Introduction to Information Systems People Technology and Processes 3rd edition Wallace Solutions Manual

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Chapter 2
Information Systems and Strategy

Learning Objectives

1. Describe Porter's five competitive forces that shape industry competition.

2. Explain how disruptive innovations, government policies, complementary products and services, and other factors affect how the competitive forces operate.

3. Identify the components of the value chain and explain its extended version.

4. Describe how information systems apply to competitive strategies for business.

5. Explain how information systems apply to strategy for nonprofit organizations and governments.

6. Explain why the role of information systems in organizations shifts depending on whether the systems are deployed to run, grow, or transform the business.

Solutions to Chapter Review Questions

2-1. What are the five competitive forces that shape industry competition? How are these forces interrelated?

The five forces that influence industry competition are (1) threat of new entrants, (2) power of buyers, (3) power of suppliers, (4) threat of substitutes, and (5) rivalry among existing competitors. The five forces determine industry structure and how profitable companies in the industry will be. The five interrelated forces are "internal" to the industry.

2-2. How do disruptive innovations, government policies, complementary products and services, and environmental events affect how the competitive forces operate?

Disruptive innovations, government policies, complementary products and services, and environmental are "external" forces that affect how the five forces operate. For example, certain innovations can flood through an industry, changing everything in their path, forcing every company to change its strategy.

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2-3. What are the components of the value chain? Which components comprise the primary activities? Which components comprise the support activities? What is the extended value chain?

The primary activities of a value chain are: (1) bring in raw resources; (2) make the product or service; (3) market the product or service; (4) deliver the product or service; and (5) provide customer support. The support activities are: (1) administration and management; (2) human resources; (3) technology support; and (4) procurement. The extended value chain links the company's value chain with the value chains of its suppliers and its customers.

2-4. How do managers use benchmarks to analyze the value chain and IT spending?

Organizations use the value chain model to compare their performance to industry benchmarks and identify areas that should be targeted for improvement. For example, an organization may compare its budget allocation to each value chain activity to industry benchmarks (i.e., average expenditures in its industry). IT benchmarks include average IT spending by industry and amount spent on IT per employee.

2-5. How do information systems apply to competitive strategies for business?

All of the competitive strategies leverage information systems to achieve success. Low cost leaders must automate as much as possible using information systems to reduce costs in many different ways depending on the industry. Organizations with a differentiated product or service often rely on innovations in IT to implement their strategy.

2-6. How are information systems used to run, grow, and transform a business?

Information systems are used to run a business by supporting productivity throughout the organization, in every component of the value chain, helping to streamline processes in administration and management and improve customer loyalty. As a strategic enabler, IT can be used to grow and transform a business by facilitating a new business model.

2-7. How do information systems apply to competitive strategies for nonprofit organizations?

Nonprofit organizations can apply information systems to their competitive strategy in two critical areas: fund-raising and volunteer management. Specialized information systems assist nonprofits in managing donations and online fund-raising as well as building relationships with volunteers.

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2-8. How do governments use information systems to improve services and fund research?

Governments use information systems to improve services in varied ways depending on the specialized requirements and responsibilities of the agency providing the service. For example, the military uses real-time systems to support military personnel and material distribution; a ministry of information and broadcasting uses information systems to provide news services and other types of information broadcasts; state and local police use information systems to access information on criminal offenses. Government funding is critical to certain kinds of research projects that private investors might avoid for various reasons including risk and uncertainty. For example, the Internet was developed by the Defense Advanced Research Projects Agency. Currently, green sources of energy and the smart electricity grid are receiving significant funding from governments.

Solutions to Projects and Discussion Questions

2-9. Although many people think electronic book readers are too expensive, there is a massive global demand for the devices, and the trend is likely to continue for some time. Search the web to learn more about how digital technology has disrupted the book publishing industry, and prepare a 5-minute presentation of your findings.

Answers will vary. At a minimum, students should be able to list several effects of digital technology on book publishing such as a decrease in sales of non-digital books and new options for self-publishing books and make them available on Kindle and iBooks and other websites.

2-10. Is a value meal related to a value chain? The value that attracts over 60 million customers to McDonald's every day comes from capabilities that are based in its value chain. Briefly, describe McDonald's value chain and discuss how information systems facilitate each component in the chain. Can you think of a way that information technology could improve your next trip to McDonald's?

Answers will vary but should include an example of at least one information system that is used in each component of the value chain and one improvement using information technology.

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2-11. Information technology enables nonprofit organizations to reach out to constituents 24 hours a day, 7 days a week. Visit www.redcross.org and note the various ways this charity is using its website to communicate with volunteers, donors, and people who need assistance. Compare the Red Cross site to your university's alumni association website. Prepare a brief summary of your findings that includes a list of specific services provided on each site. How does each website support the organization's strategic goals?

Answers will vary depending on the services made available by their local alumni association. Because the content of www.redcross.org may change, expected results will vary but should include services such as these: Get Assistance, Volunteer, Take a Class, and Give Blood.

2-12. Government agencies and corporations have similar information needs. Identify and briefly discuss specific examples of information systems typically used by a law enforcement agency such as a state or local police department. Which of these systems are used to "run" the business? Which are used to fulfill the agency's mission?

Answers will vary, but should include an example of an information system used to manage operations such as human resource scheduling, payroll, or accounts payable. The mission of a state or local police department includes safeguarding the lives and property of the people it serves. Examples of systems to fulfill the agency's mission may include systems to manage criminal history records, arrest warrants, stolen vehicles and property, fingerprint identification, sex-offender registration, and concealed handgun licenses.

