

Chapter 2: Strategic Use of Information Resources

Chapter Overview

A long-standing management topic for information systems courses is the use of information and information systems for strategic advantage. The triangle model of chapter 1 sets up this discussion by making the link between IT and business strategy. This chapter explores some of these concepts, building on the classic Porter models.

Discussion Opener: On the PowerPoint slides, there are questions from the Zara case.

Alternate Discussion Opener: Why are we concerned with the alignment of business, organizational, and information strategies? How can that knowledge be helpful to you in your career?

Key Points in Chapter

Innovative use of a firm's information resources can provide companies with substantial advantages over competitors. The introduction to this chapter explores Zara, a global retail and apparel manufacturer based in Spain that has successfully implemented this idea by having a continuous flow of new products that are typically limited in supply. Zara has created a system that draws its clientele into its stores, on average, 17 times per year as compared to 4 times per year for most stores. This is made possible by aligning its IS model with its business model. The conclusion is that a company can achieve substantial advantage over its competitors through innovative use of its information resources.

The evolution of information resources for business advantages is explored. Building on the **Eras** model of Harvard Business School professors Applegate, McFarlan and McKenney, this model succinctly summarizes how IT has been used to create efficiency, effectiveness, strategic gain, and value. This model is useful to show how leading edge companies have engaged IT for more than just automation of activities and removal of paper from the business. The model also incorporates the economics of information vs. the economics of things that was discussed in Chapter 1. The text explains some of the key components of each era. Students might be engaged in discussion as to what a business's objectives are and how IT can help achieve those objectives, based on the

targets and models discussed in Figure 2.1. Students should explain how the current Era is different from the previous one, and the implications for these changes.

The term **information resources** is defined as the data, technology, people, and processes available to perform business processes and tasks. Information resources can be either assets or capabilities. **IT asset** is anything, tangible or intangible, that can be used by a firm in its processes for creating, producing and/or offering its products (IT infrastructure is an asset). **IT capability** is something that is learned or developed over time in order for the firm to create, produce, or offer its products. Figure 2.2 shows these resources with a definition and an example. Students would do well to understand the difference between an asset and a capability.

Information resources can be used strategically. They can influence competitive forces (see Porter's model in Figure 2.3). For example, the potential threat of new entrants is influenced by using information resources to build barriers to entry. The bargaining power of buyers is influenced by using information resources to build switching costs. The bargaining power of suppliers can be influenced by using information resources to integrate backwards or to reduce costs of linking with other suppliers. Substitute products are more difficult to create if information resources are used to add value to a business's product and service offerings. And, industry competition can be influenced by information resources when these resources are used to differentiate products or services and to build new markets such as net markets. In Figure 2.4, the 5-forces model evaluates how Zara was able to gain competitive advantage through the strategic use of IT resources and services.

Information resources can be used to alter the value chain of a business, creating strategic advantages through lower costs and/or increased value. Porter's value chain suggests primary and support activities a business can use to create value. Information resources lower activity costs, which may create an advantage for the firm. Information resources add value only if a firm has accurate information regarding customers. By extending Porter's model to include supply chains of business partners, information resources are useful to create advantages through innovative linking of a business's supply chain and distribution channel chain. Students often fail to apply the value chain to business partners. Figure 2.5 shows Porter's Value Chain model of the firm, and Figure 2.6 applies the value chain model to show the extended value system and the interconnected relationships between organizations, including suppliers and buyers. **SCM**, **ERP**, and **CRM** are introduced, showing how they are applied to the value chain. Figure 2.7 describes the value added to Zara's primary and support activities by its innovative IS. The main focus is on the value added to Zara's processes, but it also shows how its suppliers and customers realize this value.

Sustaining competitive advantage is discussed next, and Figure 2.8 describes the elements of the Piccoli and Ives framework describing the barriers to competition and building sustainability.

Next there is discussion on the use of the **Resource-Based View (RBV)**. It is a useful approach to identify two subsets of information resources: those that enable a firm to *attain* competitive advantage and those that enable a firm to *sustain* the advantage over the long term.

Figure 2.9 indicates the extent to which the attributes of each information resource may add value to Zara. In the table you will notice that the resources are categorized by asset and capability and then by value creation and value sustainability. The new edition includes Relationship Skills – *Externally Focused* and Relationship Skills – *Spanning* under the IT Capability dimension. A discussion on this table may be useful to have students provide their own experiences and frame of reference on each of these resources.

