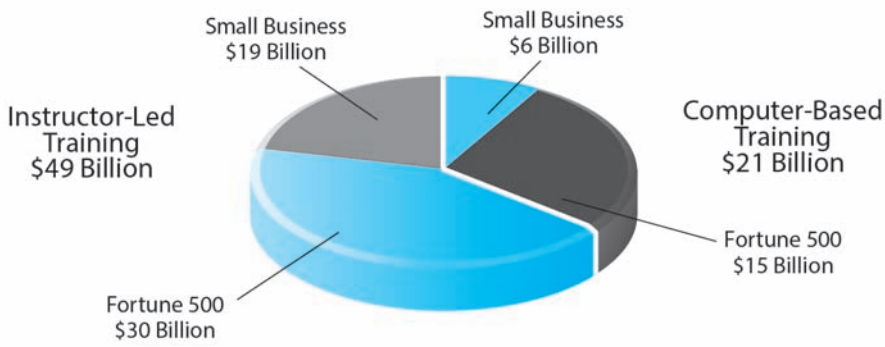
Competitive Environment

competitive environment refers to the other companies operating in the same marketspace selling similar products

A firm's **competitive environment** refers to the other companies selling similar products and operating in the same marketspace. It also refers to the presence of substitute products and potential new entrants to the market, as well as the power of customers and suppliers over your business. We discuss the firm's environment later in the chapter. The competitive environment for a company is influenced by several factors: how many competitors are active, how large their operations are, what the market share of each competitor is, how profitable these firms are, and how they price their products.

Firms typically have both direct and indirect competitors. Direct competitors are companies that sell products and services that are very similar and into the same

FIGURE 2.3 **MARKETSPACE AND MARKET OPPORTUNITY IN THE SOFTWARE TRAINING MARKET**



Marketspaces are composed of many market segments. Your realistic market opportunity will typically focus on one or a few market segments.

market segment. For example, Priceline and Travelocity, both of whom sell discount airline tickets online, are direct competitors because both companies sell identical products—cheap tickets. Indirect competitors are companies that may be in different industries but still compete indirectly because their products can substitute for one another. For instance, automobile manufacturers and airline companies operate in different industries, but they still compete indirectly because they offer consumers alternative means of transportation. CNN.com, a news outlet, is an indirect competitor of ESPN.com, not because they sell identical products, but because they both compete for consumers' time online.

The existence of a large number of competitors in any one segment may be a sign that the market is saturated and that it may be difficult to become profitable. On the other hand, a lack of competitors could either signal an untapped market niche ripe for the picking, or a market that has already been tried without success because there is no money to be made. Analysis of the competitive environment can help you decide which it is.

Competitive Advantage

Firms achieve a **competitive advantage** when they can produce a superior product and/or bring the product to market at a lower price than most, or all, of their competitors (Porter, 1985). Firms also compete on scope. Some firms can develop global markets, while other firms can develop only a national or regional market. Firms that can provide superior products at the lowest cost on a global basis are truly advantaged.

competitive advantage achieved by a firm when it can produce a superior product and/or bring the product to market at a lower price than most, or all, of its competitors

Firms achieve competitive advantages because they have somehow been able to obtain differential access to the factors of production that are denied to their competitors—at least in the short term (Barney, 1991). Perhaps the firm has been

able to obtain very favorable terms from suppliers, shippers, or sources of labor. Or perhaps the firm has more experienced, knowledgeable, and loyal employees than any competitors. Maybe the firm has a patent on a product that others cannot imitate, or access to investment capital through a network of former business colleagues or a brand name and popular image that other firms cannot duplicate. An **asymmetry** exists whenever one participant in a market has more resources—financial backing, knowledge, information, and/or power—than other participants. Asymmetries lead to some firms having an edge over others, permitting them to come to market with better products, faster than competitors, and sometimes at lower cost.

asymmetry
exists whenever one participant in a market has more resources than other participants

For instance, when Apple announced iTunes, a service offering legal, downloadable individual song tracks for 99 cents a track that would be playable on any digital device with iTunes software, the company had better-than-average odds of success simply because of Apple's prior success with innovative hardware designs, and the large stable of music firms that Apple had meticulously lined up to support its online music catalog. Few competitors could match the combination of cheap, legal songs and powerful hardware to play them on.

One rather unique competitive advantage derives from being a first mover. A **first-mover advantage** is a competitive market advantage for a firm that results from being the first into a marketplace with a serviceable product or service. If first movers develop a loyal following or a unique interface that is difficult to imitate, they can sustain their first-mover advantage for long periods (Arthur, 1996). Amazon provides a good example. However, in the history of technology-driven business innovation, most first movers often lack the **complementary resources** needed to sustain their advantages, and often follower firms reap the largest rewards (Rigdon, 2000; Teece, 1986). Indeed, many of the success stories we discuss in this book are those of companies that were slow followers—businesses that gained knowledge from failure of pioneering firms and entered into the market late.

first-mover advantage
a competitive market advantage for a firm that results from being the first into a marketplace with a serviceable product or service

complementary resources
resources and assets not directly involved in the production of the product but required for success, such as marketing, management, financial assets, and reputation

Some competitive advantages are called "unfair." An **unfair competitive advantage** occurs when one firm develops an advantage based on a factor that other firms cannot purchase (Barney, 1991). For instance, a brand name cannot be purchased and is in that sense an "unfair" advantage. Brands are built upon loyalty, trust, reliability, and quality. Once obtained, they are difficult to copy or imitate, and they permit firms to charge premium prices for their products.

unfair competitive advantage
occurs when one firm develops an advantage based on a factor that other firms cannot purchase

In **perfect markets**, there are no competitive advantages or asymmetries because all firms have access to all the factors of production (including information and knowledge) equally. However, real markets are imperfect, and asymmetries leading to competitive advantages do exist, at least in the short term. Most competitive advantages are short term, although some can be sustained for very long periods. But not forever. In fact, many respected brands fail every year.

perfect market
a market in which there are no competitive advantages or asymmetries because all firms have equal access to all the factors of production

Companies are said to **leverage** their competitive assets when they use their competitive advantages to achieve more advantage in surrounding markets. For instance, Amazon's move into the online grocery business leverages the company's huge customer database and years of e-commerce experience.

leverage
when a company uses its competitive advantages to achieve more advantage in surrounding markets

Market Strategy

No matter how tremendous a firm's qualities, its marketing strategy and execution are often just as important. The best business concept, or idea, will fail if it is not properly marketed to potential customers.

Everything you do to promote your company's products and services to potential customers is known as marketing. **Market strategy** is the plan you put together that details exactly how you intend to enter a new market and attract new customers.

market strategy
the plan you put together that details exactly how you intend to enter a new market and attract new customers

For instance, Twitter, YouTube, and Pinterest have a social network marketing strategy that encourages users to post their content on the sites for free, build personal profile pages, contact their friends, and build a community. In these cases, the customer becomes part of the marketing staff!

Organizational Development

Although many entrepreneurial ventures are started by one visionary individual, it is rare that one person alone can grow an idea into a multi-million dollar company. In most cases, fast-growth companies—especially e-commerce businesses—need employees and a set of business procedures. In short, all firms—new ones in particular—need an organization to efficiently implement their business plans and strategies. Many e-commerce firms and many traditional firms that attempt an e-commerce strategy have failed because they lacked the organizational structures and supportive cultural values required to support new forms of commerce (Kanter, 2001).

Companies that hope to grow and thrive need to have a plan for **organizational development** that describes how the company will organize the work that needs to be accomplished. Typically, work is divided into functional departments, such as production, shipping, marketing, customer support, and finance. Jobs within these functional areas are defined, and then recruitment begins for specific job titles and responsibilities. Typically, in the beginning, generalists who can perform multiple tasks are hired. As the company grows, recruiting becomes more specialized. For instance, at the outset, a business may have one marketing manager. But after two or three years of steady growth, that one marketing position may be broken down into seven separate jobs done by seven individuals.

organizational development
plan describes how the company will organize the work that needs to be accomplished

For instance, eBay founder Pierre Omidyar started an online auction site, according to some sources, to help his girlfriend trade Pez dispensers with other collectors, but within a few months the volume of business had far exceeded what he alone could handle. So he began hiring people with more business experience to help out. Soon the company had many employees, departments, and managers who were responsible for overseeing the various aspects of the organization.

Management Team

Arguably, the single most important element of a business model is the **management team** responsible for making the model work. A strong management team gives a model instant credibility to outside investors, immediate market-specific knowledge, and experience in implementing business plans. A strong management team may not

management team
employees of the company responsible for making the business model work

be able to salvage a weak business model, but the team should be able to change the model and redefine the business as it becomes necessary.

Eventually, most companies get to the point of having several senior executives or managers. How skilled managers are, however, can be a source of competitive advantage or disadvantage. The challenge is to find people who have both the experience and the ability to apply that experience to new situations.

To be able to identify good managers for a business start-up, first consider the kinds of experiences that would be helpful to a manager joining your company. What kind of technical background is desirable? What kind of supervisory experience is necessary? How many years in a particular function should be required? What job functions should be fulfilled first: marketing, production, finance, or operations? Especially in situations where financing will be needed to get a company off the ground, do prospective senior managers have experience and contacts for raising financing from outside investors?

Table 2.2 summarizes the eight key elements of a business model and the key questions that must be answered in order to successfully develop each element.

RAISING CAPITAL

seed capital
typically, an entrepreneur's personal funds derived from savings, credit card advances, home equity loans, or from family and friends

Raising capital is one of the most important functions for a founder of a start-up business and its management team. Not having enough capital to operate effectively is a primary reason why so many start-up businesses fail. Many entrepreneurs initially "bootstrap" to get a business off the ground, using personal funds derived from savings, credit card advances, home equity loans, or from family and friends. Funds of this type are often referred to as **seed capital**. Once such funds are exhausted, if the

TABLE 2.2 KEY ELEMENTS OF A BUSINESS MODEL

COMPONENTS	KEY QUESTIONS
Value proposition	Why should the customer buy from you?
Revenue model	How will you earn money?
Market opportunity	What marketspace do you intend to serve, and what is its size?
Competitive environment	Who else occupies your intended marketspace?
Competitive advantage	What special advantages does your firm bring to the marketspace?
Market strategy	How do you plan to promote your products or services to attract your target audience?
Organizational development	What types of organizational structures within the firm are necessary to carry out the business plan?
Management team	What kinds of experiences and background are important for the company's leaders to have?

company is not generating enough revenue to cover operating costs, additional capital will be needed. Traditional sources of capital include incubators, commercial banks, angel investors, venture capital firms, and strategic partners.

Incubators (sometimes also referred to as accelerators) such as Y-Combinator (profiled in Chapter 1's Insight on Business case) typically provide a small amount of funding, but more importantly, also provide an array of services to start-up companies that they select to participate in their programs, such as business, technical, and marketing assistance, as well as introductions to other sources of capital. Well-known incubator programs include TechStars, DreamIt Ventures, and Capital Factory.

incubators
typically provide a small amount of funding and also an array of services to start-up companies

Obtaining a loan from a commercial bank is often difficult for a start-up company without much revenue, but it may be worthwhile to investigate programs offered by the U.S. Small Business Administration, and its state or local equivalents. The advantage of obtaining capital in the form of a loan (debt) is that, although it must be repaid, it does not require an entrepreneur to give up any ownership of the company.

