

The background features a dense, light blue collage of various icons representing digital communication and technology. These include speech bubbles, gears, musical notes, person silhouettes, location pins, Wi-Fi symbols, thumbs up/down, and email icons. The overall theme is connectivity and digital interaction.

9 E-Commerce, Social Networking, and Web 2.0

Running Case

Carrie's personality and professional nature have helped her create a good customer base for her business. She gets her fair share of one-of-a-kind events but has focused her efforts on customers who provide her with repeat business, such as schools, sports clubs, and annual charity events.

To grow her company further, Carrie is realizing she must find ways for her to expand past her traditional customer base. To do this, she is turning her attention toward social media and the Internet. She has already developed a company website, which has some basic information about her company. She is able to show off a range of her designs and has found the website to be a useful tool for discussing options with clients. Although it has been useful, the website, of itself, has not generally created too much customer interest. Carrie often has to point people to the website, and some people have had a hard time even finding the site.

Carrie recognizes that the search engines could do more work for her if she were able to get closer to the top of the most frequent searches. She is not sure how to do that. She has thought about using targeted content directories, such as T-ShirtCountdown.com and americantshirtnetwork.com, to attract more attention to some of her own designs. However, she is worried that moving in a direction that caters to selling for a larger consumer market might dilute her "repeat customers" strategy.

A stylized illustration of a man with short dark hair and a goatee. He is wearing a bright red zip-up jacket over a grey t-shirt and dark blue jeans. He is holding a white smartphone in his right hand, looking directly at the viewer with a neutral expression.

To grow her company further, Carrie is realizing she must find ways for her to expand past her traditional customer base. To do this, she is turning her attention toward social media and the Internet. She has already developed a company website, which has some basic information about her company. She is able to show off a range of her designs and has found the website to be a useful tool for discussing options with clients. Although it has been useful, the website, of itself, has not generally created too much customer interest. Carrie often has to point people to the website, and some people have had a hard time even finding the site.

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Carrie is often on Facebook and Twitter and enjoys using these sites. She has been frustrated with her attempts at finding out how to use these sites to the advantage of her company. She does see the power of social networking, but it seems like there is already too much traffic and it is hard to get heard above all the noise. The most successful things she has seen have evolved around celebrities. If she could get some celebrities to wear her t-shirts, social media would be a great way to sell t-shirts. But how could she do that?

One place that Carrie should start investigating is Web 2.0. Carrie should realize that more and more of her work for the company can be done through her website. She should be considering integrating her invoicing, customer relationship, supplier relationship, and order status on her website. This would allow her to have all the information she needs at her fingertips and enable her to focus more attention on selling (rather than on administration). In this chapter, we will look at how Web 2.0 and social media are changing the way small and large organizations are doing business.



Study Questions

- Q1** What is E-Commerce, and how is it used?
- Q2** What is social networking, and how is it enabled and affected by IS/IT?
- Q3** What is Web 2.0?
- Q4** Is there a Web 3.0?

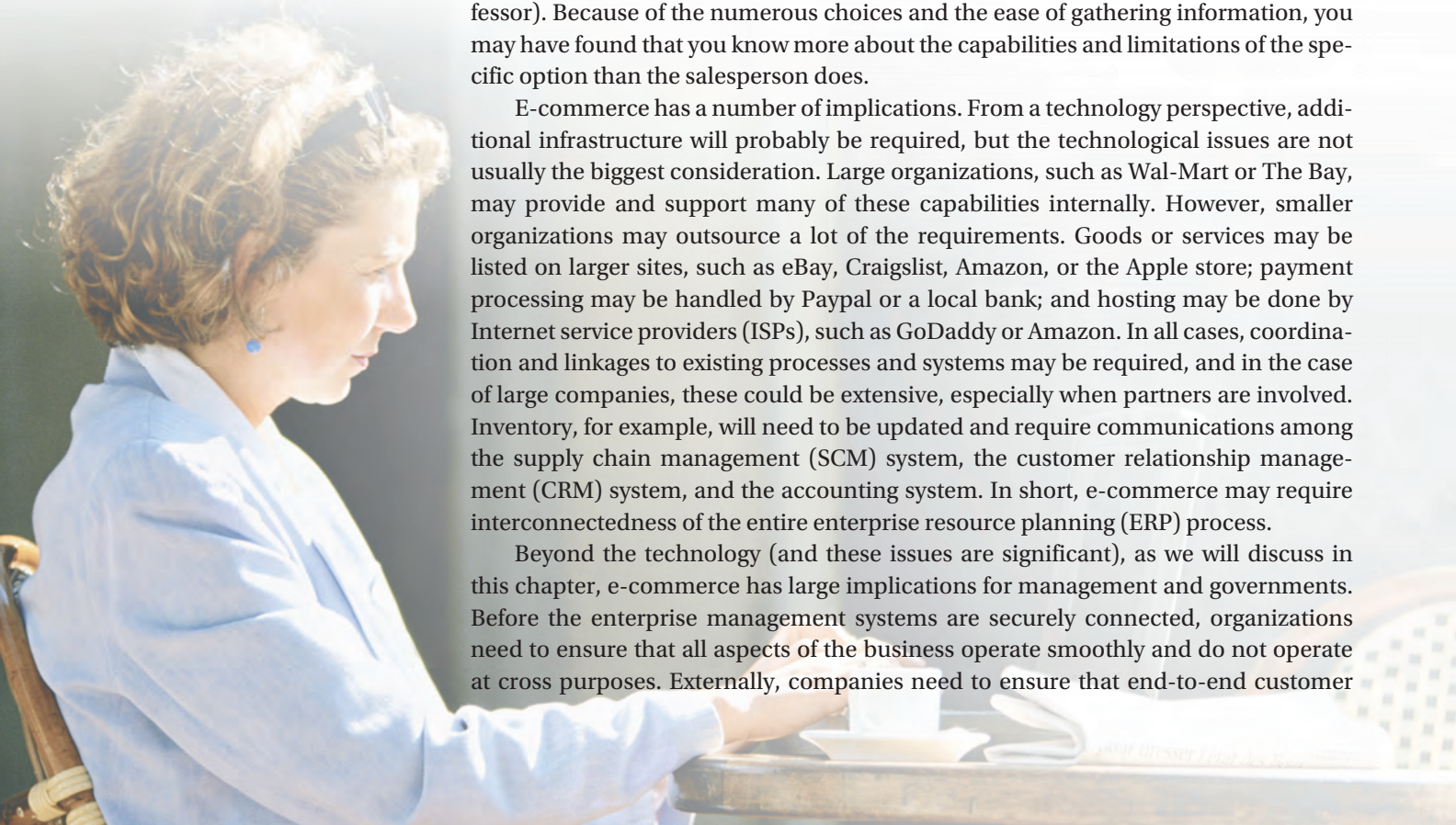
Q1 What Is E-Commerce, and How Is It Used?

An exact definition of E-commerce is a lot harder than you might think. In this text, we define **e-commerce** as the buying and selling of goods and services over public and private computer networks. However, if you examine this definition closely, you may see that it is not as clear as it might appear. Note, for example, that this definition restricts e-commerce to buying and selling transactions. Checking the weather at yahoo.ca is not e-commerce, but buying a weather service subscription that is paid for and delivered over the Internet is. Similarly, researching and buying a good or service, such as a computer from Dell or OnStar from GM, qualifies as e-commerce, but researching a product over the Internet and purchasing it in a traditional retail store would not, even though these activities clearly contribute to the purchase decision. E-commerce is a subset of the broader definition of electronic business, which is usually described as everything having to do with the application of information and communication technologies to the conduct of business between organizations, company to consumer, or consumer to consumer.

This is an important distinction to keep in mind because the majority of commerce may have historically been done in person and information gathered directly from the sales force (e.g., the way that your parents may have purchased a new car), but modern consumers are less and less likely to use a single information channel and often know more about a product or service compared with the person who is actually facilitating the sale. Think about a recent large purchase that you may have made, for example, a new computer. It is possible that you simply walked into Futureshop or Best Buy to buy it or bought it online from Dell.ca, but it is much more likely that you first researched your options online and talked to your friends. You may even have gone into one store to familiarize yourself with the physical device, although you intended to buy it elsewhere. Depending on the specific purchase, it is also possible that you used a referral website, such as Yelp (or, when choosing classes, ratemyprofessor). Because of the numerous choices and the ease of gathering information, you may have found that you know more about the capabilities and limitations of the specific option than the salesperson does.