2-13. What are the three basic strategies that companies adopt to compete? Describe how information systems support each strategy. What is a "hybrid" strategy? Describe a company, product, or service that adopts each of these four competitive strategies.

The three basic strategies are (1) low cost leadership, (2) product differentiation, and (3) focused. The low cost leadership strategy relies on information systems that automate and streamline processes and eliminate costly human labor. The product differentiation strategy requires systems that add special features or unique add-ons for which customers are willing to pay more. The focused strategy relies on special features for a particular market niche such as a business or government segment. A hybrid model incorporates aspects of several strategies. An example of a hybrid strategy is providing the best value for the lowest price. Answers will vary regarding names of companies, products, or services that adopt each of these competitive strategies. This question draws on the student's ability to understand the four strategies and their knowledge of companies, products, and services.

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2-14. What are network effects? Search the web or visit websites such as Eversave.com and AmazonLocal.com and discuss how network effects can impact the threat of new entrants. Is there an Eversave offering or an Amazon Local deal in your hometown? How would you describe the long-term value proposition of this online shopping phenomenon? In your opinion, are there any disadvantages for an organization that offers a daily deal?

Network effects refer to the increased value of a product or service, which results simply because there are more people using it. Eversave illustrates network effects by offering a daily deal to people once a group reaches a "tipping point" of people who agree to participate. A value proposition describes the benefits, cost, and value of a product or service that a business can deliver to customers. Eversave delivers customers to those businesses who sign up to sponsor a daily deal. Answers will vary on the disadvantages for an organization that offers a daily deal. Although Eversave offers can drive traffic to a business, unless the number of coupons offered is capped, the offer can overwhelm a small business. Additionally, some businesses report mostly one-time buyers rather than sales that turn in to repeat customers.

2-15. In 2011, the U.S. federal government collected approximately $2.3 trillion in taxes including individual income taxes, Social Security/ Social Insurance taxes, and corporate taxes. Visit www.irs.gov and describe how this website enhances services to the public. What types of services are available to individuals? To businesses? To charities and nonprofit organizations? What kind of "tax information for students" does this site provide? Prepare a 5-minute presentation of your findings.

The list of services provided at www.irs.gov could be extensive. For example, services provided to individuals include assistance with finding a "free file" provider, transmitting a tax return electronically, and checking on the status of a tax return. Services provided to businesses include electronic submission of tax returns, links to compliance and enforcement information, and taxpayer advocate services. Services provided to charities and nonprofit organizations are similar to those provided to businesses. Services provided to students include links to an interactive tax education program and information on education credits and student loan interest. Student lists will vary and should include specific services for each category of client.

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2-16. Why are IT resources described as a commodity? How do IT resources "matter" in terms of the different roles they play in an organization? Which component of an information system is most critical to success in growing and transforming the business? Why?

A commodity is a product for which quality is the same no matter who produces it. Examples are milk and paper. The price of a commodity fluctuates depending on supply and demand. Nicholas Carr suggests that IT resources have become so commonplace that their strategic importance has diminished, and they have become an infrastructure commodity, much like electricity. Information technology resources that are used to run the business generally fall into the commodity category where price competition is fierce. Consequently, organizations can avoid wasteful spending for these systems and get the best value for the lowest cost. On the other hand, information systems that are used to grow and transform an organization include the "people" component. Although many technologies are commodities, the ability to extract their value requires human imagination. Innovative business practices, new products and services, and changed processes come from talented people who know how to leverage information technology.

2-17. According to the Computer History Museum (www.computerhistory.org), the Kenbak Corporation sold the first personal computer in 1971. Since then, several billion PCs have been sold under various brand names. Currently, HP, Dell, Acer, Lenovo, and Asus are the leading brands in the highly competitive PC market. Work in a small group with classmates to analyze and describe the personal computer industry using the five competitive forces model.

Students should be able to provide a brief analysis that describes competitive rivalry as high due to little differentiation in PCs, supplier power that comes from the lack of substitutes for their input product and the cost associated with changing suppliers, and buyer power that comes from customer price sensitivity and the low cost of switching to another PC. The threat of substitutes is relatively high because it is easy for customers to switch to alternate products such as laptops, notebooks, and netbooks. The threat of a new entrant in this industry is relatively low due to barriers to entry such as acquiring necessary inputs from key suppliers.

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2-18. Work in a small group with classmates to discuss how information technology plays a role in the competitive environment of your college or university. How do you describe the competition to attract and retain students? How do you describe the threat of substitutes in higher education? How does the threat of substitutes affect supplier power in education?

Answers will vary. At a minimum, students should provide a list of ways that IT is used by their college or university to attract and retain students and discuss the competitive environment of their school. The threat of substitutes in higher education includes programs provided by community colleges and technical schools, as well as online degree programs offered by traditional and virtual universities. As students have more choices, supplier power for institutions of higher education is reduced.

Solutions to Application Exercises

2-19. Excel Application: IT Benchmarks

Jay's Bikes is a family-owned and -operated business that stocks a wide range of bikes designed to fit the needs of professional riders, a child's first bike, and everything in between. The business has 12 full-time employees. Jay has asked you to create a spreadsheet from the data in Figure 2-21 to calculate average IT spending so that it can be compared to the retail industry average. What is the average IT spending in the retail industry? What is the average IT spending per employee in the retail industry? How do Jay's IT expenditures compare to the industry averages? How much would Jay need to increase spending in order to match the retail industry average?

The average IT spending in retail is 1.5 percent of revenue. The average IT spending per employee in retail is $5,379.