Angel investors are typically wealthy individuals (or a group of individuals) who invest their own money in an exchange for an equity share in the stock in the business. In general, angel investors make smaller investments (typically $1 million or less) than venture capital firms, are interested in helping a company grow and succeed, and invest on relatively favorable terms compared to later stage investors. The first round of external investment in a company is sometimes referred to as Series A financing.

angel investors
typically wealthy individuals or a group of individuals who invest their own money in exchange for an equity share in the stock of a business; often are the first outside investors in a start-up

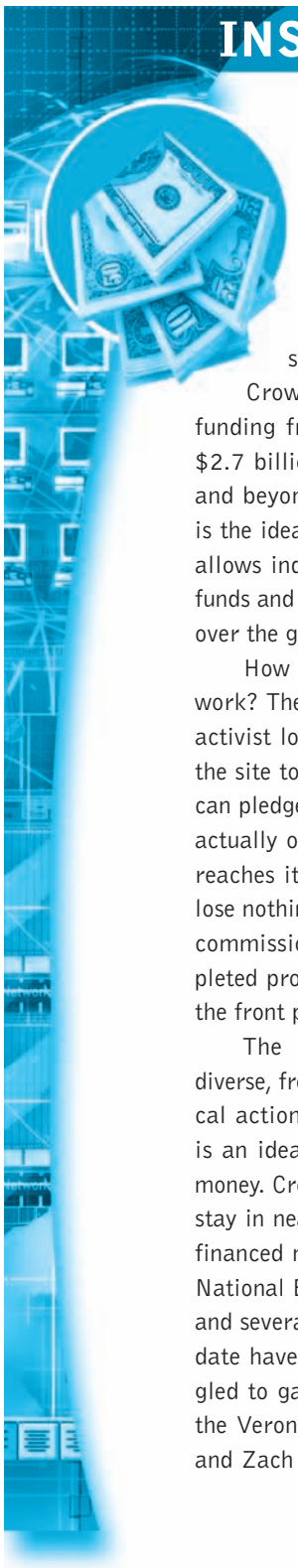
Venture capital investors typically become more interested in a start-up company once it has begun generating some revenue, even if it is not profitable. **Venture capital investors** invest funds they manage for other investors such as investment banks, pension funds, insurance companies, or other businesses, and usually want to obtain a larger stake in the business and exercise more control over the operation of the business. Venture capital investors also typically want a well-defined "exit strategy," such as a plan for an initial public offering or acquisition of the company by a more established business within a relatively short period of time (typically 3 to 7 years), that will enable them to obtain an adequate return on their investment. Venture capital investment often ultimately means that the founder(s) and initial investors will no longer control the company at some point in the future.

venture capital investors
typically invest funds they manage for other investors; usually later-stage investors

A new method for start-ups to raise capital is just around the corner. **Crowdfunding** involves using the Internet to enable individuals to collectively contribute their money to support various projects. The concepts behind crowdfunding have been popularized by Kickstarter and Indiegogo (see the *Insight on Business* case, *Crowdfunding Takes Off*), but they were not able to be used for equity investments in for-profit companies in the United States due to securities regulations. However, the passage of the Jumpstart Our Business Startups (JOBS) Act in 2012 and issuance of enabling regulations by the Securities and Exchange Commission in July 2013 will now enable companies to begin to use the Internet to solicit wealthy ("accredited") investors to invest in small and early-stage start-ups in exchange for stock. Equity crowdfunding investments by non-accredited investors, although approved by the JOBS Act in concept, will not be allowed until the SEC passes further implementing regulations.

crowdfunding
involves using the Internet to enable individuals to collectively contribute their money to support a project

INSIGHT ON BUSINESS



CROWDFUNDING TAKES OFF

Think you have the next big idea but lack the resources to make it happen? Crowdfunding sites might be your best shot. Sites such as Kickstarter, Indiegogo, RocketHub, and Crowdrise have led the growth of crowdfunding from $530 million in 2009 to almost $2.7 billion in 2012, and will reach $5 billion and beyond by the start of 2014. The Internet is the ideal medium for crowdfunding because it allows individuals and organizations in need of funds and investors to reach one another from all over the globe.

How do sites like Kickstarter and Indiegogo work? The idea is simple—an inventor, artist, or activist looking to raise money for a cause uses the site to create a page for that project. People can pledge to support the project, but the money actually only changes hands once a project fully reaches its goal. Otherwise, prospective donors lose nothing out of pocket. The sites take a small commission, usually about 5 percent, on completed projects. Active campaigns are placed on the front pages of each site.

The applications for crowdfunding are diverse, from art installations, to movies, to political action projects, to inventions. All you need is an idea that investors believe is worth their money. Crowdfunding is quickly becoming a mainstay in nearly all of these fields. Kickstarter has financed more installation art projects than the National Endowment for the Arts in Washington, and several of the biggest Kickstarter projects to date have been movie projects that have struggled to gain traction at Hollywood studios, like the Veronica Mars movie project ($5.7 million) and Zach Braff's prospective film "Wish I Was Here" (3.1 million). Contributors receive special rewards corresponding to the size of their investment in the project.

Protest movements like Occupy Wall Street have also used crowdfunding to great effect, raising funds to distribute newsletters and publish print advertisements in major newspapers. Turkish protesters crowdfunded a full-page ad in the *New York Times* to raise awareness of their dissatisfaction with Prime Minister Tayyip Erdogan. They reached their set goal of $53,800 on Indiegogo with almost a full month to spare, making it the fastest political fundraising campaign in the site's history.

Not every crowdfunding project gets off the ground—Kickstarter reports that only about 44% of its projects have reached their funding goals. Sometimes projects that do get off the ground simply flame out, disappointing all of their investors. Although this is no different than investing in stocks or other equities, Kickstarter has sought to ease investor fears by improving its communication and handling of the risk inherent in the projects hosted on its site. They introduced a section where fundraisers are required to disclose the risks inherent in their project, and for inventions, the site now requires photos of prototype products instead of simply drawings, simulations, or renderings.

There also is some worry that the lack of privacy involved with donating to crowdfunding sites has a negative effect on the process. In the art world, many artists are concerned that they will make enemies within their industry if they ignore requests for crowdfunding donations, not to mention the possibility of the focus on fundraising corrupting the artistic process. However,

(continued)

the biggest donors to the Turkish protest movement were able to keep their identities secret to avoid detection by their government, and other companies have emerged that facilitate private crowdfunding investments. Some critics have also argued that those who need Kickstarter the least are the ones benefiting the most. The Veronica Mars producers and Zach Braff are well established in Hollywood, for example. Kickstarter counters that a high-profile project draws attention to the site and helps lesser-known artists in their own fundraising efforts.

The applications for crowdfunding are limited only by imagination. Kickstarter and Indiegogo have helped people pay for adoptions and fertility treatments, have enabled Olympic athletes to raise money towards their competition expenses, and have helped video game entrepreneurs get their passion projects off the ground. A cottage industry has also sprung up around crowdfunding and specific crowdfunding Web sites, including consultants who bill themselves as experts in attracting funding for Kickstarter projects via social media campaigns. Infomercial mainstay As Seen on TV is also hoping to cash in on crowdfunding, unveiling a new site where its customers can pick the products they are most interested in buying. The next Snuggie or ShamWow might be developed using crowdfunding.

A new use of crowdfunding is to provide seed capital for startup companies. Under the JOBS Act passed by Congress in 2012, a company will be able to crowdfund up to $1 million over a 12-month period. Many expect the use of crowdfunding for this purpose to skyrocket once regulations allowing it are fully implemented in 2013. Some critics worry that there will be a steep learning curve and that a period of chaos is likely to ensue, until all participants (entrepreneurs, investors, crowdfunding platforms, and regulators) become familiar with all the potential benefits and risks of equity crowdfunding. In the meantime, however, many companies, such as Crowdfunder, AngelList, and CircleUp are already laying the groundwork for an expected explosion of activity. For example, during a test period from December 2012 through April 2013, 18 start-ups raised $6.7 million in funding commitments from 620 investors via AngelList's AngelList Invest service. Niche companies are also springing up. For instance, SeedInvest is a company that caters to investors who may have privacy concerns about crowdfunding. Sometimes, when a new startup company attracts big name backers, inexperienced investors join in and cause the start-up's valuation to balloon beyond a reasonable level. With more privacy, SeedInvest argues, valuations become accurate and investing in startups becomes more orderly. SoMoLend is another niche company, focused on debt lending for small business. CircleUp is focused on consumer products. AlumniFinder is aimed at bringing alumni together to back college entrepreneurs. These are just a few of the many companies specializing in equity crowdfunding right now, but ultimately, as with most new marketspaces, these are likely to be boiled down to just a handful of survivors.

SOURCES: "SEC Finally Moves on Equity Crowdfunding, Phase 1," by Chance Barnett, Forbes.com, July 19, 2013; "Preparing for the Chaos of Equity Crowdfunding," Phys.org, July 18, 2013; Kickstarter.com, "What is Kickstarter?", accessed July 12, 2013; Indiegogo.com, "FAQ," accessed July 12, 2013; "Why Crowdfunding Hasn't Caught on in Asia," by Kurt Wagner, Tech.Fortune.com, July 8, 2013; "SeedInvest Raises $1M to Help Angels Invest Online – Privately," by Lora Kolodny, *Wall Street Journal*, June 28, 2013; "Infomercial Maker Seeks Next Snuggie Using Crowdfunding Site," by Lora Kolodny, *Wall Street Journal*, June 24, 2013; "The Trouble with Kickstarter," by Ellen Gamerman, *Wall Street Journal*, June 21, 2013; Crowdfunding Finds a Creative Outlet," by Ella Delany, *New York Times*, June 11, 2013; "Turkish Protesters Are Crowdfunding a Full-Page Ad in the New York Times," by Brian Fung, *National Journal*, June 4, 2013; "Top 10 Crowdfunding Sites for Fundraising," by Chance Barnett, Forbes.com, May 8, 2013; "AngelList Commits to Crowdfunding," by Lora Kolodny, *Wall Street Journal*, April 24, 2013; "2013 and the Evolution of Crowdfunding," Ryan Caldbeck, Forbes.com, December 26, 2012.

CATEGORIZING E-COMMERCE BUSINESS MODELS: SOME DIFFICULTIES

There are many e-commerce business models, and more are being invented every day. The number of such models is limited only by the human imagination, and our list of different business models is certainly not exhaustive. However, despite the abundance of potential models, it is possible to identify the major generic types (and subtle variations) of business models that have been developed for the e-commerce arena and describe their key features. It is important to realize, however, that there is no one correct way to categorize these business models.

Our approach is to categorize business models according to the different major e-commerce sectors—B2C and B2B—in which they are utilized. You will note, however, that fundamentally similar business models may appear in more than one sector. For example, the business models of online retailers (often called e-tailers) and e-distributors are quite similar. However, they are distinguished by the market focus of the sector in which they are used. In the case of e-tailers in the B2C sector, the business model focuses on sales to the individual consumer, while in the case of the e-distributor, the business model focuses on sales to another business. Many companies use a variety of different business models as they attempt to extend into as many areas of e-commerce as possible. We look at B2C business models in Section 2.2 and B2B business models in Section 2.3.

A business's technology platform is sometimes confused with its business model. For instance, "mobile e-commerce" refers to the use of mobile devices and cellular and wide area networks to support a variety of business models. Commentators sometimes confuse matters by referring to mobile e-commerce as a distinct business model, which it is not. All of the basic business models we discuss below can be implemented on both the traditional Internet/Web and mobile platforms. Likewise, although they are sometimes referred to as such, social e-commerce and local e-commerce are not business models in and of themselves, but rather subsectors of B2C and B2B e-commerce in which different business models can operate.

Finally, you will also note that some companies use multiple business models. For instance, Amazon has multiple business models: it is an e-retailer, content provider, market creator, e-commerce infrastructure provider, and more. eBay is a market creator in the B2C and C2C e-commerce sectors, using both the traditional Internet/Web and mobile platforms, as well as an e-commerce infrastructure provider. Firms often seek out multiple business models as a way to leverage their brands, infrastructure investments, and assets developed with one business model into new business models.

2.2 MAJOR BUSINESS-TO-CONSUMER (B2C) BUSINESS MODELS

Business-to-consumer (B2C) e-commerce, in which online businesses seek to reach individual consumers, is the most well-known and familiar type of e-commerce. **Table 2.3** illustrates the major business models utilized in the B2C arena.

TABLE 2.3 B2C BUSINESS MODELS

BUSINESS MODEL	VARIATIONS	EXAMPLES	DESCRIPTION	REVENUE MODEL
E-tailer	Virtual Merchant	Amazon iTunes Bluefly	Online version of retail store, where customers can shop at any hour of the day or night without leaving their home or office	Sales of goods
	Bricks-and-Clicks	Walmart.com Sears.com	Online distribution channel for a company that also has physical stores	Sales of goods
	Catalog Merchant	LLBean.com LillianVernon.com	Online version of direct mail catalog	Sales of goods
	Manufacturer-Direct	Dell.com Mattel.com SonyStyle.com	Manufacturer uses online channel to sell direct to customer	Sales of goods
Community Provider		Facebook LinkedIn Twitter Pinterest	Sites where individuals with particular interests, hobbies, common experiences, or social networks can come together and "meet" online	Advertising, subscription, affiliate referral fees
Content Provider		WSJ.com CBSSports.com CNN.com ESPN.com Rhapsody.com	Information and entertainment providers such as newspapers, sports sites, and other online sources that offer customers up-to-date news and special interest how-to guidance and tips and/or information sales	Advertising, subscription fees, affiliate referral fees
Portal	Horizontal/ General	Yahoo AOL MSN Facebook	Offers an integrated package of content, content-search, and social network services: news, e-mail, chat, music downloads, video streaming, calendars, etc. Seeks to be a user's home base	Advertising, subscription fees, transaction fees
	Vertical/ Specialized (Vortal)	Sailnet	Offers services and products to specialized marketplace	Advertising, subscription fees, transaction fees
	Search	Google Bing Ask.com	Focuses primarily on offering search services	Advertising, affiliate referral
Transaction Broker		E*Trade Expedia Monster Travelocity Hotels.com Orbitz	Processors of online sales transactions, such as stockbrokers and travel agents, that increase customers' productivity by helping them get things done faster and more cheaply	Transaction fees
Market Creator		eBay Etsy Amazon Priceline	Businesses that use Internet technology to create markets that bring buyers and sellers together	Transaction fees
Service Provider		VisaNow.com Carbonite RocketLawyer	Companies that make money by selling users a service, rather than a product	Sales of services

E-TAILER

e-tailer
online retail store

Online retail stores, often called **e-tailers**, come in all sizes, from giant Amazon to tiny local stores that have Web sites. E-tailers are similar to the typical bricks-and-mortar storefront, except that customers only have to connect to the Internet or use their smartphone to place an order. Some e-tailers, which are referred to as "bricks-and-clicks," are subsidiaries or divisions of existing physical stores and carry the same products. REI, JCPenney, Barnes & Noble, Walmart, and Staples are examples of companies with complementary online stores. Others, however, operate only in the virtual world, without any ties to physical locations. Amazon, Blue Nile, and Drugstore.com are examples of this type of e-tailer. Several other variations of e-tailers—such as online versions of direct mail catalogs, online malls, and manufacturer-direct online sales—also exist.