E-commerce has a number of implications. From a technology perspective, additional infrastructure will probably be required, but the technological issues are not usually the biggest consideration. Large organizations, such as Wal-Mart or The Bay, may provide and support many of these capabilities internally. However, smaller organizations may outsource a lot of the requirements. Goods or services may be listed on larger sites, such as eBay, Craigslist, Amazon, or the Apple store; payment processing may be handled by Paypal or a local bank; and hosting may be done by Internet service providers (ISPs), such as GoDaddy or Amazon. In all cases, coordination and linkages to existing processes and systems may be required, and in the case of large companies, these could be extensive, especially when partners are involved. Inventory, for example, will need to be updated and require communications among the supply chain management (SCM) system, the customer relationship management (CRM) system, and the accounting system. In short, e-commerce may require interconnectedness of the entire enterprise resource planning (ERP) process.

Beyond the technology (and these issues are significant), as we will discuss in this chapter, e-commerce has large implications for management and governments. Before the enterprise management systems are securely connected, organizations need to ensure that all aspects of the business operate smoothly and do not operate at cross purposes. Externally, companies need to ensure that end-to-end customer



Merchant companies	Nonmerchant companies
<ul style="list-style-type: none"> – Business-to-consumer (B2C) – Business-to-business (B2B) – Business-to-government (B2G) 	<ul style="list-style-type: none"> – Auctions – Clearinghouses – Exchanges

Figure 9-1

E-Commerce Categories

security is enabled and that the information is only shared appropriately and with customer permission.

Although the definition of e-commerce is not as broad as the definition of e-business, there are many varieties. These are listed in Figure 9-1.

Merchant companies are defined as those that take title to the goods they sell: They buy goods and resell them. **Nonmerchant companies** are those that arrange for the purchase and sale of goods without ever owning or taking title to those goods. Merchant companies sell services that they provide; nonmerchant companies sell services provided by others. We will consider merchants and nonmerchants separately in the following sections.

E-Commerce Merchant Companies

There are three main types of merchant companies: (1) those that sell directly to consumers, (2) those that sell to companies, and (3) those that sell to government. Each uses slightly different information systems in the course of doing business. **Business-to-consumer (B2C)** e-commerce concerns sales between a supplier and a retail customer (the consumer). A typical information system for B2C provides a web-based application or **web storefront** by which customers enter and manage their orders.

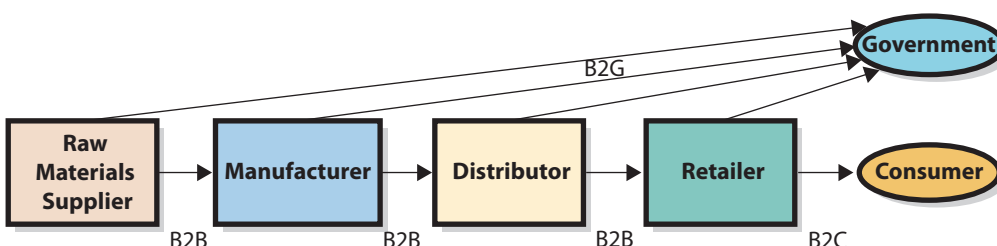
The term **business-to-business (B2B)** e-commerce refers to sales between companies. As Figure 7-2 shows, raw materials suppliers use B2B systems to sell to manufacturers, manufacturers use B2B systems to sell to distributors, and distributors use B2B systems to sell to retailers.

Business-to-government (B2G) e-commerce refers to sales between companies and governmental organizations. As Figure 9-2 shows, a manufacturer that uses an e-commerce site to sell computer hardware to a government ministry is engaging in B2G commerce. Suppliers, distributors, and retailers can sell to government as well.

B2C applications first captured the attention of mail-order and related businesses. However, companies in all sectors of the economy soon realized the enormous potential of B2B and B2G e-commerce. The number of companies engaged in B2B and B2G commerce now far exceeds those engaging in B2C commerce. For example, consider Dell Computer. Although the basis for buying computers has changed and other competitors have replicated aspects, Dell has structured its website in such a way that almost anyone can configure and order a computer online. The site guides home users, novice business users, and expert users (from business and government) into different parts of the site that provide different experiences. Home users, for example, may be offered computer packages with easy-to-understand options. Business or government experts, who are more likely to be buying high-performance

Figure 9-2

Example of Use of B2B, B2G, and B2C



server computers, could be offered a larger and more complex array of options and choices. Dell's site offers extensive support, with definitions and explanations, all online. In this way, Dell has almost completely automated ordering and has dramatically reduced the cost of processing an order. The system is consistent with Dell's competitive strategy, which is to provide the computers to its customers at the lowest possible cost.

Today's B2B and B2G e-commerce applications implement just a small portion of their potential capabilities. Their full utilization is some years away. Although most experts agree that these applications involve some sort of integration of CRM and supplier relationship management (SRM) systems, the nature of that integration is not well understood, as it is still being developed. Consequently, you can expect further progress and development in B2B and B2G applications during your career.

Nonmerchant E-Commerce

The most common nonmerchant e-commerce companies are auctions (such as eBay) and clearinghouses. **E-commerce auctions** match buyers and sellers by using an e-commerce version of a standard auction. This e-commerce application enables the auction company to offer goods for sale and to support a competitive-bidding process. The best-known auction company is eBay, but many other auction companies exist; many serve particular industries. One of the world's largest industrial auctioneers, Ritchie Bros. (www.rbauktion.com), based in Richmond, British Columbia, uses the Web to hold virtual auctions that allow bidders from across the world to take part in industrial equipment auctions without having to physically attend an event.

Clearinghouses provide goods and services at a stated price and arrange for the delivery of the goods, but they never take title. One division of Amazon.ca, for example, operates as a nonmerchant clearinghouse and sells books owned by others. As a clearinghouse, Amazon.ca matches the seller and the buyer and then takes payment from the buyer and transfers the payment to the seller, minus a commission.

Other examples of clearinghouse businesses are **electronic exchanges** that match buyers and sellers; the business process is similar to that of a stock exchange. Sellers offer goods at a given price through the electronic exchange, and buyers make offers to purchase over the same exchange. Price matches result in transactions from which the exchange takes a commission. Priceline.com is an example of an electronic exchange used by consumers.

Benefits of E-Commerce

The debate continues among business observers as to whether e-commerce is something new or if it is just a technology extension of existing business practice. During the dot-com heydays in 1999–2000, some claimed that e-commerce was ushering in a new era and a “new economy.” Although experts differ as to whether a “new economy” was created, all agree that e-commerce does lead to greater market efficiency.

One effect frequently associated with e-commerce is **disintermediation**—the removal of intermediaries between parties. As e-commerce first started to become popular, it was widely believed that some of the agents in the distribution process would be eliminated. This is illustrated by the hypothetical transactions on the left side of Figure 9-3. In this example, a manufacturer produces a good for \$1.25, and it sells it to the wholesaler for \$3. The wholesaler then sells it to the distributor for \$5, who, in turn, sells it to the retailer for \$12. The retailer is free to set the final price that is paid by the end consumer. The right side of Figure 9-3 shows the elimination of the intervening layers between manufacturers and end consumers facilitated by direct website sales.