Social capital is created through relationships. Three types of value potentially created are: structural (pattern of relationships), relational (nature of the relationship), and cognitive (thoughts of people in the network).

Next in the chapter is a discussion of **strategic alliances**. Facebook’s IPO and the partnership with Zynga is used to illustrate this concept. The concept of a business ecosystem is introduced and is described as a group of strategic alliances in which a number of firm partners provide important services to each other and jointly create value for customers. A discussion of Brandenburger and Nalebuff’s **co-opetition** theory demonstrates that some virtual corporations are formed with competitors. Basically, companies both cooperate and compete in the same industry.

The next section in this chapter includes a discussion of risks of information systems. This discussion, which describes information systems that failed, is necessary to balance the discussion of competitive advantages afforded by information systems. Instructors are encouraged to have a discussion about the risks and to challenge students to come up with additional risks.

“A Closer Look: Mobile-Only Internet Users Dominate Emerging Countries” – This vignette outlines the common practice of emerging countries to bypass traditional computing, opting for completely mobile connectivity. Malaysia is called a “test case.”

The chapter concludes with the concept of co-creating IT and business strategy. The focus of the chapter has been on how IT strategy is aligned with business strategy. It discusses how information is increasingly a core component of the product or service offered by the firm, that IT strategy *is* business strategy – they cannot be created without each other. FedEx is considered as an example; since its main product is information, the company cannot function without IT even though it is primarily a package delivering company. Business models cannot be built without consideration of information systems.

Illustrative Answers to Discussion Questions

1. How can information itself provide a competitive advantage to an organization? Give two or three examples. For each example, describe its associated risks.

Ans: There are many appropriate responses to this question. This chapter explores some of them, such as building barriers to entry, creating switching costs, reducing operating costs, opening up new markets, and creating time-based advantages. Encourage students to give specific examples from companies they know about. For each example, explore the risks (i.e., awaking a sleeping giant, demonstrating bad timing, implementing IS poorly, failing to deliver what users want, or running afoul of the law). Discuss their answers in the context of Zara and FedEx.

2. Use the five competitive forces model as described in this chapter to describe how information technology might be used to provide a winning position for each of these businesses:

- a. A global advertising agency
- b. A local restaurant
- c. A mobile applications provider
- d. An insurance company
- e. A web-based audio book service

Ans: The five forces are substitutes, supplier, buyer, new entrants, and inter-industry. The question asks the student to pick a force and describe how each of these 5 types of business might use information resources to reduce the threat of that force. An example of analyzing the substitute force is given below:

- Global advertising agency – A substitute for a global ad agency could be the use of local ad agencies in various locations. Another possibility would be using in-house personnel to fashion ad campaigns. IT resources might provide better coordination among different global locations, or even automatic translation to other languages.
- Local restaurant – Substitute services might be using a chain restaurant, or cooking at home. Information resources might be useful to create switching costs using a frequent customer card, or to provide customers with information about the ingredients in their foods with connections to their health monitoring device (such as a FitBit™). Note that these ideas might also be useful to reduce the threat of other forces, too.
- A mobile applications provider - A substitute service might be employing a desktop/laptop application provider, or bringing applications development in house. The firm can reduce the threat of substitution by increasing the reliability and emphasizing the superior features of the mobile apps.
- Insurance company – A substitute service that might threaten an insurance company is a trend with large firms to “self-insure.” More specifically, using health insurance as an example is quite interesting. A health insurance company substitute might

be to make use of an HSA (Health Savings Account), which is another form of self-insurance, but tax authorities in the USA require putting money into a special savings account so that healthcare expenditures are covered. A partial substitute would be to concentrate resources on healthy living or eating practices, which would presumably reduce healthcare expenses later. Insurance firms might use their information resources to offer a larger variety of options to customers. The IT would be required to track all the chosen options right on the spot when service is required. Other services of value to the customer such as quick and easy plan application and approval, extra incentives for longevity in accounts, links with medical practitioners, and closer links with preferred providers.

- Web-based audio book service – A substitute service might be a brick and mortar audio book store where customers could actually listen to selected portions of any book prior to buying. Another might be placing a kiosk in a bookstore or department store where the customer has instant access to the books after listening to the sample (if desired). The web-based audio book service might use IS to offer a broader array of books with more helpful information on the background of the book or its author, and feedback from customers on each audio book along with expert recommendations. Also, the web-based retailer could create value by setting up discussion forums for customers where they could interact with others interested in their particular selections.