Given that the overall retail market in the United States in 2013 is estimated to be around $3.9 trillion, the market opportunity for e-tailers is very large (Bureau of Economic Analysis, 2013). Every Internet and smartphone user is a potential customer. Customers who feel time-starved are even better prospects, since they want shopping solutions that will eliminate the need to drive to the mall or store (Bellman, Lohse, and Johnson, 1999). The e-tail revenue model is product-based, with customers paying for the purchase of a particular item.

barriers to entry
the total cost of entering a new marketplace

This sector, however, is extremely competitive. Since **barriers to entry** (the total cost of entering a new marketplace) into the e-tail market are low, tens of thousands of small e-tail shops have sprung up. Becoming profitable and surviving is very difficult, however, for e-tailers with no prior brand name or experience. The e-tailer's challenge is differentiating its business from existing competitors.

Companies that try to reach every online consumer are likely to deplete their resources quickly. Those that develop a niche strategy, clearly identifying their target market and its needs, are best prepared to make a profit. Keeping expenses low, selection broad, and inventory controlled are keys to success in e-tailing, with inventory being the most difficult to gauge. Online retail is covered in more depth in Chapter 9.

COMMUNITY PROVIDER

community provider
creates an online environment where people with similar interests can transact (buy and sell goods); share interests, photos, and videos; communicate with like-minded people; and receive interest-related information

Although community providers are not a new phenomenon, the Internet has made such sites for like-minded individuals to meet and converse much easier, without the limitations of geography and time to hinder participation. **Community providers** create an online environment where people with similar interests can transact (buy and sell goods); share interests, photos, videos; communicate with like-minded people; receive interest-related information; and even play out fantasies by adopting online personalities called avatars. The social network sites Facebook, LinkedIn, Twitter, and Pinterest, and hundreds of other smaller, niche sites all offer users community-building tools and services.

The basic value proposition of community providers is to create a fast, convenient, one-stop site where users can focus on their most important concerns and interests, share the experience with friends, and learn more about their own interests. Community providers typically rely on a hybrid revenue model that includes subscription

fees, sales revenues, transaction fees, affiliate fees, and advertising fees from other firms that are attracted by a tightly focused audience.

Community sites such as iVillage make money through affiliate relationships with retailers and from advertising. For instance, a parent might visit RightStart.com for tips on diapering a baby and be presented with a link to Huggies.com; if the parent clicks the link and then makes a purchase from Huggies.com, RightStart gets a commission. Likewise, banner ads also generate revenue. Some of the oldest online communities are The Well (Well.com), which provides a forum for technology and Internet-related discussions, and The Motley Fool (Fool.com), which provides financial advice, news, and opinions. The Well offers various membership plans ranging from $10 to $15 a month. Motley Fool supports itself through ads and selling products that start out "free" but turn into annual subscriptions.

Consumers' interest in communities is mushrooming. Community is, arguably, the fastest growing online activity. While many community sites have had a difficult time becoming profitable, many have succeeded over time, with advertising as their main source of revenue. Both the very large social network sites such as Facebook, Twitter, and LinkedIn, as well as niche sites with smaller dedicated audiences, are ideal marketing and advertising territories. Traditional online communities such as The Well, iVillage, and WebMD (which provides medical information to members) find that breadth and depth of knowledge at a site is an important factor. Community members frequently request knowledge, guidance, and advice. Lack of experienced personnel can severely hamper the growth of a community, which needs facilitators and managers to keep discussions on course and relevant. For the newer community social network sites, the most important ingredients of success appear to be ease and flexibility of use, and a strong customer value proposition. For instance, Facebook leapfrogged over its rival MySpace by encouraging the development of third-party revenue-producing applications.

Online communities benefit significantly from offline word-of-mouth, viral marketing. Online communities tend to reflect offline relationships. When your friends say they have a profile on Facebook, and ask you to "friend" them, you are encouraged to build your own online profile.

CONTENT PROVIDER

Content providers distribute information content, such as digital video, music, photos, text, and artwork. It is estimated that U.S. consumers will spend more than $24 billion for online content such as movies, music, videos, television shows, e-books, and newspapers during 2013.

content provider distributes information content, such as digital news, music, photos, video, and artwork

Content providers make money by charging a subscription fee. For instance, in the case of Rhapsody.com, a monthly subscription fee provides users with access to thousands of music tracks. Other content providers, such as WSJ.com (the *Wall Street Journal* online newspaper), *Harvard Business Review*, and many others, charge customers for content downloads in addition to, or in place of, a subscription fee.

Of course, not all online content providers charge for their information: just look at CBSSports.com, CIO.com, CNN.com, and the online versions of many newspapers and magazines. Users can access news and information at these sites without paying a

cent, although sometimes they may be required to register as a member. These popular sites make money in other ways, such as through advertising and partner promotions on the site. Increasingly, however, "free content" may be limited to headlines and text, whereas premium content—in-depth articles or videos—is sold for a fee.

Generally, the key to becoming a successful content provider is owning the content. Traditional owners of copyrighted content—publishers of books and newspapers, broadcasters of radio and television content, music publishers, and movie studios—have powerful advantages over newcomers who simply offer distribution channels and must pay for content, often at very high prices.

Some content providers, however, do not own content, but syndicate (aggregate) and then distribute content produced by others. *Syndication* is a major variation of the standard content provider model. Aggregators, who collect information from a wide variety of sources and then add value to that information through post-aggregation services, are another variation. For instance, Shopping.com collects information on the prices of thousands of goods online, analyzes the information, and presents users with tables showing the range of prices and links to the sites where the products can be purchased. Shopping.com adds value to content it aggregates, and resells this value to advertisers who advertise on its site.

Any e-commerce start-up that intends to make money by providing content is likely to face difficulties unless it has a unique information source that others cannot access. For the most part, this business category is dominated by traditional content providers. The *Insight on Technology* case, *Battle of the Titans: Music in the Cloud,* discusses how changes in Internet technology are driving the development of new business models in the online content market by Internet titans Apple, Google, and Amazon.

Online content is discussed in further depth in Chapter 10.

PORTAL

portal
offers users powerful search tools as well as an integrated package of content and services all in one place

Portals such as Yahoo, MSN, and AOL offer users powerful search tools as well as an integrated package of content and services, such as news, e-mail, instant messaging, calendars, shopping, music downloads, video streaming, and more, all in one place. Initially, portals sought to be viewed as "gateways" to the Internet. Today, however, the portal business model is to be a destination site. They are marketed as places where consumers will hopefully stay a long time to read news, find entertainment, and meet other people (think of destination resorts). Portals do not sell anything directly—or so it seems—and in that sense they can present themselves as unbiased. The market opportunity is very large: in 2013, around 243 million people in the United States accessed the Internet at work or home. Portals generate revenue primarily by charging advertisers for ad placement, collecting referral fees for steering customers to other sites, and charging for premium services.

Although there are numerous portal/search engine sites, the top five sites (Google, Yahoo, MSN/Bing, AOL, and Ask.com) gather more than 95% of the search engine traffic because of their superior brand recognition (comScore, 2013). Many of the top sites were among the first to appear on the Web and therefore had first-mover advantages. Being first confers advantage because customers come to trust a reliable

INSIGHT ON TECHNOLOGY

BATTLE OF THE TITANS: MUSIC IN THE CLOUD

Business models are closely related to the technologies available to produce and distribute products and services. Nowhere is this more apparent than the recorded music business, whose foundations since the early 20th century have been based on the technology on hand, from sheet music, to records, tape cassettes, CDs, and DVDs. And now, the Internet has enabled two new business models: the online store download-and-own model used by Amazon and Apple's iTunes, where you purchase songs and store them on a computer or devices, and the subscription service model used by Rhapsody, Pandora, and many others, where for a monthly fee you can listen to an online library of songs streamed to your devices. In this business model you don't own the music, and if you miss a payment, it's gone.

Both the download-and-own and subscription service models have significant shortcomings that detract from the customer experience. If you download music to a computer, you need cables and software to get the music to your smartphone, and you will be limited as to how many devices you can use. You may download using different devices and then face a problem coordinating them. Subscription services have confusing pricing schemes, typically cost $15 a month or more, and require you to have Internet access. Many services don't allow you to store songs locally on a device for off-the-Net play, while others allow local storage of music that will not be playable if you miss the monthly payment. Many of the inconveniences of these existing business models were created by record companies who feared, legitimately, that their music would be ripped off and their revenue decimated.

Changes in technology have introduced yet a third recorded music business model: cloud streaming. Here, you own the music and you can store it on a single online cloud drive and play it from any device you choose—one music collection, no coordination issues, and local storage for offline playback. The technology behind this business model is cloud computing, a model of computing where software and files are stored on servers located on the Internet rather than on local devices like PCs and local servers in an office or corporate headquarters. While cloud computing started out as a new and less-expensive method of information processing for large corporations, it is spreading to consumer services such as music, file storage, productivity software, and calendars. What makes cloud computing possible is mammoth data centers stocked with hundreds of thousands of computer processors, and cheap broadband networks that can move files and software instructions rapidly back and forth from local devices to cloud servers.

In 2012, Apple, Amazon, and Google, three of the largest Internet players, introduced their cloud-based music models. The resulting competition is a battle royale among Internet titans to preserve existing advantages for each firm, and to dominate the future of music distribution.

Amazon was the first to announce its cloud music service, in March 2011. Using a "music locker" business model, Amazon's Cloud Player allows you to upload MP3 and ACC music files, store the music on Cloud Player, and play the music on any number of supported digital devices, such as your PC, Mac, Kindle Fire, Android Phone, iPhone, or iPod Touch. If you are a paid subscriber of Amazon's Cloud Drive storage service, you can access Cloud Player at no additional cost. If not, you can subscribe for $24.99 a year, which entitles you to import up to 250,000 songs. Presto: your music is no longer tied to a single digital device or platform. Amazon also sells music; it is the second largest

(continued)

music retailer in the world, with more than 20 million songs for sale.

Amazon's announcement was followed by Google's announcement in May 2011 of its own music locker service, now known as Google Play. This is another music locker service based on cloud computing. You download a Google music uploader app called Music Manager and it searches your hard drive or smartphone for music files, and automatically uploads them to the Google cloud. You get free storage for 20,000 songs, for $9.99 a month, you can enjoy unlimited listening to millions of songs and create a personalized radio station similar to that offered by Pandora based on any song or artist. In addition, the Google Play store has over 18 million songs available for purchase.

In June 2011, Apple finally joined the party, announcing its own cloud service player and storage system, iCloud. Apple is the largest retailer of music in the world with an inventory of more than 26 million songs. Apple's iCloud service allows you to store all your digital files, including music files, on Apple's cloud drive, and then play your music on any Apple device or PC connected to the Internet. Apple's approach is a "matching service" where you do not need to upload any of your music files. In a unique agreement with the four largest music firms, Apple's iCloud software identifies the music titles stored on your device and places high-quality copies into your iCloud drive automatically. iTunes Match is available on a subscription basis for the same price as Amazon's Cloud Player, $24.99 a year. Without it, you are limited only to the music you have purchased through iTunes. You can also upload digital documents, from photos and calendars to spreadsheets and papers, to the iCloud. Apple provides 5 gigabytes of storage for free, with additional amounts available for purchase. Apple's iCloud drive service is coordinated with its iOS 5 operating system for smartphones and i-devices. The operating system does not require a PC or Mac base station, and you can manage all your digital content online using just an iPhone.