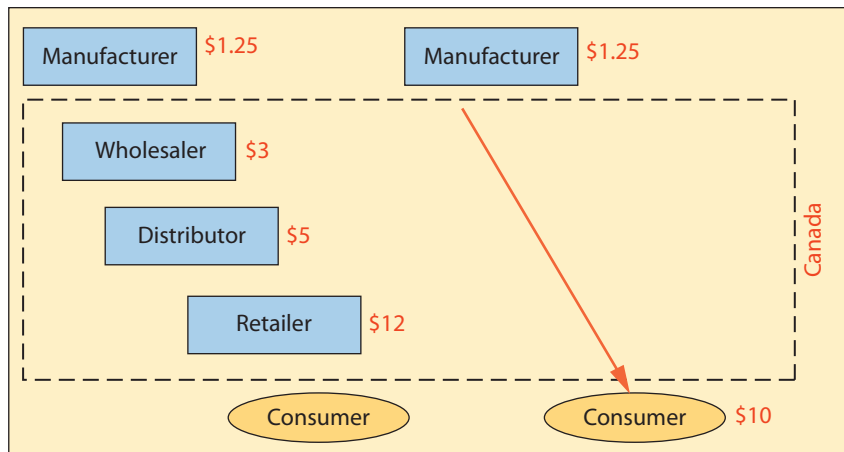


Figure 9-3

The general results of disintermediation are higher revenues for manufacturers and lower consumer prices, but the broader implications are more significant because much of the Canadian economy involves distribution. If Canadian consumers buy from Amazon.com, rather than from local retailers, large amounts of the Canadian economy could be eliminated. However, for a variety of reasons, the good news is that consumers have generally benefited from e-commerce, but the net effect has not been quite as negative as initially imagined. In many cases, manufacturers have found it much more difficult to eliminate intermediaries, and although distribution channels have become much more efficient, new players have inserted themselves into the sales and distribution processes (not surprisingly, this process is called *intermediation* or sometimes *re-intermediation*). Apple, for example, has become a significant actor in the retail of music and media. Often, rather than buying directly from airlines and hotels, many consumers prefer to use websites, such as Travelocity, Expedia, and Priceline, to find low-cost airline tickets and accommodation.

E-commerce also improves the flow of price information. As a consumer, you can go to any number of websites that offer product price comparisons. You can search for information on the high-definition television (HDTV) you want and sort the results by price and vendor reputation. You can find vendors that waive or reduce shipping charges. The improved distribution of information about price and terms enables you to pay the lowest possible price and serves ultimately to remove inefficient vendors. The market, as a whole, becomes more efficient.

From the seller's side, e-commerce produces information about price elasticity that has not been available before. **Price elasticity** measures how much demand rises or falls with changes in price. Using an auction, a company can not only learn what the top price for an item is but also the second, third, and other prices from the losing bids. In this way, the company can understand more about various customers' willingness to pay a particular price, or what is often called the *shape of the price elasticity curve*.

Similarly, e-commerce companies can learn price elasticity directly from conducting experiments with customers. For example, in one experiment, Amazon.com created three groups of similar books. It raised the price of one group by 10%, lowered the price of the second group by 10%, and left the price of the third group unchanged. Customers provided feedback on these changes by deciding whether to buy books at the offered prices. Amazon.com measured the total revenue (quantity times price) of each group and took the action (raise, lower, or maintain prices) on all books that maximized revenue. Amazon.com repeated the process until it reached the point at which the indicated action was to maintain current prices.

Managing prices by direct interaction with the customer yields better information compared with managing prices by watching competitors' pricing. By experimenting

Figure 9-4
E-Commerce Market
Consequences

Greater market efficiency	Knowledge of price elasticity
<ul style="list-style-type: none"> – Disintermediation – Increased information on price and terms 	<ul style="list-style-type: none"> – Losing-bidder auction prices – Price experimentation – More accurate information obtained directly from customer

with customers, companies learn how customers have internalized competitors' pricing, advertising, and messaging. Customers may not know about a competitor's lower prices, in which case there is no need for a price reduction. Or the competitor may be using a price that, if lowered, would increase demand sufficiently to increase total revenue. Figure 9-4 summarizes e-commerce market consequences.

Issues with E-Commerce

Although there are tremendous advantages and opportunities for many organizations to engage in e-commerce, the economics of some industries may disfavor e-commerce activity. Companies need to consider the following economic factors:

- Channel conflict
- Price conflict
- Logistics expense
- Customer service expense
- Showrooming
- Taxation

Figure 9-2 shows a manufacturer selling directly to a government agency. Before engaging in this B2G e-commerce, the manufacturer must consider each of the economic factors listed above. First, what channel conflict will develop? Suppose the manufacturer is a computer maker that is selling directly, B2G, to a government agency. When the manufacturer begins to sell goods B2G that employees of the agency had previously purchased from a computer retailer down the street, that retailer will resent the competition and may drop the manufacturer. If the value of the lost sales is greater than the value of the B2G sales, e-commerce is not a good solution, at least not on that basis.

Furthermore, when a business engages in e-commerce, it may also cause price conflict with its traditional channels. Because of disintermediation, the manufacturer may be able to offer a lower price and still make a profit. However, as soon as the manufacturer offers the lower price, existing channels will object. Even if the manufacturer and the retailer are not competing for the same customers, the retailer still will not want a lower price to be readily known via the Web.

Furthermore, the existing distribution and retailing partners do provide value; they are not just a cost. Without them, the manufacturer will have the increased logistic expense of entering and processing orders in small quantities. If the expense of processing a single-unit order is the same as that for processing a 12-unit order (which is possible), the average logistic expense per item will be much higher for goods sold via e-commerce.

Similarly, customer service expenses are likely to increase for manufacturers that use e-commerce to sell directly to consumers (B2C). The manufacturer will be required to provide service to less-sophisticated users and on a one-by-one basis. For example, instead of explaining to a single sales professional that the recent shipment of 100 Gizmo 3.0s requires a new bracket, the manufacturer will need to explain that 100 times to less knowledgeable, frustrated customers. Such service requires more training and more expense.

A growing issue for merchants with traditional stores is that of showrooming. **Showrooming** occurs when a customer learns about or tries a product or service in the high cost bricks-and-mortar retail store while completing the sales transaction at the low-cost Internet sales channel of another retailer. The ethics of showrooming and the impact on profitability have been widely debated, but there is little doubt that it occurs. Shopping has been considered a social activity, and many people still want to see and touch goods before purchasing them. In May 2012, Target stopped selling Amazon's Kindle in their stores after realizing that consumers were using their stores to examine the e-reader but were actually buying them from Amazon.com—a practice that they claimed Amazon encouraged by giving customers a 5% discount if they uploaded a copy of the UPC barcode (typically this is only accessible in a traditional store). Online purchases are often (but not always) price sensitive, particularly when the product is interchangeable and there are limited expectations for service. Some students, for example, may visit their university bookstore (the showroom) to identify the book is needed for a particular course, inspect it, and decide if they are going to buy it (a practice that, as authors and professors, we highly recommend) before purchasing their copy at an online retailer (or photocopying one, a process we do not recommend). Of course, not all aspects of showrooming are unanticipated or counter-strategic. Future-shop, for example, considers its combination of both retail stores and e-commerce websites to be part of their strategic advantage, and customers are encouraged to browse the physical store and buy online or to browse online and then buy in the store.

For governments, a large problem is determining how to tax e-commerce. Normally, taxes are based on the location of the creation or consumption of the particular good and service, but this is complicated with regard to e-commerce. If, for example, Canadian consumers download an antivirus service from a website based in a U.S. state that does not have sales tax (as one of your authors has done), what taxes are due, and who is responsible for collecting and remitting them? This problem, of course, is not completely new. Consumers located near Alberta, which does not have a sales tax, have long been able to cross the provincial border for large (or small, depending on the distance) purchases. However, this is made worse with e-commerce and is a major concern for all levels of government. Online and predominantly service-based businesses that have more location flexibility compared with retail operations are often able to pay much lower taxes. Apple, for example, has an overall U.S. tax rate of 24.2%, whereas Wal-Mart's average U.S. tax rate is 32.5%.

Beyond these economic factors, another consideration for organizations that are contemplating e-commerce is reduced profitability and margin squeeze. Because information is so freely available to consumers, it is harder to raise prices. Customers often know more about competitive pricing than salespeople do, and prices can be driven below the point at which companies can earn a reasonable profit. This scenario, of course, is not just related to e-commerce. Even if a particular company does not participate in selling directly to consumers, more and more information is freely available on the Web and accessible via smartphones. This can increase consumers' ability to negotiate lower prices.

Q2 What is Social Networking, and How Is It Enabled and Affected by IS/IT?

It is likely that you do not need this book to learn how to use Facebook or Twitter. You already know how to do that. But when you use such sites, there is more going on than you realize. If you are using such sites solely for entertainment or self-expression, then

a deeper understanding of them is not too important. But, if, like many professionals, you use such sites for both self-expression and for professional purposes, then understanding how such sites contribute to your social capital and how such capital influences and benefits organizations is important.

Social capital is earned through social networking. A *social network* is a structure of individuals and organizations that are related to each other in some way. Social networking is the process by which individuals use relationships to communicate with others in a social network.

What Is Social Capital?

Business literature defines three types of capital: physical capital, human capital, and social capital.