Students should use formulas to calculate Jay's average IT spending as a percent of revenue and his average IT spending per employee, then use Goal Seek to determine how much he needs to increase IT expenditures to match the industry benchmark of 1.5 percent of revenue or $5,379 per employee. To answer the question, "How much would Jay need to increase spending in order to match the retail industry average?," students should use a formulas to calculate (a) the difference between Jay's current IT spending as a percent of revenue and the target spending as a percent of revenue and (b) the difference between Jay's current IT spending per employee and the target spending per employee.

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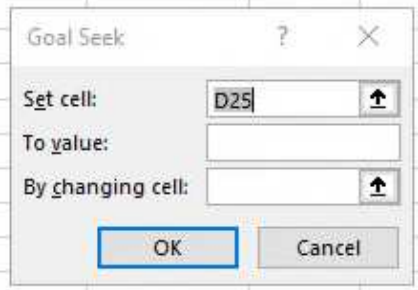
	A	B	C	D	E	F	G
1		**Jay's Bikes**					
2		IT Benchmarks					
3							
4	Revenue	Apparel & shoes	$ 1,250,000				
5		Bike accessories	550,000				
6		New Bikes	2,650,000				
7		Used Bikes	18,500				
8		Bike repairs	33,000				
9			$ 4,501,500				
10							
11	IT Expenditures	Hardware	$ 15,000				
12		Software updates	18,000				
13		Software licenses	4,500				
14		Software support	4,500				
15		Employee training	5,000				
16		Web site development	5,000				
17		Internet access	$ 1,200				
18			$ 53,200				
19							
20	Jay's Employees		12				
21	Jay's IT spending as percent of revenue		1.18%				
22	Jay's IT spending per employee		$ 4,433				
23							
24			IT Industry Benchmark	Target IT Expenditures (Total)	Required Increase (Total)		
25	Target spending as percent of revenue		1.5%	$ 67,523	$ 14,323		
26	Target spending per employee		$ 5,379	$ 5,627	$ 1,194		



2-20. Access Application: Telethon Call Reports

The volunteer coordinator of the Downtown Emergency Shelter has asked you to use the information provided in Figure 2-20 to create an Access database. (You can download the Excel file called Ch02Ex02 and import the data into your database.)

Your instructions are to create two tables (donors and volunteers) and prepare a Phonathon Call Report for each volunteer. The shelter manager wants you to add three fields to the donor table: this year's contribution, a calculated field that shows the average contribution per employee, and a calculated field that shows a target contribution that is 5 percent higher than last year's contribution. The report should list the volunteer's name and number, as well as the following donor information: donor number, donor name, company name, phone number, and contribution amount from the prior year, number of employees, average

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contribution per employee, and target contribution for this year. Although address information will not be included on the report, that information will be used to send receipts to the donors at the conclusion of this year's fund-raising event.

Students should produce an Access database with two tables by importing data from the Excel file named Ch02Ex02. Students should create a query to produce the Phonathon Call Report. The query includes two calculated fields: average contribution per employee and target contribution per employee for the current year. Set the format for both fields to currency in the Property sheet.

Bob's Phonathon Call Report

Bob's Phonathon Call Report

Volunteer Number	First Name	Co Name	Donor No	Phone No	Employees	2015 Contribution	Average Per Employee	Target Per Employee
H042	Robert	Alternate Health Spa	M697	312-341-9979	3	$878.65	$292.88	$307.53
		Carol's Beauty Shop	C456	312-044-2956	17	$2,365.00	$139.12	$146.07
		Green City Grocers	E105	630-123-4598	32	$6,234.45	$194.83	$204.57
		Hollywood Pet Care	Q349	630-234-3484	9	$563.00	$62.56	$65.68
		Mia's Nail Salon	L345	630-345-0080	12	$2,644.25	$220.35	$231.37
		Perfect Cleaners	S493	312-451-0080	11	$2,651.00	$241.00	$253.05
J234	Bob	All Right Auto Repair	A234	630-345-3333	21	$3,209.00	$152.81	$160.45
		Al's Music Shop	A226	630-555-5554	8	$945.50	$118.19	$124.10
		Do It Rental	D256	630-876-3476	19	$3,465.00	$182.37	$191.49
		Haney Enterprises	HJ376	630-345-3767	36	$9,345.00	$259.58	$272.56
		The Book Nook	W098	630-345-5656	26	$5,234.00	$201.31	$211.37
		The Butcher Shop	D345	312-456-0080	5	$928.00	$185.60	$194.88
M173	Sara	Day & Night Gym	U602	630-434-5555	32	$2,535.00	$79.22	$83.18
		Downtown Bikes	A657	630-186-7689	12	$1,248.00	$104.00	$109.20
		Edies Ice Cream Shop	E456	312-345-7890	24	$5,237.76	$218.24	$229.15
		Nelson's Gallery	W456	630-345-8235	3	$2,766.00	$922.00	$968.10
		Say It With Flowers	A754	312-972-3456	14	$2,500.00	$178.57	$187.50
		The Barbeque Pit	F234	312-555-5445	18	$2,926.74	$162.60	$170.73
		The Little Card Shop	T706	312-455-8876	8	$1,834.00	$229.25	$240.71

Solutions to Case Study Questions

Case 1— Can GameStop Survive with Its Brick-and-Mortar Stores?

2-21. Perform a five forces analysis of the online gaming industry. What are the implications of the five forces analysis for GameStop?