It's still too early to tell which of these giants will prevail in the music distribution business, but all will continue to be the dominant players. While there are mostly similarities among the various cloud services (they all play on any device you choose), some differences may have business significance. For instance, Google and Amazon require users to upload their music, which can take many hours or even days, and some of your music tracks might be very low quality. Apple's service matches your local collection and places high-quality versions of the music online automatically. It's unclear if this is a permanent advantage because both Google and Amazon could negotiate similar deals with the music companies. Google and Apple can sell users expensive smartphones to play cloud music, whereas Amazon has no proprietary music player.

Music is just the first online content to go onto cloud servers. It will soon be followed by movies, television shows, books, and magazines. In addition, the presence of all this content will drive consumers to buy mobile devices. None of the titans plan to miss out on this opportunity. There's also money for the content producers. The streaming music cloud services promise to provide a rich and stable stream of revenue for the content producers and artists. Instead of fighting each other, for once it appears the content owners and the Internet content distributors have reached a consensus on a mutually profitable business model for content.

SOURCES: "iTunes Match," Apple.com, accessed August 1, 2013; "Google Play/Music," Play.google.com, accessed August 1, 2013; "Get Started with the Amazon MP3 Store and Cloud Player," Amazon.com, accessed August 1, 2013; "Web Services to Drive Future Growth for Amazon," by Trefis Team, Forbes.com, August 21, 2012; "Top Cloud Services for Storing and Streaming Music," by Paul Lilly, *PCWorld*, July 29, 2012; "The Cloud That Ate Your Music," by Jon Pareles, *New York Times*, June 22, 2011; "Amazon's and Google's Cloud Services Compared," by Paul Boutin, *New York Times*, June 6, 2011; "For a Song, Online Giants Offer Music in a Cloud," by Walter Mossberg, *Wall Street Journal*, May 19, 2011; "Apple's Cloud Music Service Might Crush the Competition," by Mikko Torikka, VentureBeat.com, May 19, 2011; "Amazon Beats Apple and Google to Cloud Music," by Dean Takahashi, VentureBeat.com, March 28, 2011.

provider and experience switching costs if they change to late arrivals in the market. By garnering a large chunk of the marketplace, first movers—just like a single telephone network—can offer customers access to commonly shared ideas, standards, and experiences (something called *network externalities* that we describe in later chapters).

The traditional portals have company: Facebook and other social network sites are now the initial start or home page (portal) for millions of Internet users in the United States.

Yahoo, AOL, MSN, and others like them are considered to be horizontal portals because they define their marketspace to include all users of the Internet. Vertical portals (sometimes called vortals) attempt to provide similar services as horizontal portals, but are focused around a particular subject matter or market segment. For instance, Sailnet specializes in the consumer sailboat market that contains about 8 million Americans who own or rent sailboats. Although the total number of vortal users may be much lower than the number of portal users, if the market segment is attractive enough, advertisers are willing to pay a premium in order to reach a targeted audience. Also, visitors to specialized niche vortals spend more money than the average Yahoo visitor. Google and Ask.com can also be considered portals of a sort, but focus primarily on offering search and advertising services. They generate revenues primarily from search engine advertising sales and also from affiliate referral fees.

TRANSACTION BROKER

Companies that process transactions for consumers normally handled in person, by phone, or by mail are **transaction brokers**. The largest industries using this model are financial services, travel services, and job placement services. The online transaction broker's primary value propositions are savings of money and time. In addition, most transaction brokers provide timely information and opinions. Companies such as Monster.com offer job searchers a national marketplace for their talents and employers a national resource for that talent. Both employers and job seekers are attracted by the convenience and currency of information. Online stock brokers charge commissions that are considerably less than traditional brokers, with many offering substantial deals, such as cash and a certain number of free trades, to lure new customers.

transaction broker site that processes transactions for consumers that are normally handled in person, by phone, or by mail

Given rising consumer interest in financial planning and the stock market, the market opportunity for online transaction brokers appears to be large. However, while millions of customers have shifted to online brokers, some are still wary about switching from their traditional broker who provides personal advice and a brand name. Fears of privacy invasion and the loss of control over personal financial information also contribute to market resistance. Consequently, the challenge for online brokers is to overcome consumer fears by emphasizing the security and privacy measures in place, and, like physical banks and brokerage firms, providing a broad range of financial services and not just stock trading. This industry is covered in greater depth in Chapter 9.

Transaction brokers make money each time a transaction occurs. Each stock trade, for example, nets the company a fee, based on either a flat rate or a sliding scale related to the size of the transaction. Attracting new customers and encouraging them

to trade frequently are the keys to generating more revenue for these companies. Travel sites generate commissions from travel books and job sites generate listing fees from employers up front, rather than charging a fee when a position is filled.

MARKET CREATOR

market creator
builds a digital environment where buyers and sellers can meet, display products, search for products, and establish a price for products

Market creators build a digital environment in which buyers and sellers can meet, display products, search for products, and establish prices. Prior to the Internet and the Web, market creators relied on physical places to establish a market. Beginning with the medieval marketplace and extending to today's New York Stock Exchange, a market has meant a physical space for transacting business. There were few private digital network marketplaces prior to the Web. The Web changed this by making it possible to separate markets from physical space. Prime examples are Priceline, which allows consumers to set the price they are willing to pay for various travel accommodations and other products (sometimes referred to as a reverse auction), and eBay, the online auction site utilized by both businesses and consumers. Market creators make money by either charging a percentage of every transaction made, or charging merchants for access to the market.

For example, eBay's auction business model is to create a digital electronic environment for buyers and sellers to meet, agree on a price, and transact. This is different from transaction brokers who actually carry out the transaction for their customers, acting as agents in larger markets. At eBay, the buyers and sellers are their own agents. Each sale on eBay nets the company a commission based on the percentage of the item's sales price, in addition to a listing fee. eBay is one of the few e-commerce companies that has been profitable virtually from the beginning. Why? One answer is that eBay has no inventory or production costs. It is simply a middleman.

The market opportunity for market creators is potentially vast, but only if the firm has the financial resources and marketing plan to attract sufficient sellers and buyers to the marketplace. As of June 30, 2013, eBay had more than 132 million active registered users, and this makes for an efficient market (eBay, 2013). There are many sellers and buyers for each type of product, sometimes for the same product, for example, laptop computer models. Many other digital auctions have sprung up in smaller, more specialized vertical market segments such as jewelry and automobiles.

In addition to marketing and branding, a company's management team and organization can make a difference in creating new markets, especially if some managers have had experience in similar businesses. Speed is often the key in such situations. The ability to become operational quickly can make the difference between success and failure.

SERVICE PROVIDER

service provider
offers services online

While e-tailers sell products online, **service providers** offer services online. There's been an explosion in online services that is often unrecognized. Web 2.0 applications such as photo sharing, video sharing, and user-generated content (in blogs and social network sites) are all services provided to customers. Google has led the way in developing online applications such as Google Maps, Google Docs, and Gmail. Other

personal services such as online medical bill management, financial and pension planning, and travel recommendation are showing strong growth.

Service providers use a variety of revenue models. Some charge a fee, or monthly subscriptions, while others generate revenue from other sources, such as through advertising and by collecting personal information that is useful in direct marketing. Some services are free but are not complete. For instance, Google Apps' basic edition is free, but a business edition with advanced tools costs $5/user/month or $50/user/year. Much like retailers who trade products for cash, service providers trade knowledge, expertise, and capabilities for revenue.

Obviously, some services cannot be provided online. For example, dentistry, medical services, plumbing, and car repair cannot be completed via the Internet. However, online arrangements can be made for these services. Online service providers may offer computer services, such as information storage (as does Carbonite), provide legal services (RocketLawyer), or offer advice and services to high-net-worth individuals, such as at HarrisMyCFO.com. Grocery shopping sites such as FreshDirect and Peapod are also providing services.[1] To complicate matters a bit, most financial transaction brokers (described previously) provide services such as college tuition and pension planning. Travel brokers also provide vacation-planning services, not just transactions with airlines and hotels. Indeed, mixing services with your products is a powerful business strategy pursued by many hard-goods companies (for example, warranties are services).

The basic value proposition of service providers is that they offer consumers valuable, convenient, time-saving, and low-cost alternatives to traditional service providers or—in the case of search engines and most Web 2.0 applications—they provide services that are truly unique. Where else can you search 50 billion Web pages, or share photos with as many people instantly? Research has found, for instance, that a major factor in predicting online buying behavior is *time starvation*. Time-starved people tend to be busy professionals who work long hours and simply do not have the time to pick up packages, buy groceries, send photos, or visit with financial planners (Bellman, Lohse, and Johnson, 1999). The market opportunity for service providers is as large as the variety of services that can be provided and potentially is much larger than the market opportunity for physical goods. We live in a service-based economy and society; witness the growth of fast-food restaurants, package delivery services, and wireless cellular phone services. Consumers' increasing demand for convenience products and services bodes well for current and future online service providers.

Marketing of service providers must allay consumer fears about hiring a vendor online, as well as build confidence and familiarity among current and potential customers. Building confidence and trust is critical for service providers just as it is for retail product merchants.

[1] FreshDirect and other e-commerce businesses can also be classified as online retailers insofar as they warehouse commonly purchased items and make a profit based on the spread between their buy and sell prices.

2.3 MAJOR BUSINESS-TO-BUSINESS (B2B) BUSINESS MODELS

In Chapter 1, we noted that business-to-business (B2B) e-commerce, in which businesses sell to other businesses, is more than 10 times the size of B2C e-commerce, even though most of the public attention has focused on B2C. For instance, it is estimated that revenues for all types of B2B e-commerce in the United States will total around $4.8 trillion in 2013, compared to about $419 billion for all types of B2C e-commerce. Clearly, most of the dollar revenues in e-commerce involve B2B e-commerce. Much of this activity is unseen and unknown to the average consumer.

B2B e-commerce relies overwhelmingly on a technology called *electronic data interchange (EDI)* (U.S. Census Bureau, 2013). EDI is useful for one-to-one relationships between a single supplier and a single purchaser, and originally was designed for proprietary networks, although it is migrating rapidly to the Internet. Many firms have supplemented their EDI systems, however, with more powerful Internet technologies that can enable many-to-one and many-to-many market relationships where there are many suppliers selling to a single or small group of very large purchasers, or, in the case of independent exchanges, where there are many sellers and many buyers simultaneously in the marketplace. EDI is not designed for these types of relationships. **Table 2.4** lists the major business models utilized in the B2B arena.

TABLE 2.4 B2B BUSINESS MODELS

BUSINESS MODEL	EXAMPLES	DESCRIPTION	REVENUE MODEL
(1) NET MARKETPLACE			
E-distributor	Grainger.com Partstore.com	Single-firm online version of retail and wholesale store; supply maintenance, repair, operation goods; indirect inputs	Sales of goods
E-procurement	Ariba PerfectCommerce	Single firm creating digital markets where sellers and buyers transact for indirect inputs	Fees for market-making services, supply chain management, and fulfillment services
Exchange	OceanConnect	Independently owned vertical digital marketplace for direct inputs	Fees and commissions on transactions
Industry Consortium	Exostar Elemica	Industry-owned vertical digital market open to select suppliers	Fees and commissions on transactions
(2) PRIVATE INDUSTRIAL NETWORK			
	Walmart Procter & Gamble	Company-owned network that coordinates supply chains with a limited set of partners	Cost absorbed by network owner and recovered through production and distribution efficiencies

E-DISTRIBUTOR

Companies that supply products and services directly to individual businesses are **e-distributors**. W.W. Grainger, for example, is the largest distributor of maintenance, repair, and operations (MRO) supplies. MRO supplies are thought of as indirect inputs to the production process—as opposed to direct inputs. In the past, Grainger relied on catalog sales and physical distribution centers in metropolitan areas. Its catalog of equipment went online in 1995 at Grainger.com, giving businesses access to more than 1 million items. Company purchasing agents can search by type of product, such as motors, HVAC, or fluids, or by specific brand name.

e-distributor
a company that supplies products and services directly to individual businesses

E-distributors are owned by one company seeking to serve many customers. However, as with exchanges (described on the next page), critical mass is a factor. With e-distributors, the more products and services a company makes available on its site, the more attractive that site is to potential customers. One-stop shopping is always preferable to having to visit numerous sites to locate a particular part or product.