Karl Marx defined *physical capital* as the investment of resources for future profit. This traditional definition refers to investments in physical resources, such as factories, machines, manufacturing equipment, and the like.

Human capital is the investment in human knowledge and skills for future profit. By taking this class, you are investing in your own human capital. You are investing your money and time to obtain knowledge that you hope will differentiate you from other workers and ultimately give you a wage premium in the workforce.

According to Nan Lin,¹ *social capital* is the investment in social relations with the expectation of returns in the marketplace. When you attend a business function for the purpose of meeting people and reinforcing relationships, you are investing in your social capital. Similarly, when you join LinkedIn or contribute to Facebook, you are (or can be) investing in your social capital.

According to Lin, social capital adds value in four ways:

1. Information
2. Influence
3. Social credentials
4. Personal reinforcement

First, relationships in social networks can provide information about opportunities, alternatives, problems, and other factors important to business professionals. Second, they provide an opportunity to influence decision makers in one's employer or in other organizations who are critical to your success. Such influence cuts across formal organizational structures, such as reporting relationships. Third, being linked to a network of highly regarded contacts is a form of *social credential*. You can bask in the glory of those with whom you are related. Others will be more inclined to work with you if they believe critical personnel are standing with you and may provide resources to support you. Fourth, being linked into social networks reinforces a professional's image and position in an organization or industry. It reinforces the way you define yourself to the world (and to yourself).

Social networks differ in value. The social network you maintain with your high school friends probably has less value than the network you have with your business associates, but not necessarily so. According to Henk Flap,² the value of social capital is determined by the number of relationships in a social network, by the strength of those relationships, and by the resources controlled by those related. If your high

¹ Nan Lin. *Social Capital: The Theory of Social Structure and Action* (Cambridge, UK: Cambridge University Press, 2001), Location 310 of the Kindle Edition.

² Henk D. Flap, "Social capital in the reproduction of inequality," *Comparative Sociology of Family, Health, and Education*, Vol. 20, pp. 6179–6202 (1991). Cited in Nan Lin, *Social Capital* (Cambridge, UK: Cambridge University Press, 2002), Kindle location 345.

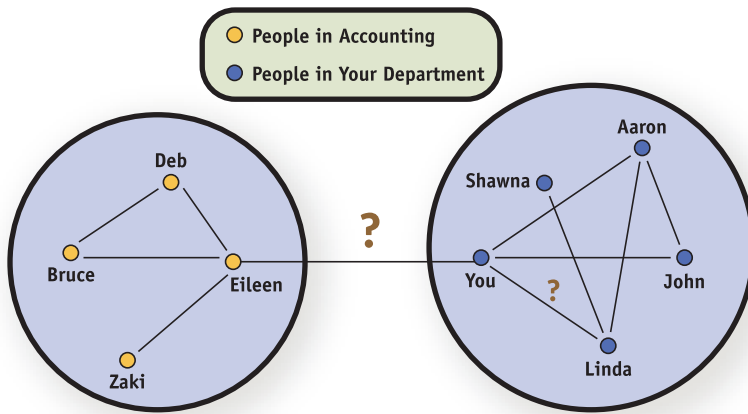


Figure 9-5
A Network Diagram

school friends happen to be Bill Gates or Mark Zuckerberg, and if you maintain strong relations with them via your high school network, then the value of that social network likely far exceeds any you will have at work. For most of us, however, it is the network of our current professional contacts that provides social capital.

So, when you use social networking professionally, consider the three factors mentioned above. You gain social capital by adding more friends and by strengthening the relationships you have with existing friends. Further, you gain more social capital by adding friends and strengthening relationships with people who control resources that are important to you. Such calculations may seem cold, impersonal, and possibly even phony. When applied to the recreational use of social networking, they may be. But when you use social networking for professional purposes, consider them important. The newly coined word “frenemy,” a combination of the words *friend* and *enemy*, is sometimes used to discuss ambiguous or complex social relationships. In the context of all of the new things that technology has made possible, it is interesting to note that this word was, in fact, first used in 1953.³

The Importance of Weak Relationships

Strong relationships create the most social capital in a social network, but ironically, it is weak relationships that contribute the most to the growth of social networks. To understand why, consider the network diagram in Figure 9-5. Assume that each line represents a relationship between two people. Note that the people in your department tend to know each other, and the people in the accounting department also tend to know each other. That is typical.

Now suppose you are at the weekly employee after-hours party, and you have an opportunity to introduce yourself to Linda or to Eileen. Setting aside personal considerations, thinking just about network building, which person should you meet?

If you introduce yourself to Linda, you shorten your pathway to her from two steps to one and your pathway to Shawna from three to two. You do not open up any new channels because you already have them to the people in your department.

However, if you introduce yourself to Eileen, you open up an entirely new network of acquaintances. So, considering just network building, you use your time better by meeting Eileen and other people who are not part of your current circle. It opens up many more possibilities. The connection from you to Eileen is called a *weak tie* in social network theory,⁴ and such links are crucial in increasing the number of

³ Winchell, W.. “How about calling the Russians our Frenemies?” *Nevada State Journal* (19 May, 1953).

⁴ See Terry Granovetter, “The strength of weak ties,” *American Journal of Sociology* (May 1973).

relationships in your network. In general, the people you know the least contribute the most to your network.

This concept is simple, but you might be surprised to learn how few people pay attention to it. At most company events, everyone talks with the people they already know. If the purpose of the occasion is to have fun, then that behaviour makes sense. In truth, however, no business social function exists just for having fun, regardless of what people say. Business functions exist for business reasons, and you can use them to create and expand networks. Given that time is always limited, you may as well use such functions efficiently.

The same comments apply to online social networking: Weak links add the greatest number of new connections to your social network.

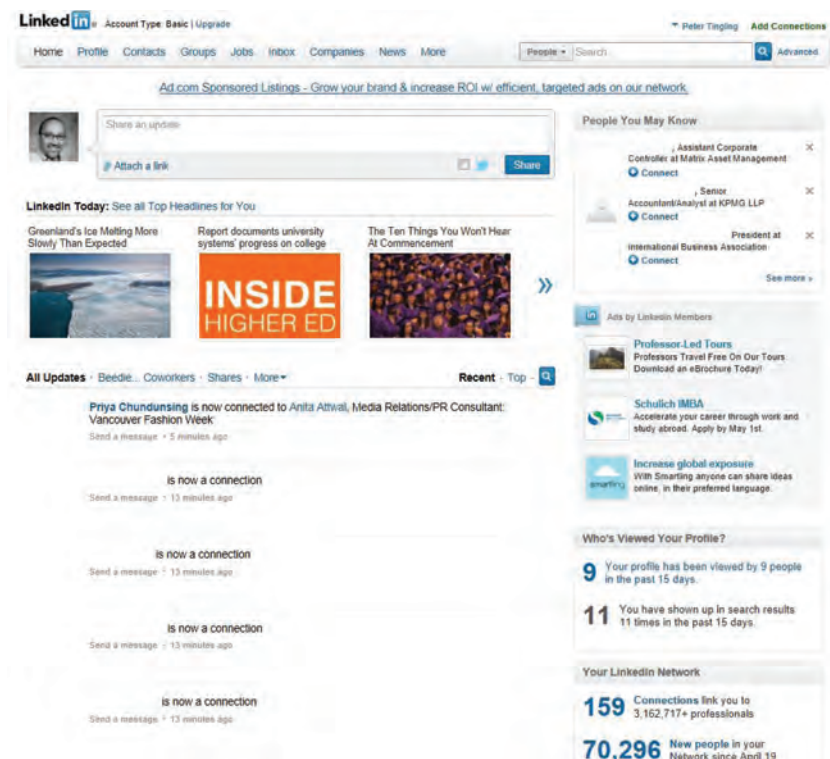
How Do Social Networks Add Value to Business?

Organizations have social capital just as humans do. Their social capital is measured in the same way: number of relationships, strength of relationships, and resources controlled by “friends.” Historically, organizations have created social capital via salespeople, via customer support, and via public relations. Endorsements by high-profile people are a traditional way of increasing social capital, but there are tigers in those woods.

Today, progressive organizations maintain a presence on Facebook, LinkedIn, Twitter, and possibly other sites. They include links to their social networking presence on their websites and make it easy for customers and interested parties to leave comments. In most cases, such connections are positive, but they can backfire or occasionally result in unintended consequences, as has happened, for example, when a large number of strangers or friends of friends show up at what was supposed to be a small house party.