3. Using the value chain model, describe how information technology might be used to provide a winning position for each of these businesses:

- a. A global advertising agency
- b. A local restaurant
- c. A mobile applications provider
- d. An insurance company
- e. A web-based audio book service

Ans: The advertising agency has primary activities (inbound logistics, operations, outbound logistics, marketing and sales, and service) and secondary activities (organization, human resources, technology, and purchasing). The question asks the student to describe how each of these 5 businesses might use information resources to add value to the activities to their company (and possibly to partners in their supply chain). An example of analyzing a particular value chain stage is:

- Global advertising agency – (operations) An agency could use automatic translation to get a head start on providing a web site for each country in which a particular client operates. The system could improve on those already available by tailoring certain phrases that would occur globally. For instance, the word “Sale” might be treated in a special way to provide the best term in each target language; the word might more closely match the typical way to introduce a special deal.
- Local restaurant– (marketing) An information system could take various factors into account (such as season, holiday, or even weather) to determine specials to run each day or even new selections to feature.
- A mobile applications provider – (human resources) An information system can be used to keep track of employee skills and development of those skills. This adds value

for customers, because many applications require particular database or development training.

- Insurance company – (outbound logistics) An information system may support all communications with customers for Electronic Funds Transfers for all transactions from premiums to claim payments.
- Web-based audio book service – (outbound logistics) A system could be set up where the book service delivers books in any desired format, from mp3 to physical CD, depending on the wishes of the customer. This flexibility could build loyalty among customers because these idiosyncratic preferences are sometimes quite strong.

4. Use the resource-based view as described in this chapter to describe how information technology might be used to provide and sustain a winning position for each of these businesses:

- a. A global advertising agency
- b. A local restaurant
- c. A mobile applications provider
- d. An insurance company
- e. A web-based audio book service

Ans: The Resource-Based View (RBV) looks at gaining competitive advantage through the use of information resources. Two subsets of information resources have been identified: those that enable firms to attain competitive advantage (rare and valuable resources that are not commonplace), and those that enable firms to sustain competitive advantage (resources must be difficult to transfer or relatively immobile). The question asks the student to describe how each of these 5 businesses might use information resources to add value to the activities of their company.

- Global advertising agency – The agency could utilize its global relationships to market strategically to customers through a CRM system that would be difficult to imitate because of the firm's global reach. IT talent could be utilized from all parts of the world to create ads that are innovative and strategic in nature.
- Local restaurant – In conjunction with a frequent dining card, a customer preference system could be set up which markets to customers that have not utilized the restaurant recently. Perhaps offer coupons to these customers, etc.
- A mobile applications provider – An IS system could be used to track interactions with customers (along with their usage of the applications), thereby developing sustainable relationships and generating more customer loyalty. Competitive advantage can be attained by innovative IT embedded in the features of the phones. IT can sustain that competitive advantage through superior customer service, facilitated by a CRM system.
- Insurance company – Provide a new service through their websites that takes advantage of a service that is unique to that company and difficult to emulate.
- Web-based audio book service – Take advantage of its online presence to offer other services like book recommendations, limited samples, and other services that would enhance its services.

5. Some claim that the only sustainable competitive advantage for an organization is its relationships with its customers. All other advantages eventually erode. Do you agree or disagree? How can IS play a role in maintaining the organization's relationship with its customers? Defend your position.

Ans: This is, of course, a very open-ended question. As the chapter discusses, sustainable advantage is hard to come by. The sustainability framework provides some food for discussion. Because almost any advantage gained by a company can eventually be copied by another at some point in the future, it is an important issue for discussion.

Students who disagree with this statement might argue that there are other factors that sustain a competitive advantage. Refer them to the Piccoli and Ives framework. A few examples could be helpful; then ask students if they can add any. One example is a complementary resource such as brand name, patent, or business process. While patents are not permanent, they could provide enough lead time for the organization to update and enhance their services, extending their impact.

Students who agree with the statement will likely point out the preemption barrier, where a firm that is a leader in an area achieves loyalty or other switching cost. For instance, Apple has locked many users into the iPhone because it is difficult to transfer data and applications to the Android system. Amazon gained loyalty of customers because of early features and superb customer service. Storing address and credit card information makes future orders easy.