E-PROCUREMENT

Just as e-distributors provide products to other companies, **e-procurement firms** create and sell access to digital electronic markets. Firms such as Ariba, for instance, have created software that helps large firms organize their procurement process by creating mini-digital markets for a single firm. Ariba creates custom-integrated online catalogs (where supplier firms can list their offerings) for purchasing firms. On the sell side, Ariba helps vendors sell to large purchasers by providing software to handle catalog creation, shipping, insurance, and finance. Both the buy and sell side software is referred to generically as "value chain management" software.

e-procurement firm
creates and sells access to digital electronic markets

B2B service providers make money through transaction fees, fees based on the number of workstations using the service, or annual licensing fees. They offer purchasing firms a sophisticated set of sourcing and supply chain management tools that permit firms to reduce supply chain costs. In the software world, firms such as Ariba are sometimes also called **application service providers (ASPs)**; they are able to offer firms much lower costs of software by achieving scale economies. **Scale economies** are efficiencies that result from increasing the size of a business, for instance, when large, fixed-cost production systems (such as factories or software systems) can be operated at full capacity with no idle time. In the case of software, the marginal cost of a digital copy of a software program is nearly zero, and finding additional buyers for an expensive software program is exceptionally profitable. This is much more efficient than having every firm build its own supply chain management system, and it permits firms such as Ariba to specialize and offer their software to firms at a cost far less than the cost of developing it.

B2B service provider
sells business services to other firms

application service provider (ASP)
a company that sells access to Internet-based software applications to other companies

scale economies
efficiencies that arise from increasing the size of a business

EXCHANGES

Exchanges have garnered most of the B2B attention and early funding because of their potential market size even though today they are a small part of the overall B2B picture. An **exchange** is an independent digital electronic marketplace where hun-

exchange
an independent digital electronic marketplace where suppliers and commercial purchasers can conduct transactions

dreds of suppliers meet a smaller number of very large commercial purchasers (Kaplan and Sawhney, 2000). Exchanges are owned by independent, usually entrepreneurial start-up firms whose business is making a market, and they generate revenue by charging a commission or fee based on the size of the transactions conducted among trading parties. They usually serve a single vertical industry such as steel, polymers, or aluminum, and focus on the exchange of direct inputs to production and short-term contracts or spot purchasing. For buyers, B2B exchanges make it possible to gather information, check out suppliers, collect prices, and keep up to date on the latest happenings all in one place. Sellers, on the other hand, benefit from expanded access to buyers. The greater the number of sellers and buyers, the lower the sales cost and the higher the chances of making a sale. The ease, speed, and volume of transactions are summarily referred to as *market liquidity*.

In theory, exchanges make it significantly less expensive and time-consuming to identify potential suppliers, customers, and partners, and to do business with each other. As a result, they can lower transaction costs—the cost of making a sale or purchase. Exchanges can also lower product costs and inventory-carrying costs—the cost of keeping a product on hand in a warehouse. In reality, as will be discussed in Chapter 12, B2B exchanges have had a difficult time convincing thousands of suppliers to move into singular digital markets where they face powerful price competition, and an equally difficult time convincing businesses to change their purchasing behavior away from trusted long-term trading partners. As a result, the number of exchanges has fallen significantly.

INDUSTRY CONSORTIA

industry consortia
industry-owned vertical marketplaces that serve specific industries

Industry consortia are industry-owned *vertical marketplaces* that serve specific industries, such as the automobile, aerospace, chemical, floral, or logging industries. In contrast, *horizontal marketplaces* sell specific products and services to a wide range of companies. Vertical marketplaces supply a smaller number of companies with products and services of specific interest to their industry, while horizontal marketplaces supply companies in different industries with a particular type of product and service, such as marketing-related, financial, or computing services. For example, Exostar is an online trading exchange for the aerospace and defense industry, founded by BAE Systems, Boeing, Lockheed Martin, Raytheon, and Rolls-Royce in 2000. Exostar connects with more than 300 procurement systems and has registered more than 70,000 trading partners in 95 countries around the world.

Industry consortia have tended to be more successful than independent exchanges in part because they are sponsored by powerful, deep-pocketed industry players, and also because they strengthen traditional purchasing behavior rather than seek to transform it.

private industrial network
digital network designed to coordinate the flow of communications among firms engaged in business together

PRIVATE INDUSTRIAL NETWORKS

Private industrial networks constitute about 75% of all B2B expenditures by large firms and far exceed the expenditures for all forms of Net marketplaces. A **private industrial network** (sometimes referred to as a private trading exchange or PTX)

is a digital network (often but not always Internet-based) designed to coordinate the flow of communications among firms engaged in business together. The network is owned by a single large purchasing firm. Participation is by invitation only to trusted long-term suppliers of direct inputs. These networks typically evolve out of a firm's own enterprise resource planning (ERP) system, and are an effort to include key suppliers in the firm's own business decision making. For instance, Walmart operates one of the largest private industrial networks in the world for its suppliers, who on a daily basis use Walmart's network to monitor the sales of their goods, the status of shipments, and the actual inventory level of their goods.

We discuss the nuances of B2B e-commerce in more detail in Chapter 12.

2.4 E-COMMERCE ENABLERS: THE GOLD RUSH MODEL

Of the nearly 500,000 miners who descended on California in the Gold Rush of 1849, less than 1% ever achieved significant wealth. However, the banking firms, shipping companies, hardware companies, real estate speculators, and clothing companies such as Levi Strauss built long-lasting fortunes. Likewise in e-commerce. No discussion of e-commerce business models would be complete without mention of a group of companies whose business model is focused on providing the infrastructure necessary for e-commerce companies to exist, grow, and prosper. These are the e-commerce enablers: the Internet infrastructure companies. They provide the hardware, operating system software, networks and communications technology, applications software, Web design, consulting services, and other tools that make e-commerce (see **Table 2.5** on page 86). While these firms may not be conducting e-commerce per se (although in many instances, e-commerce in its traditional sense is in fact one of their sales channels), as a group they have perhaps profited the most from the development of e-commerce. We discuss many of these players in the following chapters.

2.5 HOW E-COMMERCE CHANGES BUSINESS: STRATEGY, STRUCTURE, AND PROCESS

Now that you have a clear grasp of the variety of business models used by e-commerce firms, you also need to understand how e-commerce has changed the business environment in the last decade, including industry structures, business strategies, and industry and firm operations (business processes and value chains). We return to these concepts throughout the book as we explore the e-commerce phenomenon. In general, the Internet is an open standards system available to all players, and this fact inherently makes it easy for new competitors to enter the marketplace and offer substitute products or channels of delivery. The Internet tends to intensify competition. Because information becomes available to everyone, the Internet inherently shifts power to buyers who can quickly discover the lowest-cost provider. On the other hand, the

TABLE 2.5 E-COMMERCE ENABLERS

INFRASTRUCTURE	PLAYERS
Infrastructure	Players
Hardware: Web Servers	IBM, HP, Dell, Oracle
Software: Server Software	Microsoft, Red Hat Linux, Apple
Cloud Providers	Amazon Web Services, Rackspace, Google, IBM,
Hosting Services	Rackspace, Webintellects, 1&1 Internet, HostGator, Hostway
Domain Name Registration	Go Daddy, Network Solutions, Dotster
Content Delivery Networks	Akamai, Limelight
Site Design	GSI Commerce, Fry, Oracle
E-commerce Platform Providers	GSI Commerce, Magento, IBM, ATG, Demandware
Mobile Commerce Hardware Platform	Apple, Samsung, Google
Mobile Commerce Software Platform	Apple, Google, Adobe, Usablenet, Unbound Commerce, Branding Brand
Streaming, Rich Media, Online Video	Adobe, Apple, Easy 2 Technologies, Channel Advisor
Security and Encryption	VeriSign, Checkpoint, GeoTrust, Entrust, EMC, Thawte, McAfee
Payment Systems	PayPal, Authorize.net, Chase Paymentech, Cybersource
Web Performance Management	Compuware Gomez, Smartbear, Keynote Systems
Comparison Engine Feeds/Marketplace Management	Channel Advisor, Mercent, CPC Strategy
Customer Relationship Management	Oracle, SAP, GSI Commerce, Salesforce.com, NetSuite
Order Management	JDA Software, GSI Commerce, Stone Edge
Fulfillment	JDA Software, GSI Commerce, CommerceHub
Social Marketing	Buffer, HootSuite, SocialFlow
Search Engine Marketing	iProspect, Channel Advisor, Rimm-Kaufman Group
E-mail Marketing	Constant Contact, Experian CheetahMail, Bronto Software, MailChimp
Affiliate Marketing	Commission Junction, Google Affiliate Network, LinkShare
Customer Reviews and Forums	Bazaarvoice, PowerReviews, BizRate
Live Chat/Click-to-Call	LivePerson, BoldChat, Oracle
Web Analytics	Google Analytics, Adobe Omniture, IBM Coremetrics

Internet presents many new opportunities for creating value, for branding products and charging premium prices, and for enlarging an already powerful offline physical business such as Walmart or Sears.

Recall Table 1.2 in Chapter 1 that describes the truly unique features of e-commerce technology. **Table 2.6** suggests some of the implications of each unique feature

TABLE 2.6 EIGHT UNIQUE FEATURES OF E-COMMERCE TECHNOLOGY

FEATURE	SELECTED IMPACTS ON BUSINESS ENVIRONMENT
Ubiquity	Alters industry structure by creating new marketing channels and expanding size of overall market. Creates new efficiencies in industry operations and lowers costs of firms' sales operations. Enables new differentiation strategies.
Global reach	Changes industry structure by lowering barriers to entry, but greatly expands market at same time. Lowers cost of industry and firm operations through production and sales efficiencies. Enables competition on a global scale.
Universal standards	Changes industry structure by lowering barriers to entry and intensifying competition within an industry. Lowers costs of industry and firm operations by lowering computing and communications costs. Enables broad scope strategies.
Richness	Alters industry structure by reducing strength of powerful distribution channels. Changes industry and firm operations costs by reducing reliance on sales forces. Enhances post-sales support strategies.
Interactivity	Alters industry structure by reducing threat of substitutes through enhanced customization. Reduces industry and firm costs by reducing reliance on sales forces. Enables differentiation strategies.
Personalization/ Customization	Alters industry structure by reducing threats of substitutes, raising barriers to entry. Reduces value chain costs in industry and firms by lessening reliance on sales forces. Enables personalized marketing strategies.
Information density	Changes industry structure by weakening powerful sales channels, shifting bargaining power to consumers. Reduces industry and firm operations costs by lowering costs of obtaining, processing, and distributing information about suppliers and consumers.
Social technologies	Changes industry structure by shifting programming and editorial decisions to consumers. Creates substitute entertainment products. Energizes a large group of new suppliers.

for the overall business environment—industry structure, business strategies, and operations.

INDUSTRY STRUCTURE

E-commerce changes industry structure, in some industries more than others. **Industry structure** refers to the nature of the players in an industry and their relative bargaining power. An industry's structure is characterized by five forces: *rivalry among*

industry structure refers to the nature of the players in an industry and their relative bargaining power

industry structural analysis
an effort to understand and describe the nature of competition in an industry, the nature of substitute products, the barriers to entry, and the relative strength of consumers and suppliers

existing competitors, the *threat of substitute products, barriers to entry into the industry*, the *bargaining power of suppliers*, and the *bargaining power of buyers* (Porter, 1985). When you describe an industry's structure, you are describing the general business environment in an industry and the overall profitability of doing business in that environment. E-commerce has the potential to change the relative strength of these competitive forces (see **Figure 2.4**).

When you consider a business model and its potential long-term profitability, you should always perform an industry structural analysis. An **industry structural analysis** is an effort to understand and describe the nature of competition in an industry, the nature of substitute products, the barriers to entry, and the relative strength of consumers and suppliers.

FIGURE 2.4 HOW E-COMMERCE INFLUENCES INDUSTRY STRUCTURE

E-commerce has many impacts on industry structure and competitive conditions. From the perspective of a single firm, these changes can have negative or positive implications depending on the situation. In some cases, an entire industry can be disrupted, while at the same time, a new industry is born. Individual firms can either prosper or be devastated.

E-commerce can affect the structure and dynamics of industries in very different ways. Consider the recorded music industry, an industry that has experienced significant change because of e-commerce. Historically, the major record companies owned the exclusive rights to the recorded music of various artists. With the entrance into the marketplace of substitute providers such as Napster and Kazaa, millions of consumers began to use the Internet to bypass traditional music labels and their distributors entirely. In the travel industry, entirely new middlemen such as Travelocity entered the market to compete with traditional travel agents. After Travelocity, Expedia, CheapTickets, and other travel services demonstrated the power of e-commerce marketing for airline tickets, the actual owners of the airline seats—the major airlines—banded together to form their own Internet outlet for tickets, Orbitz, for direct sales to consumers (although ultimately selling the company to a private investor group). Clearly, e-commerce creates *new industry dynamics* that can best be described as the give and take of the marketplace, the changing fortunes of competitors.