Consider organizational social networking from the standpoint of social capital. Figure 9-6 shows a portion of one of the authors’ LinkedIn page in May 2012. As shown, the author had just added a few new connections bringing the total up to 159.

Figure 9-6
Author’s LinkedIn Page



In the two weeks since the last log-in, the total people connected had increased by more than 70 000 to more than 3 000 000 in total. You can see that LinkedIn has posted pictures and links to three stories that are tied to some of the author's interests—climate change (the polar ice caps), academia (higher education), and student development (convocation)—and that nine people had looked at the author's profile in the past two weeks. Depending on how the privacy settings have been adjusted, the author can click on this link and see who they are.

The author has just a basic account on LinkedIn, but even with just this level of access, links can be posted, endorsements provided for known people, and recommendations or comments made on a variety of things. Of course, all of this also brings scrutiny as well, since much of it is public. In May 2012, for example, the CEO of Yahoo joined a long list of people who were found to have added fake credentials to their resumes when he claimed to have earned a degree in computer science.

Now, look at the other side of this exchange. The author can also keep in touch with all of the contacts, and they can choose to share a variety of information and links with the author. They can, for example, see if they have colleagues in common or how far away a particular person is. While Figure 9-6, part of the LinkedIn page belonging to the co-author of this book, may not reveal a lot of new information because both authors are frequently in touch with each other anyway, it is easy to see how useful this can be. Of course, sometimes we make assumptions about the person based on what we read on their pages. In this case, for example, the author knows that the co-author has not updated a promotion that he received last year, which may lead to the conclusion that that he has either not logged in for a while or he has been very busy (updating this book).

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Share PDF Print vCard

Experience

Associate Dean

Simon Fraser University

Educational Institution; 5001-10,000 employees; Higher Education industry
September 2010 – Present (1 year 9 months)

Associate Dean, Undergraduate Programs

Faculty of Business Administration

Simon Fraser University

[Recommend Andrew's work at Simon Fraser University](#)

Associate Professor

Simon Fraser University

Educational Institution; 5001-10,000 employees; Higher Education industry
2008 – 2009 (1 year)

[Recommend Andrew's work at Simon Fraser University](#)

Figure 9-7

Sample element of co-authors
LinkedIn page.

How is Social Networking Enabled by IS/IT?

Human beings, by definition, are social creatures, and many people claim that social networking has existed since the Stone Age. Indeed, many people have suggested that social networks really are just an extension of the networking concepts developed in clubs and universities (Facebook, of course, was started at Harvard University) and that these relationships are often used to facilitate introductions. A question, therefore, is how social networking has been enabled by technology. Besides the ubiquity of computers and the relative low cost, three other considerations are (1) improved search capabilities, (2) reduction in the trade-off of richness and reach, and (3) network effects.

Search is important to social networking because it enables us to quickly sort through large amounts of data and find the specific people or relationship that we are interested in. Even if you have an uncommon name, in many cases, people find that they have “Internet doppelgängers” or people with the same name. Sometimes, if you have the same name as a celebrity, this can be useful in getting reservations at a popular restaurant. Conversely, if you share a name with a criminal or person on a “do not fly” list, it can also be troublesome. To deal with this type of event, large organizations, such as airlines and CSIS (the Canadian Security Intelligence Service), maintain lists and processes to reduce the impact and confusion. In managing your digital persona, one thing to be aware of is what happens when people search for you on the Internet by “ego surfing,” or searching one’s own name to see the results.

The second advantage of technology is the ability to keep track of many more people and enhance personalization. For example, the more people that we connect with, the lower is the level of interaction that can exist with each connection. Although finite limits exist—there are only so many things that we can keep track of and each day only has 24 hours—we can use databases and systems to store information and remind us of friends’ birthdays, wedding anniversary dates, and other key pieces of information.

The final technological consideration is that of network effects. As we have described earlier, a network of 10 people is five times more valuable than a network of two people. As a network grows, the benefit or utility that each person adds tends to increase. This can accelerate the speed at which networks grow and how useful they become.

Q3 What Is Web 2.0?

There is no universally accepted definition for the term Web 2.0. **Web 2.0** was first popularized in 2005 by Tim O’Reilly to refer to the integration and interaction of products and services, such as smartphones, user created content, social networking, location and context-based services and dynamic marketplaces, and not as a specific technology. Figure 9-8 compares Web 2.0 with traditional processing.

Software as a (Free) Service

Google, Amazon.com, and eBay exemplify Web 2.0. These companies do not sell software licences because software is not their product. Instead, they provide software as a service (SAAS). You can search Google, run Google Docs, use Google Earth, process Gmail, and access Google Maps, all from a thin-client browser, with the bulk of the processing occurring in the cloud, somewhere on the Internet. Instead of software licence fees, the Web 2.0 business model relies on advertising or other revenue that results as users employ the software as a service.

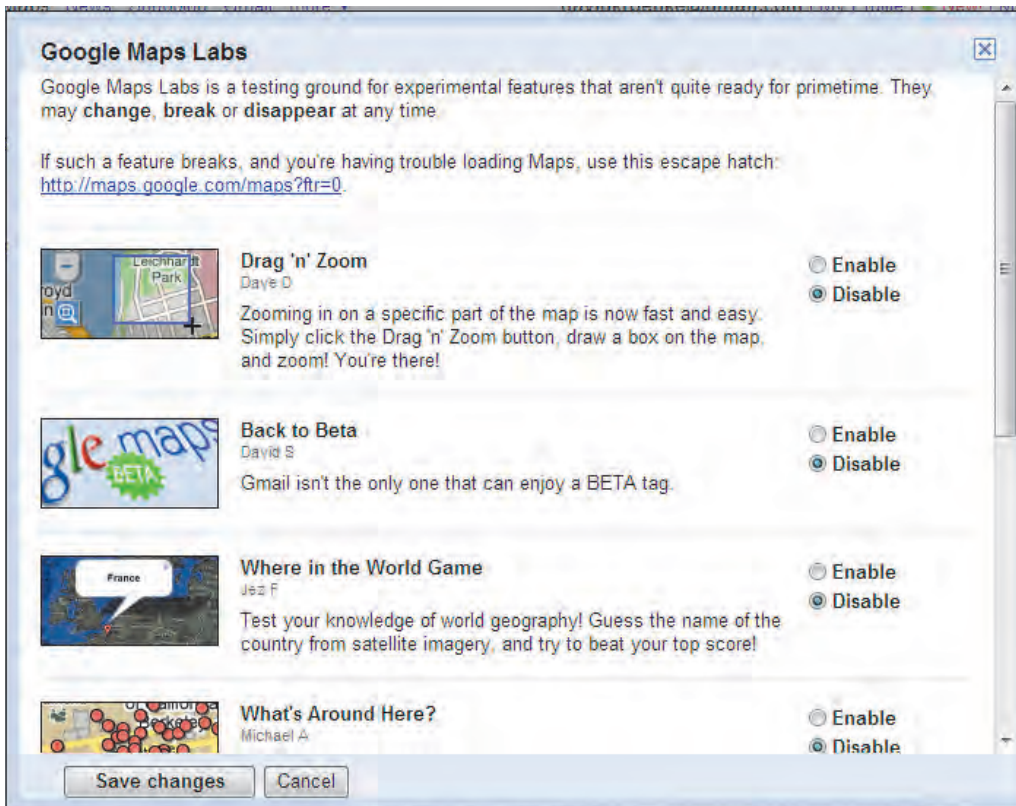
Web 2.0 Processing	Traditional Processing
Major winners: Google, Amazon.com, eBay	Major winners: Microsoft, Oracle, SAP
Software as a (free) service	Software as product
Frequent releases of thin-client applications	Infrequent, controlled releases
Business model relies on advertising or other revenue-from-use	Business model relies on sale of software licences
Viral marketing	Extensive advertising
Product value increases with use and users	Product value fixed
Organic interfaces, mashups encouraged	Controlled, fixed interface
Participation	Publishing
Some rights reserved	All rights reserved

Figure 9-8

Comparison of Web 2.0 with Traditional Processing

Web 2.0 applications are thin clients. As such, they do not require an installation on the users' computers. Web servers download Web 2.0 programs as code within HTML, as Flash, or as Silverlight code. Because this is so, they are readily (and frequently) updated. New features are added with little notice or fanfare. Web 2.0 users are accustomed to, and even expect, frequent updates to their licence-free software.