A more general discussion could reveal that unfortunately, the capability of the IT organization is not a sustainable advantage because people come and go, they can be bought by another organization as a move to create the capability elsewhere, and their skills and knowledge atrophy over time, when new capabilities arise. Witness IT organizations who excelled at managing mainframe applications, who are now struggling to keep up with web-based applications.

The key to sustaining any advantage comes from the way all business resources are organized and used, and ultimately that comes down to how the managers and the people are able to perform. The firm should ensure that customer relationships not only stay positive, but improve wherever possible. Information systems can be used to raise convenience, provide a pleasing experience, and raise switching costs by providing rewards. All of those require information systems.

6. Cisco Systems has a network of component suppliers, distributors, and contract manufacturers that are linked through Cisco's extranet. When a customer orders a Cisco product at Cisco's website, the order triggers contracts to manufacturers of printed circuit board assemblies when appropriate and alerts distributors and component suppliers. Cisco's contract manufacturers are aware of the order because they can log on to Cisco's extranet and link with Cisco's own manufacturing execution systems. What are the advantages of Cisco's strategic alliances?

ANS: Cisco is linked via its extranet to contract manufacturers who print circuit board assemblies. The circuit boards can be provided when the order is made, or shortly thereafter. This reduces the circuit board inventory that Cisco needs to maintain. Similarly, since it is linked to component suppliers, it can be anticipated that Cisco's inventories for component supplies can be maintained for several days (or less) of manufacturing needs, instead of for weeks or months. The distributors linked via the extranet can be alerted that a customer order is being processed. This can help them schedule the delivery and complete the paper work so that the customer order can be completed more speedily. By making the processing more efficient, inventory and processing costs may be reduced. Ultimately this may result in reduced prices and speedier delivery to the customer.

b) What are the risks to Cisco? To the suppliers?

ANS: Cisco Supply Chain Management can improve the way a company finds raw components it needs to make a product or service, manufactures that product or service, and delivers it to customers. But sharing that information might increase the risk of a security breach, which would open up sensitive data to attack. Both Cisco and suppliers are vulnerable. Further, Cisco's long-term needs would be immediately known to suppliers, and they could be tempted to increase prices on some products that are to be in higher demand. Suppliers might also count too heavily on that information, and if it is not accurate, they might be caught short on particular items.

Further Discussion Questions

1. Social networking, used strategically, can be viewed as an information resource. Select a firm to analyze. Explain how SN can be used as an IT Asset and how the skills acquired by corporate staff can be viewed as an IT Capability.
2. Apple's iPad is saturating the market, commanding huge market share. Use Porter's five competitive forces model to analyze how Apple has attained a competitive advantage in the tablet market.

Cases

Case Study 2-1: *Amazon Go: How far can it go?*

This is an interesting, short case about a new concept in physical shopping. Amazon created a new vision for in-store shopping in its pursuit of becoming the largest and most customer-centric company it can be.

1. Assess the time savings of not having to cope with a line in a convenience store. How would it impact your life? Stated another way, does Amazon Go have a genuine competitive advantage, or is it simply a gimmick that will likely fade after it loses its novelty? If it has a genuine competitive advantage, which of the three types described in Chapter 1 does it represent?

Ans: Students should find this an interesting question. They might realize that the time savings could be quite small unless the store is extremely busy. Convenience stores tend to have lines intermittently, but students might not have experienced those lines very often. Assure them that there are lines from time to time and the time savings could be significant, especially for customers in a rush. Some students might remark that the time savings of perhaps 5-10 minutes is not very significant in the grand scheme of things and others might argue that for a person in a hurry, that is quite important.

2. Describe how Amazon Go is positioned (or not positioned) to resist each of the Five Forces.

Ans: The answers could be wide-ranging. Examples of those answers could be: (1) Current competition: Differentiated service is an excellent draw and lowers that force. (2) New entrants: Highly technical, proprietary solution would be difficult to copy, which lowers that force. (3) Customer power: Unique, interesting and fast concept lowers buyer power. (4) Supplier power: Students might find no impact here, but it is possible that the hardware is industry-standard and therefore no supplier is empowered to provide pressures. (5) Finally, current substitutes like grocery stores or on-line stores will slow down the customer or force him or her to travel further, and therefore, are not a significant force. Things are quite bright currently, but of course unknown or unannounced future technology changes could disrupt this model.