Yet in other industries, e-commerce has strengthened existing players. In the chemical and automobile industries, e-commerce is being used effectively by manufacturers to strengthen their traditional distributors. In these industries, e-commerce technology has not fundamentally altered the competitive forces—bargaining power of suppliers, barriers to entry, bargaining power of buyers, threat of substitutes, or rivalry among competitors—within the industry. Hence, each industry is different and you need to examine each one carefully to understand the impacts of e-commerce on competition and strategy.

New forms of distribution created by new market entrants can completely change the competitive forces in an industry. For instance, consumers gladly substituted free access to Wikipedia for a $699 set of World Book encyclopedias, or a $40 DVD, radically changing the competitive forces in the encyclopedia industry. As we describe in Chapter 10, the content industries of newspapers, books, movies, games, and television have been transformed by the emergence of new distribution platforms.

Inter-firm rivalry (competition) is one area of the business environment where e-commerce technologies have had an impact on most industries. In general, e-commerce has increased price competition in nearly all markets. It has been relatively easy for existing firms to adopt e-commerce technology and attempt to use it to achieve competitive advantage vis-à-vis rivals. For instance, e-commerce inherently changes the scope of competition from local and regional to national and global. Because consumers have access to global price information, e-commerce produces pressures on firms to compete by lowering prices (and lowering profits). On the other hand, e-commerce has made it possible for some firms to differentiate their product or services from others. Amazon patented one-click purchasing, for instance, while eBay created a unique, easy-to-use interface and a differentiating brand name. Therefore, although e-commerce has increased emphasis on price competition, it has also enabled businesses to create new strategies for differentiation and branding so that they can retain higher prices.

It is impossible to determine if e-commerce technologies have had an overall positive or negative impact on firm profitability in general. Each industry is unique, so it is necessary to perform a separate analysis for each one. Clearly, e-commerce has shaken the foundations of some industries, in particular, information product industries (such as the music, newspaper, book, and software industries) as well as

other information-intense industries such as financial services. In these industries, the power of consumers has grown relative to providers, prices have fallen, and overall profitability has been challenged. In other industries, especially manufacturing, e-commerce has not greatly changed relationships with buyers, but has changed relationships with suppliers. Increasingly, manufacturing firms in entire industries have banded together to aggregate purchases, create industry exchanges or marketplaces, and outsource industrial processes in order to obtain better prices from suppliers. Throughout this book, we document these changes in industry structure and market dynamics introduced by e-commerce.

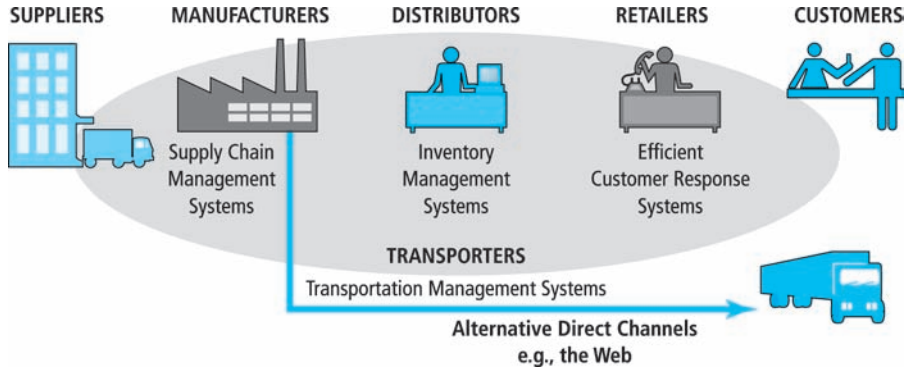
INDUSTRY VALUE CHAINS

value chain
the set of activities performed in an industry or in a firm that transforms raw inputs into final products and services

While an industry structural analysis helps you understand the impact of e-commerce technology on the overall business environment in an industry, a more detailed industry value chain analysis can help identify more precisely just how e-commerce may change business operations at the industry level. One of the basic tools for understanding the impact of information technology on industry and firm operations is the value chain. The concept is quite simple. A **value chain** is the set of activities performed in an industry or in a firm that transforms raw inputs into final products and services. Each of these activities adds economic value to the final product; hence, the term *value chain* as an interconnected set of value-adding activities. **Figure 2.5** illustrates the six generic players in an industry value chain: suppliers, manufacturers, transporters, distributors, retailers, and customers.

By reducing the cost of information, e-commerce offers each of the key players in an industry value chain new opportunities to maximize their positions by lowering costs and/or raising prices. For instance, manufacturers can reduce the costs they pay for goods by developing Internet-based B2B exchanges with their

FIGURE 2.5 E-COMMERCE AND INDUSTRY VALUE CHAINS



Every industry can be characterized by a set of value-adding activities performed by a variety of actors. E-commerce potentially affects the capabilities of each player as well as the overall operational efficiency of the industry.

suppliers. Manufacturers can develop direct relationships with their customers, bypassing the costs of distributors and retailers. Distributors can develop highly efficient inventory management systems to reduce their costs, and retailers can develop highly efficient customer relationship management systems to strengthen their service to customers. Customers in turn can search for the best quality, fastest delivery, and lowest prices, thereby lowering their transaction costs and reducing prices they pay for final goods. Finally, the operational efficiency of the entire industry can increase, lowering prices and adding value for consumers, and helping the industry to compete with alternative industries.

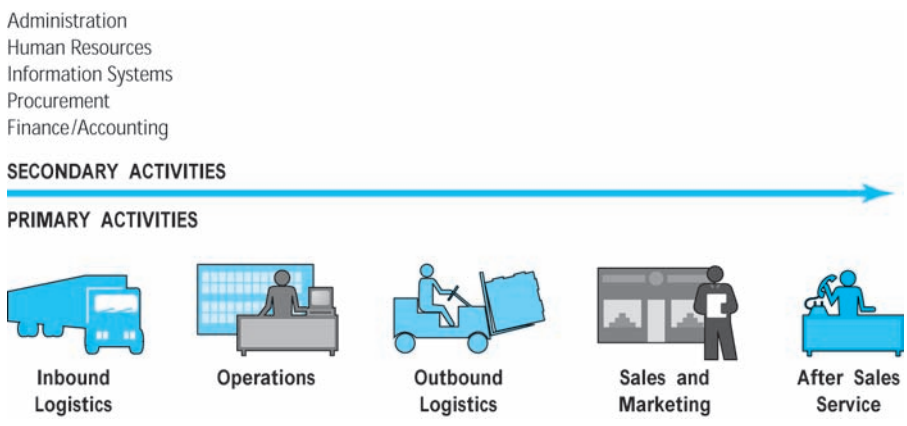
FIRM VALUE CHAINS

The concept of value chain can be used to analyze a single firm's operational efficiency as well. The question here is: How does e-commerce technology potentially affect the value chains of firms within an industry? A **firm value chain** is the set of activities a firm engages in to create final products from raw inputs. Each step in the process of production adds value to the final product. In addition, firms develop support activities that coordinate the production process and contribute to overall operational efficiency. **Figure 2.6** illustrates the key steps and support activities in a firm's value chain.

firm value chain
the set of activities a firm engages in to create final products from raw inputs

E-commerce offers firms many opportunities to increase their operational efficiency and differentiate their products. For instance, firms can use the Internet's communications efficiency to outsource some primary and secondary activities to specialized, more efficient providers without such outsourcing being visible to the consumer. In addition, firms can use e-commerce to more precisely coordinate the steps in the value chains and reduce their costs. Finally, firms can use e-commerce to provide users with more differentiated and high-value products. For instance, Amazon

FIGURE 2.6 E-COMMERCE AND FIRM VALUE CHAINS



Every firm can be characterized by a set of value-adding primary and secondary activities performed by a variety of actors in the firm. A simple firm value chain performs five primary value-adding steps: inbound logistics, operations, outbound logistics, sales and marketing, and after sales service.

provides consumers with a much larger inventory of books to choose from, at a lower cost, than traditional book stores. It also provides many services—such as instantly available professional and consumer reviews, and information on buying patterns of other consumers—that traditional bookstores cannot.

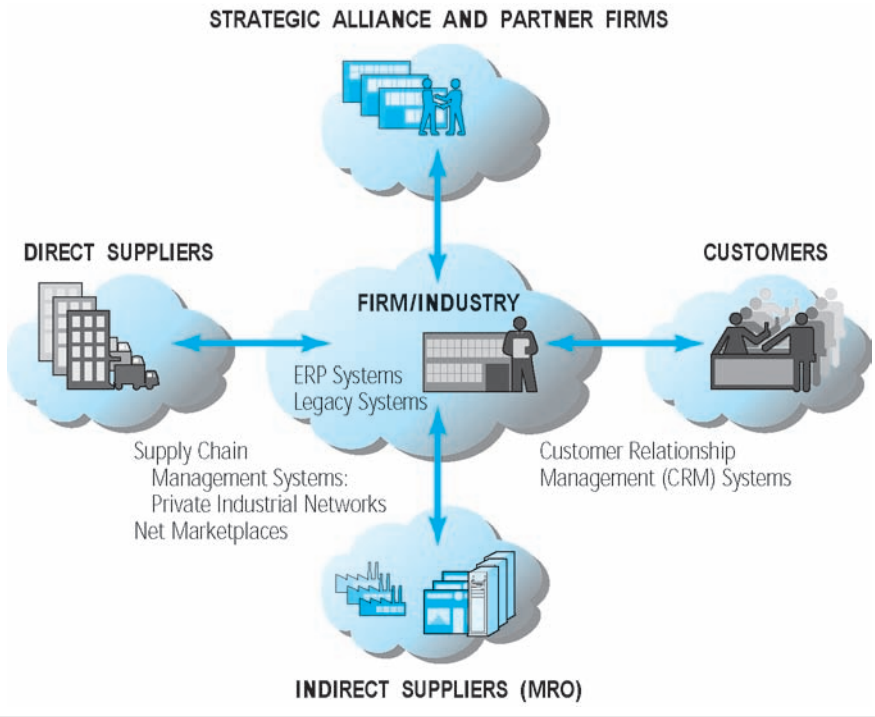
FIRM VALUE WEBS

value web
networked business ecosystem that coordinates the value chains of several firms

While firms produce value through their value chains, they also rely on the value chains of their partners—their suppliers, distributors, and delivery firms. E-commerce creates new opportunities for firms to cooperate and create a value web. A **value web** is a networked business ecosystem that uses e-commerce technology to coordinate the value chains of business partners within an industry, or at the first level, to coordinate the value chains of a group of firms. **Figure 2.7** illustrates a value web.

A value web coordinates a firm's suppliers with its own production needs using an Internet-based supply chain management system. We discuss these B2B systems in Chapter 12. Firms also use the Internet to develop close relationships with their logistics partners. For instance, Amazon relies on UPS tracking systems to provide its

FIGURE 2.7 INTERNET-ENABLED VALUE WEB



Internet technology enables firms to create an enhanced value web in cooperation with their strategic alliance and partner firms, customers, and direct and indirect suppliers.

customers with online package tracking, and it relies on the U.S. Postal Service systems to insert packages directly into the mail stream. Amazon has partnership relations with hundreds of firms to generate customers and to manage relationships with customers. In fact, when you examine Amazon closely, you realize that the value it delivers to customers is in large part the result of coordination with other firms and not simply the result of activities internal to Amazon. The value of Amazon is, in large part, the value delivered by its value web partners. This is difficult for other firms to imitate in the short run.

BUSINESS STRATEGY

A **business strategy** is a set of plans for achieving superior long-term returns on the capital invested in a business firm. A business strategy is therefore a plan for making profits in a competitive environment over the long term. **Profit** is simply the difference between the price a firm is able to charge for its products and the cost of producing and distributing goods. Profit represents economic value. Economic value is created anytime customers are willing to pay more for a product than it costs to produce. Why would anyone pay more for a product than it costs to produce? There are multiple answers. The product may be unique (there are no other suppliers), it may be the least costly product of its type available, consumers may be able to purchase the product anywhere in the world, or it may satisfy some unique needs that other products do not. Each of these sources of economic value defines a firm's strategy for positioning its products in the marketplace. There are four generic strategies for achieving a profitable business: differentiation, cost, scope, and focus. We describe each of these below. The specific strategies that a firm follows will depend on the product, the industry, and the marketplace where competition is encountered.

business strategy
a set of plans for achieving superior long-term returns on the capital invested in a business firm

profit
the difference between the price a firm is able to charge for its products and the cost of producing and distributing goods

Although the Internet is a unique marketplace, the same principles of strategy and business apply. As you will see throughout the book, successful e-commerce strategies involve using the Internet and mobile platform to leverage and strengthen existing business (rather than destroy your business), and to provide products and services your competitors cannot copy (in the short term anyway). That means developing unique products, proprietary content, distinguishing processes (such as Amazon's one-click shopping), and personalized or customized services and products (Porter, 2001). There are five generic business strategies: product/service differentiation, cost competition, scope, focus, and customer/supplier intimacy. Let's examine these ideas more closely.