Figure 9-9 shows new features that Google is considering adding to Google Maps. Note the warning that they "may change, break, or disappear at any time."

**Figure 9-9**

Potential New Features in Google Maps

Source: Used with permission from Google.

By providing frequent updates this way, Google maintains its reputation as an innovative company while obtaining testing and usability feedback on new features.

Software as a service clashes with the software model used by traditional software vendors, such as Microsoft, Oracle, and SAP. Software is their product. They release new versions and new products infrequently. For example, three years separated the release of Microsoft Office 2007 from 2010, and as of May 2012, Office 2012 is not yet available. Releases are made in a very controlled fashion, and extensive testing and true beta programs precede every release.

Traditional software vendors depend on software licence fees. If a large number of Office users switched to free word processing and spreadsheet applications, the effect on Microsoft's revenue would be catastrophic. Because of the importance of software licensing revenue, substantial marketing efforts are made to convert users to new releases.

In the Web 2.0 world, little such marketing is done; new features are released, and vendors wait for users to spread the news to one another—one friend sending a message to many friends, most of whom send that message, in turn, to their friends, and so forth—in a process called *viral marketing*. Google has never announced any software in a formal marketing campaign. Users carry the message to one another. In fact, if a product requires advertising to be successful, then it is not a Web 2.0 product.

By the way, traditional software companies do use the term *software as a service*. However, they use it only to mean that they will provide their software products via the cloud rather than having customers install that software on their computers. Software licences for their products still carry a sometimes significant licence fee. So, to be accurate, we should say that in the Web 2.0 world software is provided as a free service.

Use Increases Value

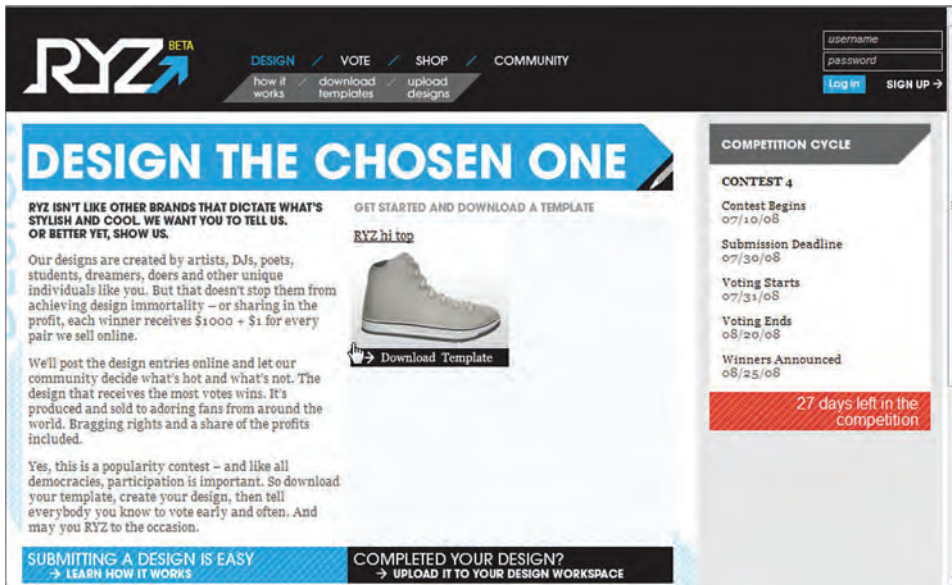
Another characteristic of Web 2.0 is the extent of network effects. The value of the site increases with users and use. Amazon.com gains more value as more users write more reviews. Amazon.com becomes the place to go for information about books or other products. Similarly, the more people who buy or sell on eBay, the more eBay gains value as a site.

The term user-generated content (UGC) refers to website content that is contributed by users. Although reviews are still the bulk of such content (and their objectivity is often questionable), some companies have created websites and tools that encourage users to contribute in other ways. On some sites, users can provide customer support to one another or even participate in the creation of product specifications, designs, and complete products in a process called *crowdsourcing*. As shown in Figure 9-10, the shoe startup company RYZ (www.ryzwear.com) sponsors shoe design contests to understand what type of shoes to create and how to market those designs.

Crowdsourcing combines social networking, viral marketing, and open-source design, saving considerable cost while cultivating customers. With crowdsourcing, the crowd performs classic in-house market research and development and does so in such a way that customers are being set up to buy.

Organic User Interfaces and Mashups

The traditional software model carefully controls users' experience. All Office programs share a common user interface; the ribbon (toolbar) in Word is similar to the ribbon in PowerPoint and in Excel. In contrast, Web 2.0 interfaces are organic. Users

**Figure 9-10**

Design by Crowdsourcing
Source: Used with permission from RYZ.

find their way around eBay and PayPal, and if the user interface changes from day to day, well, that is just the nature of Web 2.0. Further, Web 2.0 encourages *mashups*, which result when the output from two or more websites is combined into a single user experience.

Google's My Maps is an excellent mashup example. Google publishes Google Maps and provides tools for users to make custom modifications to those maps. Thus, users mash the Google map product with their own knowledge. One user demonstrated the growth of gang activity to the local police by mapping new graffiti sites on Google maps. Other users share their experiences or photos of hiking trips or other travel.

In Web 2.0 fashion, Google provides users a means for sharing their mashed-up map over the Internet and then indexes that map for Google search. If you publish a mashup of a Google map with your knowledge of a hiking trip on Mt. Pugh, anyone who performs a Google search for Mt. Pugh will find your map. Again, the more users who create My Maps, the greater is the value of the My Maps site.

Participation and Ownership Differences

Mashups lead to another key difference. Traditional sites are about publishing; Web 2.0 is about participation. Users provide reviews, map content, discussion responses, blog entries, and so forth. A final difference concerns ownership.

Traditional vendors and websites tend to lock down all the legal rights they can. For example, Oracle publishes content and demands that others obtain written permission before reusing it. Web 2.0 locks down only some rights. Google publishes maps and says, "Do what you want with them. We'll help you share them."

How Can Businesses Benefit from Web 2.0?

Amazon.com, Google, eBay, and other Web 2.0 companies have pioneered Web 2.0 technology and techniques to their benefit. A good question today, however, is how these techniques might be used by non-Internet companies. How might 3M, Alaska Airlines, Procter & Gamble, or the bicycle shop down the street use Web 2.0?

Advertising

Consider again the Oracle CRM ad in the print version of *The Globe and Mail*. Oracle has no control over who reads that ad, nor does it know much about the people who do (just that they fit the general demographic of *Globe and Mail* readers). On any particular day, 10 000 qualified buyers for Oracle products might read the ad, or then again, perhaps only 1000 qualified buyers would read it. Neither Oracle nor *The Globe and Mail* knows the number, but Oracle pays the same amount for the ad, regardless of the number of readers or who they are.

In the Web 2.0 world, advertising can be specific to user interests. Someone who searches online for “customer relationship management” is likely an information technology (IT) person (or a student) who has a strong interest in Oracle and its competing products. Oracle would like to advertise to that person.

As stated earlier, Google pioneered Web 2.0 advertising. With its AdWords software, vendors pay Google a certain amount for particular search words. For example, The 1881 (the Bread and Breakfast hotel featured in the opening chapter) might agree to pay \$2 for the words Bread and Breakfast and Lunenburg. When someone Googles that term, Google will display a link to The 1881 website. If the user clicks on that link (and only if the user clicks on that link), Google charges \$2 to The 1881’s account but nothing if the user does not click on the link. This is targeted advertising because The 1881 can specifically tailor the ads.

The amount that a company pays per word can be changed from day to day and even from hour to hour. If The 1881 is having a promotion around American Thanksgiving, it may be willing to pay more for the word “thanksgiving” or “getaway” before the hotel is fully booked than when it has vacancies. The value of a click on “getaway” is low when the hotel is full compared with other times of the year.

AdSense is another advertising alternative. Google searches an organization’s website and inserts ads that match the content on that site. When users click on those ads, Google pays the organization a fee. Other Web 2.0 vendors offer services similar to AdWords and AdSense.

With Web 2.0, the cost of reaching a particular, qualified person is much smaller than in the traditional advertising model. As a consequence, many companies are switching to the new lower-cost medium, and consequently, newspapers and magazines are struggling with a sharp reduction in advertising revenue.