The purpose of this question is to have students apply a framework from the chapter to the case. A five forces analysis provides an idea of whether or not an industry would be attractive to enter. In the online gaming industry, entry barriers are reasonably low (implies that industry is not attractive), because all that is required to enter the industry are developers to program a game and a website to publish the game. There are numerous available substitutes (implies that industry

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is not attractive), as online gaming is only one of many forms of entertainment. Internal rivalry is increasing (implies that industry is not attractive) with multiple providers of online gaming. Buyer power is low (implies that industry is attractive), because buyers are individual consumers and no consumer wields undue market power. There is some supplier power (implies that industry is moderately attractive), because there may be a limit to the number of talented developers available for hire. This five forces analysis suggests that the online gaming industry has low to moderate attractiveness. It is not necessary for students to arrive at this suggested answer, instead it is more important for students to get experience in performing and drawing implications from a five forces analysis.

2-22. What role have information systems played in the five forces you identified?

Building from the five forces analysis in the previous question, IS plays a key role in at least three of the five forces. For example, one reason that barriers to entry are low is because online distribution reduces the barriers to entry. A game publisher does not require physical logistics to distribute games to retail locations, the publisher can simply distribute directly to consumers via the Internet. One reason that substitutes for online gaming are high is that the target demographic can use online social media (another form of entertainment) at no cost. One reason that internal rivalry is increasing is because existing retailers (such as GameStop) are adding online channels. It is not necessary for students to develop this precise analysis, instead it is more important for students to understand the relationship between IS and strategy.

2-23. How has GameStop used information systems to compete more effectively?

The five forces analysis performed in questions 1 and 2 relate with GameStop's evaluation of the industry and GameStop's response to the industry. The purpose of this question is to have students understand how firms can incorporate IS as part of their strategy. GameStop acquired an online gaming company to embrace online gaming as a substitute for offline gaming and to enter that segment of the industry. Firms can use IS as a tool to implement their strategies.

2-24. What other strategic actions will GameStop need to take to protect its business?

The purpose of this question is to have students understand that IS are only one component of strategy, and that organizations need to integrate IS together with other components to successfully execute a strategy. For this case, in addition to acquiring the online gaming company, GameStop will need to integrate operations of the online gaming company with its brick and mortar operations, to take advantage of GameStop's physical footprint. Offering opportunities to earn PowerUP reward points on Kongregate is an example of how the company can

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attract more in-store customers. The company might also conduct gaming tournaments that further integrate its online presence with in-store events. GameStop management will need to think through whether the firm will compete more based on low price (in which case it might increase its focus on online gaming) or quality service (in which case it might maintain focus on the brick and mortar stores and personnel).

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Case 2— The Battle for Net Neutrality

2-25. What are the strategic interests of carriers? What are the strategic interests of websites?

The purpose of this case is to give students the opportunity to think through strategic considerations at the industry level, as opposed to the firm level as in the GameStop case. In this case, the strategic interests of carriers such as Verizon and AT&T are not necessarily aligned with the strategic interests of websites such as YouTube and Facebook. Carriers argue that they have invested substantial financial resources to build Internet capacity, and want to protect their ability to generate additional revenues from their investments. On the other hand, websites argue that their success depends on a direct connection to the customer and the ability to offer the customer an exceptional user experience.

2-26. How do the interests of carriers differ from the interests of websites? What are the implications for websites from a value chain perspective?

The purpose of this question is to help students further understand the relationship between IS and strategy at the industry level. Building from question 1, one way for carriers to protect their investments and generate additional revenues would be to have users pay for enhanced Internet connectivity. Another way for carriers to generate additional revenues would be to have websites pay for higher priority. On the other hand, websites would view less robust Internet access for some users or websites (implied if not all users or websites pay for enhanced access) as interference to their user experience and business models. From a five forces perspective, the decision on net neutrality could dramatically impact the proportion of online revenues that accrue to carriers versus websites (carriers are one supplier for websites), and the relative attractiveness of each industry.

2-27. What is the basis for Verizon's lawsuit against the Federal Communications Commission? Why did they claim a violation of free speech?

This question helps students understand how companies can use the legal system to fight government regulations. As a carrier, Verizon is hindered by the FCC's ruling in favor of net neutrality. Verizon is claiming a "violation of free speech" because the FCC's rulings are taking away control over the carrier's property, which in some contexts might be considered speech. Students might also answer this question more fully by researching the outcome of the case and the court's response.

2-28. What are relevant considerations on the role government could play to resolve differences between carriers and websites?

As in questions 1 and 2 above, the carriers have different interests than the websites. This situation is likely to require some resolution between these

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differences. Governments also have conflicting considerations. On one hand, governments have a responsibility to protect the rights of citizens. On the other hand, governments have a responsibility to regulate commerce. Governments will need to balance these conflicting considerations as they make decisions related to net neutrality.

Solutions to E-Project Questions

E-Project 1—Identifying Company Strategy with Online Financial Chart Tools

One useful way to catch up on a company's strategy is to check out trends in its stock price, and the net offers many free tools. Go to Google's finance website (www.google.com/finance) and type the stock ticker symbol for GameStop (GME) into the search bar to pull up current news about the company, including a graph of its share prices, from Google finance.

2-29. The letters on the graph tie to the news stories, and some of them have major effects on the company's stock. Change the graph to show 1 year of data by clicking '1y' at the top left of the graph. Do you see any sudden changes in share price paired with a news story? Does the news shed light on how investors view its strategy or the execution of it?

The answer to this question will vary based on the date the student performs the search. A screen shot of the search as of December 2016 is below. This screen shot shows a drop in the stock's prices in December of 2016, tied to recent price moves of shares.