Differentiation refers to all the ways producers can make their products or services unique and distinguish them from those of competitors. The opposite of differentiation is **commoditization**—a situation where there are no differences among products or services, and the only basis of choosing is price. As economists tell us, when price alone becomes the basis of competition and there are many suppliers and many customers, eventually the price of the good/service falls to the cost to produce

differentiation
refers to all the ways producers can make their products or services unique and different to distinguish them from those of competitors

commoditization
a situation where there are no differences among products or services, and the only basis of choosing is price

it (marginal revenues from the nth unit equal marginal costs). And then profits are zero! This is an unacceptable situation for any business person. The solution is to differentiate your product or service and to create a monopoly-like situation where you are the only supplier.

There are many ways businesses differentiate their products or services. A business may start with a core generic product or service, but then create expectations among users about the "experience" of consuming the product or using the service—"Nothing refreshes like a Coke!" or "Nothing equals the experience of driving a BMW." Businesses may also augment products and services by adding features to make them different from those of competitors. And businesses can differentiate their products and services further by enhancing their abilities to solve related consumer problems. For instance, tax programs such as TurboTax can import data from spreadsheet programs, as well as be used to electronically file tax returns. These capabilities are enhancements to the product that solve a customer's problems. The purpose of marketing is to create these differentiation features and to make the consumer aware of the unique qualities of products and services, creating in the process a "brand" that stands for these features. We discuss marketing and branding in Chapters 6 and 7.

In their totality, the differentiation features of a product or service constitute the customer value proposition we described in earlier sections of this chapter. E-commerce offers some unique ways to differentiate products and services, such as the ability to personalize the shopping experience and to customize the product or service to the particular demands of each consumer. E-commerce businesses can also differentiate products and services by making it possible to purchase the product from home, work, or on the road (ubiquity); by making it possible to purchase anywhere in the world (global reach); by creating unique interactive content, videos, stories about users, and reviews by users (richness and interactivity); and by storing and processing information for consumers of the product or service, such as warranty information on all products purchased through a site or income tax information online (information density).

strategy of cost competition
offering products and services at a lower cost than competitors

Adopting a **strategy of cost competition** means a business has discovered some unique set of business processes or resources that other firms cannot obtain in the marketplace. Business processes are the atomic units of the value chain. For instance, the set of value-creating activities called Inbound Logistics in Figure 2.6 is in reality composed of many different collections of activities performed by people on the loading docks and in the warehouses. These different collections of activities are called *business processes*—the set of steps or procedures required to perform the various elements of the value chain.

When a firm discovers a new, more efficient set of business processes, it can obtain a cost advantage over competitors. Then it can attract customers by charging a lower price, while still making a handsome profit. Eventually, its competitors go out of business as the market decisively tilts toward the lowest-cost provider. Or, when a business discovers a unique resource, or lower-cost supplier, it can also compete effectively on cost. For instance, switching production to low-wage-cost areas of the world is one way to lower costs.

Competing on cost can be a short-lived affair and very tricky. Competitors can also discover the same or different efficiencies in production. And competitors can also move production to low-cost areas of the world. Also, competitors may decide to lose money for a period as they compete on cost.

E-commerce offers some ways to compete on cost, at least in the short term. Firms can leverage ubiquity by lowering the costs of order entry (the customer fills out all the forms, so there is no order entry department); leverage global reach and universal standards by having a single order entry system worldwide; and leverage richness, interactivity, and personalization by creating customer profiles online and treating each individual consumer differently—without the use of an expensive sales force that performed these functions in the past. Finally, firms can leverage information intensity by providing consumers with detailed information on products, without maintaining either expensive catalogs or a sales force.

While e-commerce offers powerful capabilities for intensifying cost competition, which makes cost competition appear to be a viable strategy, the danger is that competitors have access to the same technology. The *factor market*s—where producers buy supplies—are open to all. Assuming they have the skills and organizational will to use the technology, competitors can buy many of the same cost-reducing techniques in the marketplace. Even a skilled labor force can be purchased, ultimately. However, self-knowledge, proprietary tacit knowledge (knowledge that is not published or codified), and a loyal, skilled workforce are in the short term difficult to purchase in factor markets. Therefore, cost competition remains a viable strategy.

Two other generic business strategies are scope and focus. A **scope strategy** is a strategy to compete in all markets around the globe, rather than merely in local, regional, or national markets. The Internet's global reach, universal standards, and ubiquity can certainly be leveraged to assist businesses in becoming global competitors. Yahoo, for instance, along with all of the other top 20 e-commerce companies, has readily attained a global presence. A **focus/market niche strategy** is a strategy to compete within a narrow market segment or product segment. This is a specialization strategy with the goal of becoming the premier provider in a narrow market. For instance, L.L.Bean uses e-commerce to continue its historic focus on outdoor sports apparel; and W.W. Grainger—the Web's most frequently visited B2B site—focuses on the narrow MRO market segment. E-commerce offers some obvious capabilities that enable a focus strategy. Firms can leverage richness and interactivity to create highly focused messages to different market segments; information intensity makes it possible to focus e-mail and other marketing campaigns on small market segments; personalization—and related customization—means the same product can be customized and personalized to fulfill the very focused needs of specific market segments and consumers.

scope strategy
competing in all markets around the globe, rather than just local, regional, or national markets

focus/market niche strategy
competing within a narrow market or product segment

Another generic strategy is **customer intimacy**, which focuses on developing strong ties with customers. Strong linkages with customers increase *switching costs* (the costs of switching from one product or service to a competing product or service) and thereby enhance a firm's competitive advantage. For example, Amazon's one-click shopping that retains customer details and recommendation services based on

customer intimacy
focuses on developing strong ties with customers in order to increase switching costs

TABLE 2.7 BUSINESS STRATEGIES

STRATEGY	DESCRIPTION	EXAMPLE
Differentiation	Making products and services unique and different in order to distinguish them from those of competitors	Warby Parker (Vintage-inspired prescription eyeglasses)
Cost competition	Offering products and services at a lower cost than competitors	Walmart.com
Scope	Competing in all markets around the globe, rather than merely in local, regional, or national markets	Apple iDevices
Focus/market niche	Competing within a narrow market or product segment	Bonobos.com (Men's clothing)
Customer intimacy	Developing strong ties with customers	Amazon; Netflix

previous purchases makes it more likely that customers will return to make subsequent purchases.

Table 2.7 summarizes the five basic business strategies.

Industry structure, industry and firm value chains, value webs, and business strategy are central business concepts used throughout this book to analyze the viability of and prospects for e-commerce sites. In particular, the signature case studies found at the end of each chapter are followed by questions that may ask you to identify the competitive forces in the case, or analyze how the case illustrates changes in industry structure, industry and firm value chains, and business strategy.

2.6 CASE STUDY

Pandora

and the Freemium Business Model

Pandora is the Internet's most successful subscription radio service. As of June 2013, it had over 200 million registered users (140 million of which access the service via a mobile device) and over 70 million active listeners. Pandora now accounts for more than 70% of all Internet radio listening hours and a 7% share of total U.S. radio listening (both traditional and Internet).

At Pandora, users select a genre of music based on a favorite musician, and a computer algorithm puts together a personal radio station that plays not only the music of the selected artist but also closely related music by different artists. A team of professional musicians listens to new songs each day and classifies the music according to more than 400 musical criteria including male or female vocal, electric vs. acoustical guitar, distortion of instruments, presence of background vocals, strings, and various other instruments. These criteria are used in a computer algorithm to classify new songs into five genres: Pop/Rock, Hip-Hop/Electronica, Jazz, World Music, and Classical. Within each of these genres are hundreds of sub-genres. Like Taylor Swift? Create a radio station on Pandora with Taylor Swift as the artist and you can listen all

© NetPhotos / Alamy

day not only to some Taylor Swift tracks but also to musically related artists such as Carrie Underwood, Rascal Flatts, Anna Nalick, and others.

Pandora's founders, Will Glaser and Tim Westergren, launched Pandora in 2005. Their biggest challenge was how to make a business out of a totally new kind of online radio station when competing online stations were making music available for free, many without advertising, and online subscription services were streaming music for a monthly fee and finding some advertising support as well. Online music illegally downloaded from P2P networks for free was also a significant factor, as was iTunes, which by 2005 was a roaring success, charging 99 cents a song with no ad support, and 20 million users at that time. The idea of a "personal" radio station playing your kind of music was very new.

Facing stiff odds, Pandora's first business model was to give away 10 hours of free access, and then ask subscribers to pay $36 a month for a year after they used up their free 10 hours. The result: 100,000 people listened to their 10 hours for free and then refused to use their credit cards to pay for the annual service. People loved Pandora but were unwilling to pay for it, or so it seemed in the early years.

Facing financial collapse, in November 2005 Pandora introduced an ad-supported option. Subscribers could listen to a maximum of 40 hours of music in a calendar month for free. After the 40 hours were used up, subscribers had three choices: (a) pay 99 cents for the rest of the month, (b) sign up for a premium service offering unlimited usage, or (c) do nothing. If they chose (c), the music would stop, but users could sign up again the next month. The ad-supported business model was a risky move because Pandora had no ad server or accounting system, but it attracted so many users that in a few weeks they had a sufficient number of advertisers (including Apple) to pay for their infrastructure. In 2006, Pandora added a "Buy" button to each song being played and struck deals with Amazon, iTunes, and other online retail sites. Pandora now gets an affiliate fee for directing listeners to Amazon where users can buy the music. In 2008, Pandora added an iPhone app to allow users to sign up from their smartphones and listen all day if they wanted. This added 35,000 new users a day. By 2009, this "free" ad-supported model had attracted 20 million users. All of Pandora's plans come with restrictions required by the music companies that own the music, including the inability to hear a song on demand, no replay, and a skip limit of six skips per hour per station. Also, the music cannot be used commercially or outside the United States. After struggling for years showing nothing but losses, threatened by the music companies who wanted to raise their Internet radio rates, Pandora finally had some breathing room.

Still not giving up on its premium service, in late 2009, the company launched Pandora One, a premium service that offered no advertising, higher quality streaming music, a desktop app, and fewer usage limits. The service cost $36 a year. By July 2010, Pandora had 600,000 subscribers to its premium service, about 1% of its then 60 million users. Pandora reported $55 million in annual revenue for 2009 and $137 million for 2010. Pandora's "new" business model proved so successful that it went public in June 2011. Revenues again doubled in 2011, to $274 million, and in 2012, to $427 million with about 88% ($375 million) coming from advertising and the

remainder from subscriptions and other sources. However, Pandora has not yet shown a profit, and does face competition from services such as Spotify, which also is using the freemium strategy.

Pandora is an example of the "freemium" business revenue model. The model is based on giving away some services for free to 99% of the customers, and relying on the other 1% of the customers to pay for premium versions of the same service. As Chris Anderson, author of *Free: The Future of a Radical Price,* has pointed out, since the marginal cost of digital products is typically close to zero, providing free product does not cost much, and potentially enables you to reach many more people, and if the market is very large, even getting just 1% of that market to purchase could be very lucrative. There are many other examples of successful freemium model companies. For many traditional print media like newspapers and magazines, the freemium model may be their path to survival. But it won't work for every online business.

While it clearly has worked for Pandora, there is ongoing debate among e-commerce CEOs and venture capitalists about the effectiveness of the freemium model. The crux of the issue is that while freemium can be an efficient way to gather a large group of potential customers, companies have found that it's a challenge to convert eyeballs into those willing to pay. Absent subscriber revenue, firms need to rely on advertising revenues.

MailChimp's story is both a success and a cautionary tale. The company lets anyone send e-mail newsletters to customers, manage subscriber lists, and track the performance of an e-mail marketing campaign. Despite the powerful tools it gives marketers, and its open applications programming interface, after 10 years in business, the company had only 85,000 paid subscribers.

In 2009, CEO Ben Chestnut decided that it was time to implement new strategies to attract additional customers. MailChimp began giving away its basic tools and charging subscription fees for special features. The concept was that as those customers' e-mail lists grew, they would continue using MailChimp and be willing to pay for enhanced services. These services included more than just the ability to send e-mails to a greater number of people. Clients would pay to use sophisticated analytics to help them target their e-marketing campaigns more efficiently and effectively.