Mashups

How can two non-Internet companies mash up the contents of their websites? Suppose you are watching a hit movie and you would like to buy copies of the jewellery, dress, and watch worn by the leading actress. Suppose that The Bay sells all of those items. With Web 2.0 technology, the movie’s producer and The Bay can mash up their contents together so that you, watching the movie on a computer at home, can click on the item you like and be directed to The Bay’s e-commerce site that will sell it to you. Or, perhaps, The Bay is disintermediated out of the transaction, and you are taken to the e-commerce site of the item’s manufacturer.

Not for All Applications

Before you get too carried away with the potential for Web 2.0, you should note that not all business information systems benefit from flexibility and organic growth. Any information system that deals with assets, whether financial or material, requires

some level of control. You probably do not want to mash up your credit card transactions on My Maps and share that mashup with the world. As a chief financial officer (CFO), you probably do not want your accounts payable or general ledger system to have an organic user interface; in fact, Canadian Bill 198 (and the U.S. Sarbanes-Oxley Act [SOX]) proscribe much of the information that you can provide and how it is to be displayed.

Q4 Is There a Web 3.0?

When you hear the term Web 2.0, it would seem almost self-evident that it was preceded by Web 1.0 and that it will be followed by Web 3.0. However, unfortunately, explaining the past and predicting the future are a lot more difficult. As noted earlier, not only is Web 2.0 a broad overarching term, but many changes are discontinuous and the invention and use of technology are hard to predict as well. As Marshall McLuhan suggested, the first use of a new technology nearly always mirrors how we used the old technology. Early televised news, for example, focused on a reporter speaking directly to the camera, unlike current newscasts, in which advanced cinema photography, interviews, and live information productions are used. In short, we cannot predict what Web 3.0 will look like (or even if it will be called “Web 3.0”) because we do not know what may be imagined by the next generation of inventors and entrepreneurs—some of whom may be in this classroom (this might be a good time to add them to your network).

Henry Ford is famously quoted to have stated that had he asked his customers what they wanted, they would have replied “faster horses.” Until we are presented with a technology, our mental models—how we see the world—often prevent us from imagining radically different ideas. Think, for example, of the last time that you ordered a pizza for delivery and were told how long it would take. Did you think that you could click on a webpage and track the delivery as it actually happened? Technically, of course, cellular devices, other mobile devices, and the global positioning system (GPS) have long enabled this capability, but it is only recently that trackmypizza.com has actually deployed it. Domino’s, which uses this service in the United States, updates street-by-street progress of the delivery person every 15 seconds, and this has had a substantial impact on Domino’s business. In areas where this service is available, more than 18% of its customers have used it, and online orders have increased by more than 100%. Online orders, of course, are not only cheaper to process, as there are fewer humans involved, but Domino’s has also found that customers using the online service spend, on average, \$2 more per order.

By the time that this book is published, we can be certain that more of the existing business models and ideas will have been disrupted. At the time of writing, for example, startups such as NowPublic are changing the way that news is collected and distributed by allowing anyone with a cell phone to gather and share videos (as we have seen from the Middle East), and such services such as ShopSavvy are allowing the use of the cell phone to scan a barcode to find the lowest price within the local area. Such services challenge the efficiency and effectiveness of retail supply chains. The fundamental drivers of e-commerce—low-cost computing and storage, ubiquitous networking, and collaborative services—are not likely to lose momentum any time soon.



MIS in Use

Computing Your Social Capital

Social capital is not an abstract concept that applies only to organizations; it applies to you as well. You and your classmates are accumulating social capital now. What is the value of that capital? To see, form a group and answer the following questions:

1. Define *capital*, *human capital*, and *social capital*. Explain how these terms differ.
2. How does the expression "It's not *what* you know but *who* you know that matters" pertain to the terms you defined in Question 1?
3. Do you, personally, agree with the statement in Question 2? Form your own opinion before discussing this with your fellow group members.
4. As a group, discuss the relative value of human capital and social capital. In what ways is social capital more valuable than human capital? Formulate a group consensus view on the validity of the statement in Question 2.
5. Visit Facebook, LinkedIn, Twitter, or other social networking site of each group member.
 - a. Using the definition of social capital value in this chapter, assess the value of each group member's social networking presence.
 - b. Recommend at least one way to add value to each group member's social capital at each site.

Active



Use this Active Review to verify if you have understood the material in the chapter. You can read the entire chapter and then perform the tasks in this review, or you can read the material for just one question and perform the tasks for that question before moving on to the next one.

Q1 What is E-Commerce and how is it used?

Define e-commerce. Explain the difference between e-commerce and e-business. Describe why the distinction is important. Differentiate each of the types of merchant sites and discuss the benefits and liabilities of e-commerce from the perspective of business, consumers, and society (government).

Q2 What is social networking, and how is it enabled and affected by IS/IT?

Define social capital and the four ways in which it is valuable. Explain how its creation has been affected by

Review

technology. Explain network effects and how the amount of value that a member receives varies, depending on when they join a network.

Q3 What is Web 2.0?

Explain the essence of Web 2.0 and why it lacks a common definition. Discuss how each of the main elements (e.g., UGC) contributes to some of the more well known Web 2.0 examples.

Q4 Is there a Web 3.0?

Discuss why it is hard to predict the impact of technological change. Explain Henry Ford's famous statement about "faster horses."



Figure 9-11

Are all connections the same, and how should they be measured?

6. Suppose you each decide to feature your Facebook or other social networking page on your professional résumé.

- a. How would you change your presence that you evaluated in Question 5 to make it more appropriate for that purpose?
 - b. Describe three or four types of professionals that you could add to your social network that would facilitate your job search.
7. Imagine that you are the CEO of a company that has just one product to sell: You!
 - a. Explain how you could use your social networking presence to facilitate social CRM selling of your product.
 - b. Devise a creative and interesting way to use this exercise as part of your social CRM offering.
8. Present your answers to Questions 4 and 7 to the rest of the class.

Key Terms

Business-to-business (B2B) 281	Disintermediation 282	Nonmerchant companies 281
Business-to-consumer (B2C) 281	E-commerce auctions 282	Showrooming Price elasticity 285
Business-to-government (B2G) 281	Electronic exchanges 282	Price elasticity 283
Clearinghouses 282	Merchant companies 281	Web storefront 281
		Web 2.0 290

Using Your Knowledge

1. Choose one of the following basic business processes: inventory management, operations, manufacturing, human resources management, or accounting/financial management. Use the Internet to identify three vendors that license a product to support that process. Compare offerings from the three vendors as follows:
 - a. Determine differences in terminology, especially differences in the ways vendors use the same terms.
 - b. Compare the features and functions of each product offering.
 - c. For each vendor, specify the characteristics of a company for which that vendor's offering would be ideal.

2. Distance learning is an application of interorganizational information systems. Although it may seem odd to label students as organizations, they are customers in the same sense that consumers are customers in B2C e-commerce systems.
 - a. Draw a process diagram of a regular, non—distance learning class. Label the activities and the flows among the activities.
 - b. Draw a second process diagram of a distance learning class. In what ways are the two diagrams similar? In what ways are they different?
 - c. What is the competitive strategy of your university? How do distance learning classes contribute to that competitive strategy?
 - d. Assuming that no face-to-face meeting is required to successfully teach a distance learning class, neither students nor professors need live near campus. In fact, they do not even need to reside on the same continent. What opportunities does that fact present to your university? What new educational products might your university develop?
 - e. Considering your answer to (d), what opportunities does distance learning provide your professor? Is there any reason a professor should not teach for more than one university? Do you think there is a realistic opportunity for a group of professors from different universities to band together to form a virtual college? What competitive advantage might they accrue by doing so?

Collaborative Exercises

This chapter provides several examples of companies that use information systems to gain a competitive advantage. This collaborative exercise asks your group to take a more critical and in-depth look at the companies and the offerings they provide. Using the web as a resource, collaborate with your team to answer the following questions:

1. Create a maximum two-page information sheet that summarizes the company, the idea, and the system it uses. The summary should include the following:
 - a. An introduction to the company (example companies are listed below, but you are welcome to use another company).
 - b. Outline the basis of the idea.
 - c. Identify, to the best of your ability, the strategy of the company (*Note:* You can use Porter's five forces to understand the company's industry.)
 - d. Identify the information systems you think will be most critical to support the strategy.
 - e. Provide suggestions on how the company should consider investing in information systems to support its business. Justify your suggestions.
2. Choose one of the following companies (or ask your professor if you can choose a different company):
 - a. Zipcar (www.zipcar.com)
 - b. Avelle (www.bagborroworsteal.com)
 - c. Grand & Toy (www.grandandtoy.com)
 - d. Dell (www.dell.com)
 - e. My Virtual Model (www.MVM.com).
 - f. The Running Room (www.runningroom.com)
 - g. Ritchie Bros. Auctioneers (www.rbauktion.com)
3. Now create a presentation (using PowerPoint, Keynote, or another presentation software), and present the topic to the students in your class. Be sure to include a title page.