3. Which of the four sustainability factors are positioned to help Amazon Go? Describe how.

Ans: Students might mention the following: (1) IT Project Barrier: There are likely complex systems underlying the technology. Some might even contain so-called "Business Method Patents," which prevent other companies from providing the same business process. (2) IT Resources and Capabilities Barrier: Customer data will help Amazon determine product styles/types to order and levels of future inventory, providing Amazon with a head start given their extensive testing and publicity. (3) Complementary Resources Barrier: The brand name and experience gained with Whole Foods is likely to be quite helpful to Amazon Go! (4) Preemption barrier: Switching cost is very low, so it is not likely for preemption to be of significant help.

4. Consider the world in twenty years. Argue (a) for, and (b) against the proposition that most stores will be just like Amazon Go.

Ans: Answers will vary, but on the pro side (a): Automation continues to replace people in many positions. There is little need for a large number of humans to serve as personnel

in a store. Of particular concern would be cashiers, which have been replaced by automation in grocery stores world-wide. On the con side (b): With most technologies, there are often unforeseen problems that arise. Perhaps customer theft will be easier. Perhaps software errors will crop up. Large crowds could overwhelm the system. Customers might prefer having the human touch or might mistrust a fully automated store.

5. Are there opportunities for improving the efficiency of the value chain of a typical retail store?

Ans: Students might think hard for a while and then perhaps come to the conclusion that today's stores have been stripped to the bone. Salespeople and cashiers are sometimes becoming harder than ever to find in stores, and that could continue, especially if the minimum wage increases substantially to enable personnel to have a living wage. All of the major grocery and drug store chains have automated checkouts, and some grocery stores enable scanning while shopping, preventing the need to wait in line to check out. Many opportunities have already been implemented.

6. How closely aligned are the business strategy and IT strategy for Amazon Go? Support your answer.

Ans: The business strategy of being the main "go-to" store in a wide spectrum of product lines are in close alignment with the IT strategy of making the convenience store extremely, well, convenient! Students might come up with more specific issues, such as using IT for competitive advantage, providing a unique service to lock in customers, and synergies from connecting purchases and payments with Amazon's website.

7. Several risks of rolling out technologies that yield a competitive advantage are identified in the chapter. Which of these risks do you believe should be of greatest concern for Amazon Go?

Ans: Legal requirements have haunted Amazon Go! as the case describes. Amazon might awaken a sleeping giant, or current convenience store chains. Specifically, the major chains could band together and create something similar or improving on Amazon's idea. The class might conclude that the timing is not premature, so timing should not be an issue.

8. If you were the CEO of Amazon, to what extent would you expand Amazon Go? In your answer, consider the positioning of Amazon's Whole Foods chain.

Ans: Students will likely state that thorough testing will be crucial given that expensive purchases in real estate and investments in IT equipment and software are not as scalable as an online store. Expansion should follow successful demonstration of feasibility and profitability. When those issues are settled, then Amazon could embark on a program of extensive growth. Perhaps a section of their Whole Foods stores could be devoted to the program early on.

9. Amazon has made it profitable to adopt a two-sided platform where third party vendors can also sell on Amazon and where Amazon receives a commission on every sale. If Amazon Go decided to license the enabling technologies to firms such as Wal-Mart and Target, do you believe the net impact would be positive or negative to Amazon Go? Why?

Ans: There is no way to answer this question definitively. Firms throughout the last several decades have developed technologies then licensed them to competitors. In some industries the licensing of the technology is more profitable than the users of the technology. Selling products is costly, requiring substantial real estate and personnel expenditures. Licensing technology at a high enough price in thousands of locations can be incredibly lucrative. All of this depends on licensing prices and the number of potential customers.

Case Study 2-2: Groupon

Students are likely familiar with Groupon but not with the operational issues faced by Groupon. They should visit the website (<http://www.groupon.com/>) and visit the entry on Wikipedia. From the case in the textbook and this additional information, they should be able to answer the questions posed.

1. How does information technology help Groupon compete?

Ans: IT creates the network and communicates daily deals to participating potential consumers. The deals are e-mailed to the public. The system also tracks acceptance of the offers, determining when constraints are satisfied.

2. Do you agree or disagree with the statement that “Groupon has no sustainable competitive advantage”? Please explain your point of view.

Ans: Student responses might support or oppose the statement. The important point is for them to justify their positions with logical arguments. The case seems to agree with the statement, since there are a number of competitors entering the market, and Groupon’s service is not truly unique. However, Groupon could continue to innovate in order to establish itself as the premier service for this type of market. Branding its product will be critical, so that consumers only think of Groupon for this activity. The Piccoli and Ives framework will provide useful discussion material.