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2-30. One way to get an idea of how well the company is doing is to compare the trend in its share prices to the Dow Jones Industrial Average. Check the box next to Dow Jones at the top of the graph and compare the trends. How does GameStop's performance compare?

The answer to this question will vary based on the date the student performs the search. A screen shot of the search as of December 12, 2016, is below. This screen shot shows that stock price for GameStop decreased faster than the Dow Jones Industrial Average (DJIA) during the period shown in the graph.

E-Project 2— Analyzing Movie Download Times with Excel

In this e-project, you will obtain and analyze information about download times to assess Internet connectivity.

2-31. Download the file called CH02_MediaDownloads. This file shows the approximate file sizes for different kinds of media, along with estimated download times.

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2-32. Add a column called Speed Advantage and enter the formula that shows how many times faster the download will be if one uses fast broadband (+d2/+c2). Copy the formula to the remaining rows, and then add a row at the bottom called "AVERAGE". On average, how much faster is it to download media files using fast broadband compared to regular broadband?

On average, it is 4.85 times faster to download media files using fast broadband compared to regular broadband. See screen shot of completed Excel spreadsheet below.

	A	B	C	D	E	F	G
1	Media	File Size in MB	Download time in seconds with fast broadband (5 Mbit/s)	Download time for slower broadband (1 Mbit/sec)	Speed Advantage	Download time per MB (fast broadband)	Download time per MB (regular broadband)
2	3 minute song	3	3.5	19	5.43	1.17	6.33
3	3 minute video	18	21	108	5.14	1.17	6.00
4	9-hour audiobook	110	120	600	5.00	1.09	5.45
5	45-minute TV show	265	318	1390	4.37	1.20	5.25
6	45-minute HDTV show	600	750	3120	4.16	1.25	5.20
7	2-hour movie	1250	1260	6300	5.00	1.01	5.04
8	2-hour HD movie	4000	3900	18900	4.85	0.98	4.73
9				Average	4.85	1.12	5.43

2-33. Add two more columns called Download Time per MB (Fast Broadband) and Download Time per MB (Regular Broadband). Compute these values by dividing the appropriate download time by the file size in MB, and add the average at the bottom.

a. What is the average download time per MB for fast broadband?

The average download time is 1.12 seconds per MB for fast broadband. See screen shot of completed Excel spreadsheet above.

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b. For regular broadband?

The average download time is 5.43 seconds per MB for fast broadband. See screen shot of completed Excel spreadsheet above.

2-34. Download the video file called CH02_TestVideo and time how long it takes.

a. What is the file's size in MB? If the file size is represented in gigabytes (GB), multiply that number by 1,000 to convert to megabytes (MB).

The TestVideo file is 2.467 MB.

b. Using the average download times you computed, what should be the download time using fast broadband? What would it be for regular broadband?

The download time for fast broadband should be (2.467 MB * 1.12 average) = 2.763 seconds. The download time for regular broadband should be (2.467 MB * 5.43 average) = 13.396 seconds.

c. How does your download time compare to these estimates? Do you have fast broadband, regular broadband, or something else?

The answer will vary based on where the student performs the test download. A download time in the range of 2–3 seconds suggests fast broadband, and a download time in the range of 10–15 seconds suggests regular broadband.

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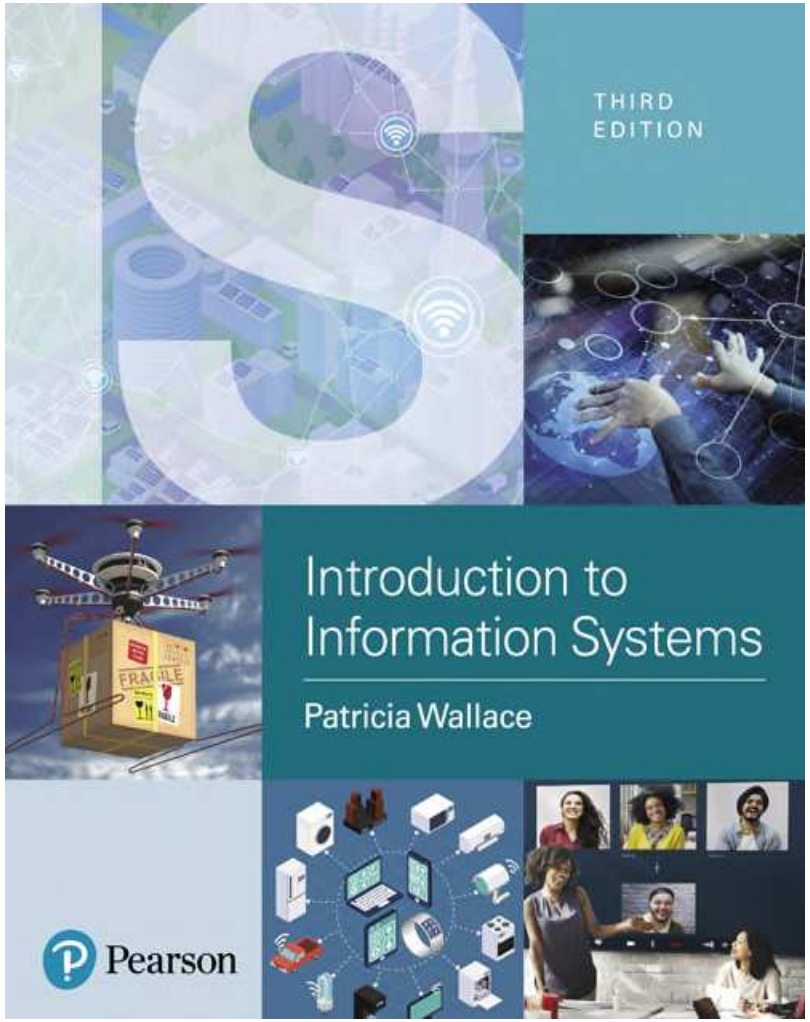
Introduction to Information Systems