Case Study 9

Let Me Get That: BuyATab and Where Good Ideas Come from.

Matias Marquez could be forgiven if his mind drifted off in his entrepreneurship class as the professor talked about the millions of people who must have pulled burrs off their clothes long before someone thought of Velcro. Matias was still in university, but working with fellow students he had already founded a customer-oriented company that continued to smash its revenue targets and had received national attention.

BuyATab first took shape when one of Matias's friends tried to give his father a surprise gift. Calling the Chicago restaurant where he knew his father was dining, he asked if he could "buy the tab" or pay the bill by putting it on his credit card. The problem, as he found out, was that although the restaurant had the policies and processes in place to sell him a physical gift card over the telephone (that they would later mail), the only way that he could pay the bill by telephone was if he faxed them a letter with a copy of the front and back of his credit card—something that would be very hard to do, since he was calling from his cell phone.

Matias' friend described the problem to Matias, and they tried to figure out how this could be solved. When they both realized that gift cards were really not about the tangible plastic but more about what they represented, their frustration only grew. The 16 to 24 digits that made up each gift card validated its authenticity and the restaurant could then trust that it was legitimate. There was no reason why this could not be done on the Internet, thought Matias. Customers should be able to go online, sign up at his website, and instantaneously be able to "pick up the tab" or pay for meals at participating restaurants.

Of course, if things were really easy, very few of us would be sitting in this classroom. Getting the first restaurants signed up was immensely difficult, and Matias found that there was a host of technical and security problems to be addressed. Still he was persistent, refined the process, and slowly managed to build his network. Parts of the business model evolved, and Matias soon realized that working with the gift card infrastructure was important and that integrating the BuyATab technology with that of his customers websites and working with credit card companies were crucial.

The future of BuyATab, however, is bright. In 2012, barely three years after BuyATab was started, its customers include some of North America's most famous restaurant brands, and the company has added professional management, secured external financing, and won national innovation and entrepreneurial awards.

Questions

1. How hard would it be for BuyATab to sign its first customer?
2. Many others might have had this same problem, but why didn't they think of developing a solution?
3. Why wouldn't the credit card companies have solved this problem?
4. Could BuyATab have been formed in the 1980s? (*Hint: What enabling technologies were required to form such a company?*)

Running Case Assignment Part 3

1. Carrie has decided to understand more about her printing situation. She collected information about clients and their orders in the last two years in an Excel spreadsheet labelled “Carrie Creations Order Information.xls.” You can find this spreadsheet on the MyMISLab for Chapter 7. Use the data in the spreadsheet to answer the following questions:
 - a. How many different customers did Carrie’s Creations have over the past two years?
 - b. What was the overall average number of t-shirts printed per order?
 - c. What was the average number of t-shirts that Carrie sells per month?
 - d. On average, how long did it take to complete an order (end date — start date)?
 - e. What was the average time between the end date of production and the delivery date (delivery date — end date)?
 - f. Where there any orders that were not delivered on time (delivery date > Required by)? List the order numbers along with the number of days late for each late order.
2. Carrie is considering buying a new drop-on-demand inkjet printer. She has one printer that already has been paid off. The new printer’s retail price is \$16 500. But Carrie has chosen to lease over five years at \$250 per month. She then has the option to buy the five-year-old printer for \$2500.
 - a. Assume that Carrie has a margin of \$1.75 for each shirt that she sells (in total, she makes \$1.75 more than she pays for making the shirt). If Carrie increases her monthly sales by 10%, will this increase in sales cover the increased cost associated with leasing the printer?
 - b. Given the assumption in (a), how many additional t-shirts does Carrie have to sell in a month to break even on the lease on the printing machine?
 - c. What is the total cost of the five-year lease excluding the purchase at the end of five years? If Carrie decides to buy the printer after five years, what will be the total cost of using and obtaining the printer?

Collaborative Question (could be done in class or in discussion)

1. In your opinion, is the decision to buy a new garment printer well justified? List the advantages and disadvantages associated with this decisions, and create a recommendation to Carrie about purchasing the printer or not.
2. Do you think that purchasing the printer will create a competitive advantage for Carrie’s Creations? Justify your answer.

MyMISLab Visit the MyMISLab website to access the data files to complete these questions.





Hiding the Truth?

No one is going to publish their ugliest picture on their Facebook page, but how far should you go to create a positive impression? If your hips and legs are not your best features, is it unethical to stand behind your sexy car in your photo? If you have been to one event with someone very popular in your crowd, is it unethical to publish photos that imply you meet on a daily basis? Surely, there is no obligation to publish pictures of yourself at boring events with unpopular people just to balance the scale after posting photos in which you appear unrealistically attractive and overly popular.

As long as all of this occurs on a Facebook or MySpace account that you use for personal relationships, it may not have any significant consequences. (Remember, though, that what goes around comes around.) However, consider social networking in the business arena.

- a. Suppose that a river rafting company starts a group on a social networking site for promoting rafting trips. Graham, a 15-year-old high school student who wants to be more grown up than he is, posts a picture of a handsome 22-year-old male as a picture of himself. He also writes witty and clever comments on the site photos and claims to play the guitar and be an accomplished masseuse. Are his actions unethical? Suppose someone decided to go on the rafting trip, partly influenced by Graham's postings, and was disappointed when he learned the truth about Graham. Would the rafting company have any responsibility to refund that person's fees?
- b. Suppose you own and manage that same rafting company. Is it unethical for you to encourage your employees to write positive reviews about your company? Does your assessment change if you ask your employees to use an email address other than the one they have at work?
- c. Again, suppose you own and manage the rafting company and that you pay your employees a bonus for every client they bring to a rafting trip. Without specifying any particular technique, you encourage your employees to be creative in how they obtain clients. One employee invites his MySpace friends to a party at which he shows photos of prior rafting trips. On the way to the party, one of the friends is involved in an automobile accident and dies. His spouse sues your company. Should it be held accountable? Would it matter if you had known about the employee's party? Would it matter if you had not encouraged your employees to be creative?
- d. Suppose your rafting company has a website for customer reviews. In spite of your best efforts at camp cleanliness, on one trip (out of dozens) one of your staff members accidentally serves contaminated food, and everyone becomes ill with food poisoning. One of those clients writes a poor review because of that experience. Is it ethical for you to delete that review from your site?
- e. Assume you have a professor who has written a popular textbook. You are upset with the grade you received in his class, so you write an

extremely harsh review of that professor's book on Amazon.com. Are your actions ethical?

- f. Suppose you were at one time employed by the river rafting company and you were, undeservedly you think, terminated by the company. To get even, you use Facebook to spread rumours among your friends (many of whom are river guides) about the safety of the company's trips. Are your actions unethical? Are they illegal? Do you see any ethical distinctions between this situation and that in item (d)?
- g. Again, suppose that you were at one time employed by the rafting company and were undeservedly terminated. You notice that the company's owner does not have a Facebook account, so you create one for her. You have known her for many years and have dozens of photos of her, some of which were taken at parties and are unflattering and quite scandalous. You post those photos along with critical comments that she had made about clients or employees. Most of the comments were made when she was tired or frustrated, and they are hurtful, but they are also witty and humorous. You send friend invitations to people whom she knows, many of whom are the target of her biting and critical remarks. Are your actions unethical?



Discussion Questions

1. Read the situations in items (a) through (g), and answer the questions contained in each.
2. On the basis of your answers for Question 1, formulate ethical principles for creating or using social networks for business purposes.
3. On the basis of your answers for Question 1, formulate ethical principles for creating or using user-generated content for business purposes.
4. Summarize the risks that a business assumes when it chooses to sponsor user-generated content.
5. Summarize the risks that a business assumes when it uses social networks for business purposes.