In just over a year, MailChimp went from 85,000 to 450,000 users. E-mail volume went from 200 million a month to around 700 million. Most importantly, the number of paying customers increased more than 150%, while profit increased more than 650%! Sounds great, but there was also a price to pay. Although the company also saw a significant increase in abuse of its system, they developed an algorithm that has helped them to find and eliminate spammers using their service.

For MailChimp, freemium has been worth the price. It currently supports more than 3 million subscribers worldwide, sending 35 billion e-mails a year. However, Ning, a company that enables users to create their own social networks, tried freemium and came to a different conclusion. They abandoned it in July 2010.

Marc Andreessen, co-author of Mosaic, the first Web browser, and founder of Netscape, launched Ning in 2004. With his assistance, the company has raised $119 million in funding. Despite being the market's leading social network infrastructure

platform, Ning was having a common problem—converting eyeballs into paying customers. While 13% of customers were paying for some premium services, the revenue was not enough. The more free users Ning acquired, the more it cost the company.

In May 2010, Ning announced the impending end of the freemium model. The company shed staff, going from 167 to 98, and began using 100% of its resources to capture premium users. Since shifting to a three-tier paid subscription model, Ning has experienced explosive growth, increasing the number of paying customers from 17,000 to more than 100,000 and growing revenue by more than 500%. By September 2011, Ning had more than 100 million registered user social profiles and its social networks reached more than 60 million monthly unique users. In December 2011, Ning was acquired by Glam Media, a leading social media company, for $200 million. In March 2013, Glam relaunched Ning as a personal blogging platform for brands and individuals to bring all of their social media followers together in one place. This version of Ning will attempt to intertwine content publishing with community. Glam intends to charge users a fee, rather than returning to a free or freemium strategy.

So when does it make sense to include freemium in a business plan? It makes sense when the product is easy to use and has a very large potential audience, preferably in the millions. A solid customer value proposition is critical. It's helpful if a large user network increases the perceived value of the product (i.e., a dating service). Freemium may work when a company has good long-term customer retention rates and the product produces more value over time. An extremely important part of the equation is that the variable costs of providing the product or service to additional customers for free must be low.

For example, Evernote, a personal note-taking service, added freemium to its business model and has since grown its user base to over 65 million, adding about 100,000 users a day. The company has over 1.4 million paying users. Evernote reportedly has a conversion rate of about 3.7%, which is considered to be quite high in the freemium business world. Evernote has also discovered that the longer a subscriber remains an active user, the more likely he or she is to convert to a premium subscription. For instance, 12% of those who continue to use Evernote for at least two years become premium subscribers. Evernote currently is taking in about $75–$80 million in revenues and has raised over $250 million in funding, the most recent round of which has valued the company at $1 billion, clear proof that the freemium model can add tremendous value.

Companies also face challenges in terms of what products and/or services to offer for free versus what to charge for (this may change over time), the cost of supporting free customers, and how to price premium services. Further, it is difficult to predict attrition rates, which are highly variable at companies using freemium. So, while freemium can be a great way to get early users and to provide a company with a built-in pool for upgrades, it's tough to determine how many users will be willing to pay and willing to stay.

A freemium strategy makes sense for companies such as Pandora, where there is a very low marginal cost, approaching zero, to support free users. It also makes sense for a company where the value to its potential customers depends on a large network, like

SOURCES: "Pandora Announces June 2013 Audience Metrics," July 9, 2013; "Happy 5th Birthday, Evernote!," by Seth Fiegerman, Mashable.com, June 27, 2013; Pandora Media, Inc., Quarterly Report on Form 10-Q, May 29, 2013; "How MailChimp Learned to Treat Data Like Orange Juice and Rethink the Email in the Process," by Derrick Harris, Gigaom.com, May 5, 2013; "Pandora Now Has 200 Million Registered Users," by Seth Fiegerman, Mashable.com, April 9, 2013; "Evernote's Capital-Intensive Freemium Model Works," by Sraman Mitra, Sramanamitra.com, April 9, 2013; "Remember Ning? Once-buzzy Social Network Has Relaunched Again as a Publishing Platform," by Eliza Kern, Gigaom.com, March 25, 2013; "As Evernote's Cult Grows, the Business Market Beckons," by Rob Walker, Businessweek.com, February 28, 2013; "When Freemium Fails," by Sarah E. Needleman and Angus Loten, *Wall Street Journal*, August 22, 2012; "An Interview with Phil Libin (Evernote)," Doeswhat.com, February 25, 2012; "Glam Media Completes Ning Acquisition," press release, December 5, 2011; "Pandora IPO Prices at $16; Valuation $2.6 Billion," by Eric Savitz, Blogs.forbes.com, June 14, 2011; "Social-Networking Site Ning: Charging Users Works for Us," by Jennifer Valentino-DeVries, *Wall Street Journal,* April 13, 2011; "Explainer: What Is the Freemium Business Model," by Pascal-Emmanuel Gobry, *San Francisco Chronicle,* April 8, 2011; "Shattering Myths About 'Freemium' Services: Mobility is Key," by Martin Scott, *WirelessWeek*, April 7, 2011; "Going Freemium: One Year Later," by Ben Chestnut, Blog.mailchimp.com, September 27, 2010; "How To Avoid The Traps and Make a 'Freemium' Business Model Pay," Anna Johnson, Kikabink.com, June 14th, 2010; "6 Ways for Online Business Directories to Convert More Freemium to Premium," BusinessWeek.com, April 14, 2010; "Case Studies in Freemium: Pandora, Dropbox, Evernote, Automattic and MailChimp," by Liz Gannes, Gigacom.com, Mar. 26, 2010; *Free: The Future of a Radical Price*, by Chris Anderson, Hyperion, 2009.

Facebook. Freemium also works when a business can be supported by the percentage of customers who are willing to pay, like Evernote and Pandora, especially when there are other revenues like affiliate and advertising fees that can make up for shortfalls in subscriber revenues. Freemium has also become the standard model for most apps, with over 75% of the top 100 apps in Apple's app store using a freemium strategy.

Case Study Questions

1. Compare Pandora's original business model with its current business model. What's the difference between "free" and "freemium" revenue models?
2. What is the customer value proposition that Pandora offers?
3. Why did MailChimp ultimately succeed with a freemium model but Ning did not?
4. What's the most important consideration when considering a freemium revenue model?

2.7 REVIEW

KEY CONCEPTS

■ Identify the key components of e-commerce business models.

A successful business model effectively addresses eight key elements:

- *Value proposition*—how a company's product or service fulfills the needs of customers. Typical e-commerce value propositions include personalization, customization, convenience, and reduction of product search and price delivery costs.
- *Revenue model*—how the company plans to make money from its operations. Major e-commerce revenue models include the advertising model, subscription model, transaction fee model, sales model, and affiliate model.
- *Market opportunity*—the revenue potential within a company's intended marketspace.
- *Competitive environment*—the direct and indirect competitors doing business in the same marketspace, including how many there are and how profitable they are.
- *Competitive advantage*—the factors that differentiate the business from its competition, enabling it to provide a superior product at a lower cost.
- *Market strategy*—the plan a company develops that outlines how it will enter a market and attract customers.
- *Organizational development*—the process of defining all the functions within a business and the skills necessary to perform each job, as well as the process of recruiting and hiring strong employees.
- *Management team*—the group of individuals retained to guide the company's growth and expansion.

■ Describe the major B2C business models.

There are a number of different business models being used in the B2C e-commerce arena. The major models include the following:

- *Portal*—offers powerful search tools plus an integrated package of content and services; typically utilizes a combined subscription/advertising revenue/transaction fee model; may be general or specialized (vortal).
- *E-tailer*—online version of traditional retailer; includes virtual merchants (online retail store only), bricks-and-clicks e-tailers (online distribution channel for a company that also has physical stores), catalog merchants (online version of direct mail catalog), and manufacturers selling directly to the consumer.
- *Content provider*—information and entertainment companies that provide digital content; typically utilizes an advertising, subscription, or affiliate referral fee revenue model.
- *Transaction broker*—processes online sales transactions; typically utilizes a transaction fee revenue model.
- *Market creator*—uses Internet technology to create markets that bring buyers and sellers together; typically utilizes a transaction fee revenue model.
- *Service provider*—offers services online.
- *Community provider*—provides an online community of like-minded individuals for networking and information sharing; revenue is generated by advertising, referral fees, and subscriptions.

■ Describe the major B2B business models.

The major business models used to date in the B2B arena include:

- *E-distributor*—supplies products directly to individual businesses.
- *E-procurement*—single firms create digital markets for thousands of sellers and buyers.
- *Exchange*—independently owned digital marketplace for direct inputs, usually for a vertical industry group.
- *Industry consortium*—industry-owned vertical digital market.
- *Private industrial network*—industry-owned private industrial network that coordinates supply chains with a limited set of partners.

■ Understand key business concepts and strategies applicable to e-commerce.

E-commerce has had a major impact on the business environment in the last decade, and have affected:

- *Industry structure*—the nature of players in an industry and their relative bargaining power by changing the basis of competition among rivals, the barriers to entry, the threat of new substitute products, the strength of suppliers, and the bargaining power of buyers.
- *Industry value chains*—the set of activities performed in an industry by suppliers, manufacturers, transporters, distributors, and retailers that transforms raw inputs into final products and services by reducing the cost of information and other transaction costs.
- *Firm value chains*—the set of activities performed within an individual firm to create final products from raw inputs by increasing operational efficiency.

- *Business strategy*—a set of plans for achieving superior long-term returns on the capital invested in a firm by offering unique ways to differentiate products, obtain cost advantages, compete globally, or compete in a narrow market or product segment.

QUESTIONS

1. What is a business model? How does it differ from a business plan?
2. What are the eight key components of an effective business model?
3. What are Amazon's primary customer value propositions?
4. Describe the five primary revenue models used by e-commerce firms.
5. Why is targeting a market niche generally smarter for a community provider than targeting a large market segment?
6. Would you say that Amazon and eBay are direct or indirect competitors? (You may have to visit the Web sites to answer.)
7. What are some of the specific ways that a company can obtain a competitive advantage?
8. Besides advertising and product sampling, what are some other market strategies a company might pursue?
9. How do venture capitalists differ from angel investors?
10. Why is it difficult to categorize e-commerce business models?
11. Besides the examples given in the chapter, what are some other examples of vertical and horizontal portals in existence today?
12. What are the major differences between virtual storefronts, such as Drugstore.com, and bricks-and-clicks operations, such as Walmart.com? What are the advantages and disadvantages of each?
13. Besides news and articles, what other forms of information or content do content providers offer?
14. What is a reverse auction? What company is an example of this type of business?
15. What are the key success factors for exchanges? How are they different from portals?
16. How have the unique features of e-commerce technology changed industry structure in the travel business?
17. Who are the major players in an industry value chain and how are they impacted by e-commerce technology?
18. What are four generic business strategies for achieving a profitable business?
19. What is the difference between a market opportunity and a marketspace?

PROJECTS

1. Select an e-commerce company. Visit its Web site and describe its business model based on the information you find there. Identify its customer value proposition, its revenue model, the marketspace it operates in, who its main competitors are, any comparative advantages you believe the company possesses, and what its market strategy appears to be. Also try to locate

information about the company's management team and organizational structure. (Check for a page labeled "the Company," "About Us," or something similar.)

2. Examine the experience of shopping on the Web versus shopping in a traditional environment. Imagine that you have decided to purchase a digital camera (or any other item of your choosing). First, shop for the camera in a traditional manner. Describe how you would do so (for example, how you would gather the necessary information you would need to choose a particular item, what stores you would visit, how long it would take, prices, etc.). Next, shop for the item on the Web. Compare and contrast your experiences. What were the advantages and disadvantages of each? Which did you prefer and why?

3. Visit eBay and look at the many types of auctions available. If you were considering establishing a rival specialized online auction business, what are the top three market opportunities you would pursue, based on the goods and auction community in evidence at eBay? Prepare a report or electronic slide presentation to support your analysis and approach.

4. During the early days of e-commerce, first-mover advantage was touted as one way to success. On the other hand, some suggest that being a market follower can yield rewards as well. Which approach has proven to be more successful—first mover or follower? Choose two e-commerce companies that prove your point, and prepare a brief presentation to explain your analysis and position.

5. Prepare a research report (3 to 5 pages) on the current and potential future impacts of e-commerce technology, including mobile devices, on the book publishing industry.

6. Select a B2C e-commerce retail industry segment such as pet products, online gaming, or gift baskets, and analyze its value chain and industry value chain. Prepare a short presentation that identifies the major industry participants in that business and illustrates the move from raw materials to finished product.

7. The ringtone industry is a profitable segment of the music industry. Research the ringtone industry in terms of industry structure, value chains, and competitive environment. Is there room in this industry for another competitor, and if so, what kind of business model and market strategy would it follow?