Third Edition



Chapter 2

Information Systems and *Strategy*

Pearson

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Learning Objectives

- Five forces
- Other factors
- Value chain
- Business strategy
- Nonprofit/government strategy
- Role of IS

Pearson

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Baidu

- Chinese visitors
- Chinese language
- Competition

Pearson

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Introduction

- Strategies rely on IS
- IS transform industries
- Companies gain advantages with IS
- Nonprofits achieve missions with IS

Pearson

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Introduction

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1. New entrants
2. Buyers
3. Suppliers
4. Substitutes
5. Rivalry

Pearson

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Threat of New Entrants

- Incumbents and IS
- Network effects
- Switching costs

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Power of Buyers

- Few buyers
- Similar products
- IS shift buyer power

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Power of Suppliers

- Only game in town
- IS impose switching costs

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Threat of substitutes

- Alternative products at attractive savings
- IS role in substitutions

Source: Andersen Ross/Exactostock/SuperStock.

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Rivalry Among Competitors

- Price cuts
- Slow growth

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External Factors

1. Disruptive innovations
2. Government policies
3. Complementary services
4. Environmental events

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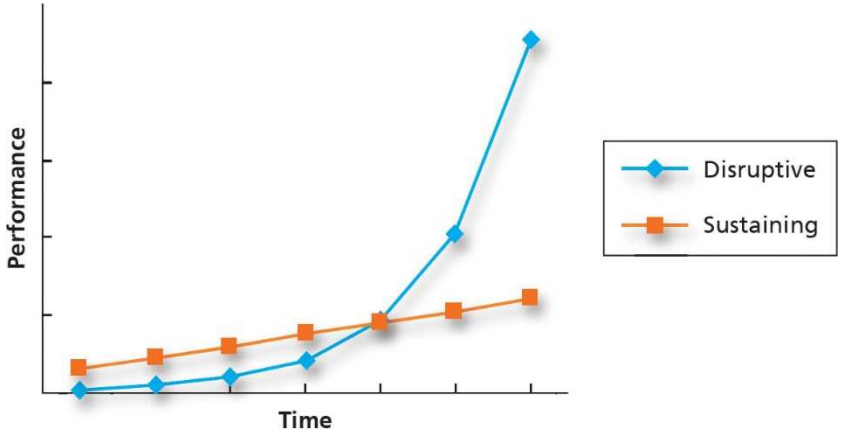
Disruptive Innovations

- Radical and unexpected breakthroughs
- Transform industry and change five forces
- Creative destruction



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Government Policies

- Affect how industries operate and evolve
- Organizations lobby for government action
- Judges and courts affect industry structure

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Complementary Services

- Industries are interrelated
- Companies embedded in ecosystem
- Visionaries lead to new beneficial directions

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Environmental Events

- Major effects without warning
- Energy costs and emissions
- Leaders must consider industry and forces

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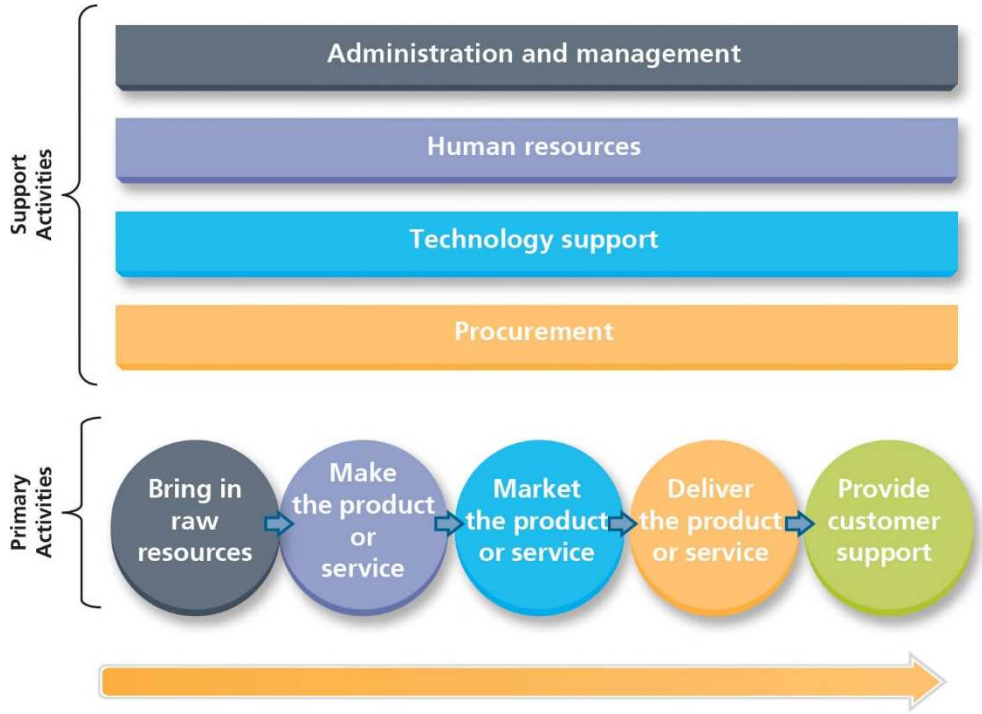
Value Chain