3. How does Groupon add value to the companies whose offers are sold on the site?

Ans: The value created for companies is both direct and indirect. As stated in the case, a large number of companies realize a loss from the volume of coupons redeemed. However, they increase their visibility by appearing on Groupon’s site and the coupons get the target customers to visit the company. Getting new customers through the door creates the opportunity for up-selling and cross-selling.

4. Why do you believe Groupon Now was integrated into the main Groupon site? Explain whether you think that it was a success or a failure, and why.

Ans: Students might mention that planning in advance will be beaten by endeavors that enable onsite, last minute choices. The Groupon Now concept appears to be successful, as the expansion of sales and geography in the following years provides evidence. The growth came along in spite of expanding competition.

5. What would you advise Groupon leaders to consider as their next application?

Ans: Student responses should be creative and reflect serious possibilities. One obvious extension would be to capitalize on the social networking phenomenon. Another possibility is to create an application designed specifically for entrepreneurs. Third, there might be an application that could limit the number of coupons based on quantity or time. This would encourage more members to respond with urgency and mitigate the negative financial losses of companies offering coupons.

6. Analyze the business model of Groupon using Porter's five forces model.

Existing competition: Considering Groupon's industry as the paid couponing industry, there is not very much competition. But considering their industry as couponing in general, there is quite a bit of competition. Newspapers, emails, websites, and several other publications provide coupons. The unique factor here is having higher customer commitment because they must purchase a voucher for future use.

New entrants: Others who duplicate their business model have appeared, and switching costs would be unlikely to build on the end-customer's (the diner's) side. However, providing special deals to restaurants with increased use could provide switching costs.

Buyer power: Groupon provides entertaining, colorful ads to the end customers (the diners), and has preemption impacts (as the first such service). Therefore, customer loyalty might increase switching cost.

Supplier power: Considering restaurants as suppliers, this is a difficulty in Groupon's model. Without restaurants, Groupon would not be able to operate. Groupon therefore has a high threat in supplier power. However, if customer loyalty is high, Groupon would be able to reduce supplier power somewhat, so restaurants might find Groupon campaigns to be more successful than those of other similar firms.

Substitute products: This depends on how the industry is defined. If it is defined narrowly (paid couponing), there are many substitutes. If it is defined broadly (couponing in general), then substitutes might include restaurant "specials" that might be offered without a coupon at all. Also, a substitute might be to choose a less expensive restaurant (such as a fast food outlet).

Students will likely have different assessments of the individual elements. They should be able to explain their decisions, describing the forces experienced by Groupon.

Supplemental Cases

Groupon by Chatterjee, S., O’Keefe, S., and Streiff, A., Richard Ivey School of Business. W12674, 15 pages, 2012 (industry: retail trade)

This case study provides a foundation for the “collective buying industry,” a new business model. As discussed in the case, the future is uncertain, relying on the innovative decisions of the market leaders. This case is a good compliment to the mini-case provided in the chapter. Students will be asked to recommend a course of action for the company to maintain the incredible growth trajectory.

Apple Inc. in 2010 by Yoffie, D.B. and Kim, R., Harvard Business School. 9-710-467, 25 pages, 2011 (setting: California)

Apple launched the iPad to the market in April 2010, on the heels of the incredibly successful iPhone and iPod products. This case study explores the competitive challenges Apple faced worldwide, particularly with struggling sales of the Macintosh personal computer. Students will investigate the growth potential for this new product, suggesting ways to build market share into the future.

Websites

www.cio.com

CIO and CIO.com are published by CXO Media Inc. to meet the needs of CIOs (Chief Information Officers) and other information executives. CIO is read by more than 140,000 CIOs and senior executives who oversee annual IT budgets in excess of \$175 million. CIO.com serves over 12 million pages annually.

www.groupon.com/

The Groupon web site provides details on the company and the service provided. In particular, students should visit the “How It Works” tab. This is a good reference site when discussing the case study.

www.zipcar.com

The ZIPCAR web site shows how they function, rates, etc. This can be a good tool when discussing the case study.

www.uber.com

The Uber web site shows how they function, rates, etc. This can be a good tool when discussing interesting business strategies enabled by IT.

<http://www.zara.com/>

The website is aesthetically pleasing, presenting many samples of their products. Their mission statement page is devoted to the company's eco-friendly environmental focus. This can be used to supplement the textbook discussion of strategic use of IT at Zara.

News:

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