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- Primary activities
- Support activities

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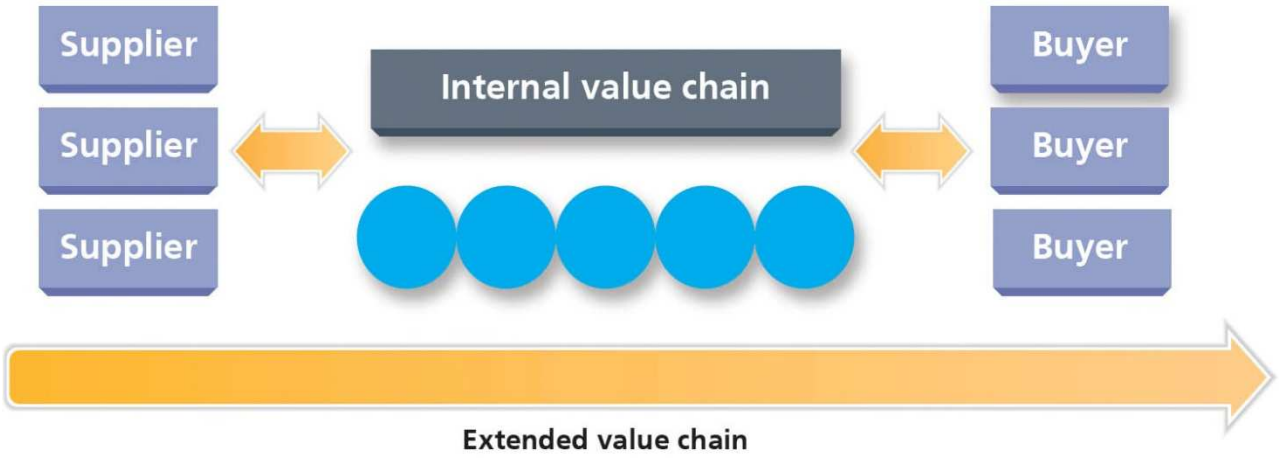
Extended Value Chain



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- Includes suppliers and customers
- Strategic opportunities for suppliers
- Strategic opportunities for customers

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Benchmarking

- Reference point used as baseline
- For value chain, percent of total budget
- Analysis identifies areas that need attention

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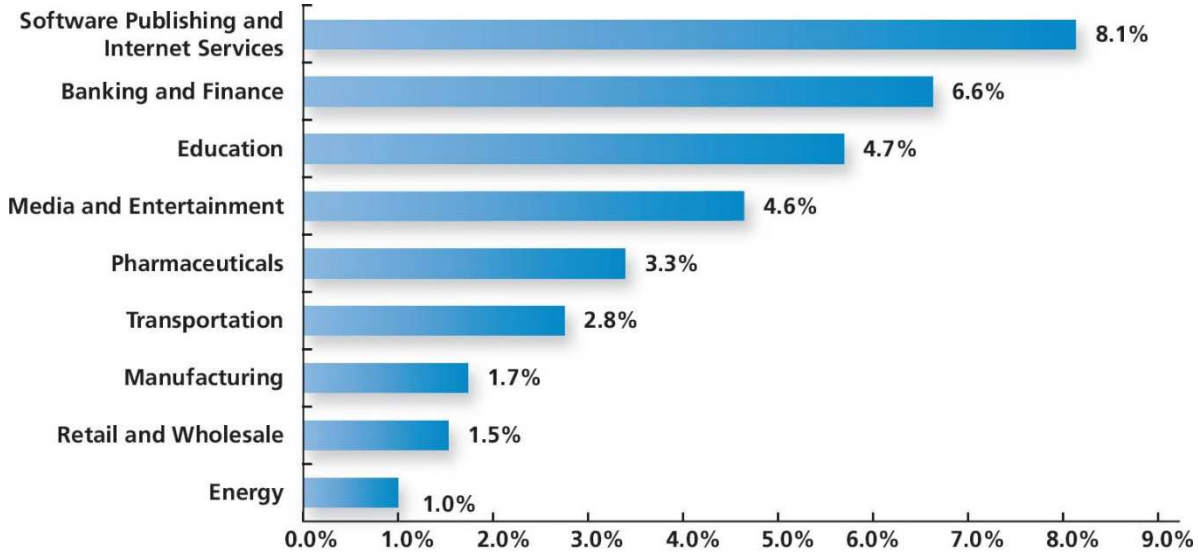
IT Benchmarks

- IT spending varies by industry and by region
- Managers can use benchmarks to assess extended value chain



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Competitive Strategies

1. Low cost leadership
2. Product differentiation
3. Focused strategy

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Low Cost Leadership

- Similar product at lower price
- Automate and streamline processes
- Reduce operating expenses
- Achieve efficiencies

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Differentiation and Focus

Product Differentiation	Focused Strategy
• Special features • Customers willing to pay more • Reduce substitutes and new entrants	• Differentiate for market niche

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IS in Strategy

Low Cost	Differentiation
• Automate • Support back office • Streamline	• Innovations

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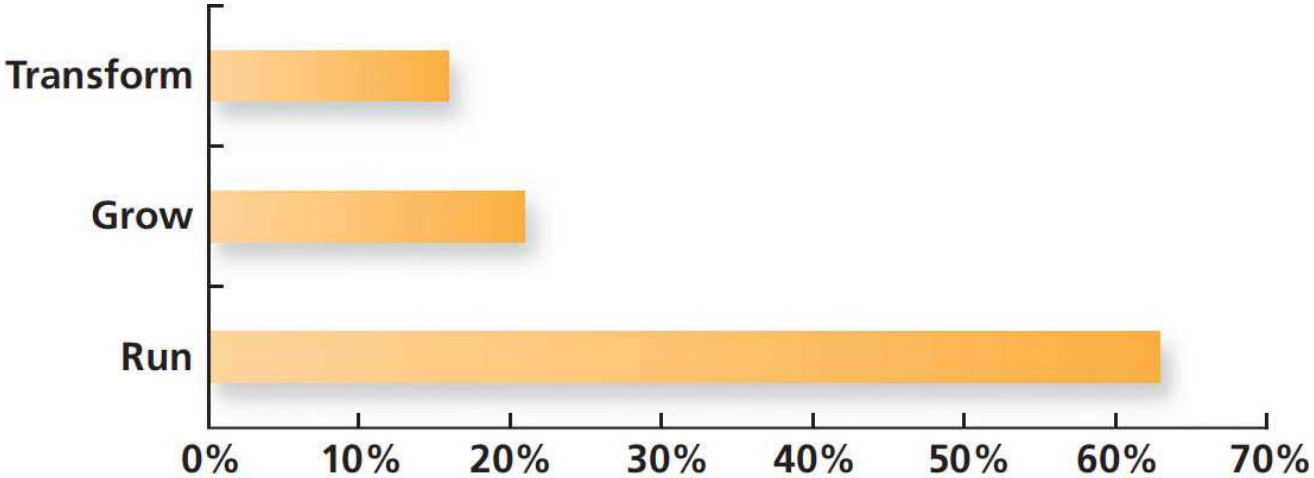
Run, Grow, and Transform

- 66% of IT spending to run organization
- 19% to grow business
- 15% to transform business model



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Nonprofit Organizations

- Objectives that need strategic planning
- Operational requirements
- Benefit from IS

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Fund-Raising

- IS help manage donations
- Reach worldwide audience
- Learn about preferences and motivations

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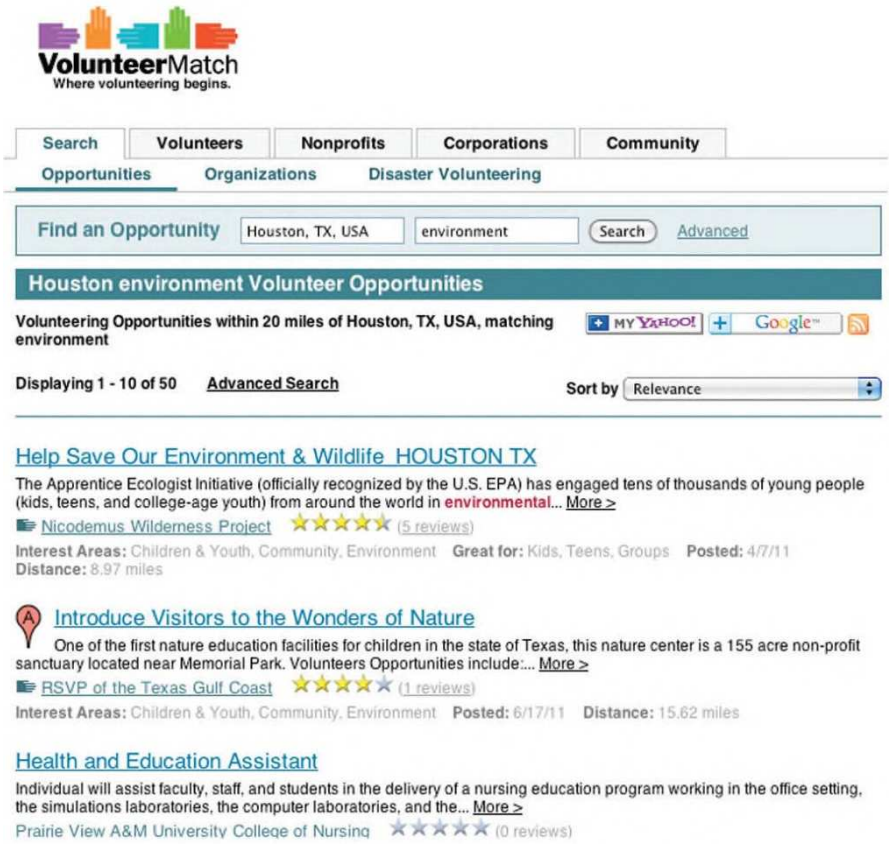
Volunteering

- Attract volunteers
- Help volunteers identify projects that need their skills



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Government (1:2)

- Needs IS to handle operational requirements
- Citizens expect cost effective services
- Mission also includes projects with long-term benefits

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Government (2:2)

E-Government	Research
• Unclassified info available to citizens via the Internet • Interactive online services	• Private investors might avoid certain projects because of risk or distant payoff

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Does IT matter?

- Advantage depends on type of IS
- Funds to run business are commodity
- Funds to grow and transform are more closely tied to strategy and advantage
- Human element is critical for success

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Summary

1. Five forces
2. Other factors
3. Value chain
4. Business strategy
5. Nonprofit/government strategy
6. Role of IS

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GameStop Case Study

- GameStop business model
- Rivalry among competitors
- Barriers to entry
- Power of suppliers
- GameStop's response to threats

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Open Internet Case Study

- Net neutrality
- Position of content providers
- Position of telecom companies
- Proposal
- Criticism of proposal

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