Introduction to Information Systems 6th edition Rainer Solutions Manual

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Chapter 2: Organizational Strategy, Competitive Advantage, and Information Systems

Chapter Outline

2.1 Business Processes
2.2 Business process reengineering and business process management
2.3 Business Pressures, Organizational Responses, and Information Technology Support
2.4 Competitive Advantage and Strategic Information Systems

Learning Objectives

1. Discuss ways in which information systems enable cross-functional business processes and business processes for a single functional area.
2. Differentiate between business process improvement, business process reengineering, and business process management to identify the advantages and disadvantages of each one.
3. Identify effective IT responses to different kinds of business pressures.
4. Describe the strategies that organizations typically adopt to counter Porter's five competitive forces.

Teaching Tips and Strategies

In this chapter, students are introduced to the basic concepts of information systems in the organization and how businesses use information systems in nearly every facet of their operations.

It is important for students to understand how information systems are critical to a business in obtaining and maintaining a competitive advantage. So it is also important for your students to make the connection between information systems and the success of a business. Making the point that businesses usually fail when they do not keep up-to-date and close to state-of-the-art information systems is usually something that helps get the students' attention.

One way to explain this is to illustrate how universal Information Technology is in companies today. Explain to your students that they will probably work for a company that utilizes a variety of technologies at various levels of the organization. You might want to open your presentation for this chapter with a discussion about how information technology impacts many aspects of our life. Some examples are:

- ATM machines and banks in general.
- Grocery store checkout line cash registers with bar code scanners and the ability to use bankcards and credit cards for purchases.
- The ability of those grocery stores point-of-sale systems to also update the store's inventory system in real-time.
- Your college or university relies on IT. The registrar's office, financial aid office, and the library are just a few examples.
- Smartphones, tablets, and laptops.

Explain to your students how the various areas of your school use information technology to perform their tasks. Develop examples of how the office that handles administrative systems (i.e. registration/grades, financial aid, etc.) is usually on a different network, because this helps limit the number of users that can modify grades or view students' records.

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Discuss why by properly managing their data network the school saves money and has the ability to control what information or programs students and faculty members can access. Then explain how companies use access controls to manage information stored on their network. For example, in most organizations, each user has a userID and pass code. They are usually linked to a level of security clearance, which limits what information the user can access. That access is based on a user's need, which ensures that they can accomplish the work that they need to complete, yet cannot access other parts of the system.

Many tasks that are performed by some employees are the same every week (such as recording hours worked for payroll) and that process can be automated including entering time sheets, calculating hours worked, etc. Discussing payroll related examples usually gets the students interested in information systems since it has a universal interest for all employees, whether they are an MIS major or not.

Unfortunately, in today's interconnected world we have access to so much information that it is often overwhelming for managers to know where the best data resides, and how to access it. Managers can see what products are selling and what products are not. This information can be used to better help management run the day-to-day operations of a business.

This chapter is important in that it sets the foundation for the importance of information systems discussed through the rest of the book. Your students should begin to realize that this is important for them to understand and will use in their future careers. Your students need to understand that information technology not only change the way business is done, but it also helps the business share information and make better-educated decisions that will in turn help their business thrive in a competitive environment. The students should also be able to apply this knowledge to their specific major.

It is important for students to understand that there is need for managers to understand what is involved with IT because of the interdependence that exists between the business and technology used.

It is also important for you to emphasize that technology is evolving into open system standards. This means that industries now expect information technology solutions to be seamlessly interconnected and upgradeable. A good example of this the way the medical industry is automating patient records.

Businesses that can upgrade their systems can save millions of dollars not just on equipment costs, but save money by not having to retrain customers or employees on new system interfaces when they are implemented.

This chapter should help your students to realize that when they or the business where the work is looking at adapting or changing technology they use, it is not as easy as just installing a piece of new hardware or a software program. They must consider and analyze future needs and make sure that the programs/technologies they are implementing will not only work today, but also be able to integrate with new technologies in the future.

Blackboard/CMS suggestions

I again suggest that if you are teaching an online class or are looking for a short video for a lecture class, you can usually find a relevant topic videos at http://youtube.com. The problem is that sometimes they are product demos or sales videos, but they still usually present relevant information or concepts.

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Opening case: GrubHub

1. Look ahead in this chapter. Which one of Porter's strategies for competitive advantage is GrubHub pursuing? Explain your answer.

ANSWER:
GrubHub's strategy is to develop knowledge of the industry in order to integrate their system into the food service industry to limit the threat of entry of new competitors into their market space..

They are also using the bargaining power of customers by providing services (such as order/delivery tracking) to deferentiate themselves from their competition.

Level: Easy
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Comprehension
AACSB Category: Reflective Thinking

2. Propose additional applications that GrubHub could develop to gain a competitive advantage in the marketplace.

ANSWER:
Based on information presented in the case, GrubHub should consider developing mobile versions of their order and tracking applications.

Students should be able to contribute additional ideas.

Level: Easy
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Comprehension
AACSB Category: Reflective Thinking

IT's About Business - **2.1** NASCAR Uses IT in Its Pre-Race Inspection

1. Describe why pre-race inspection is a business process for NASCAR.

ANSWER:
It is a process that begins two days prior to the race. Each car that is entered in the race must go through and pass the inspection to compete. If the car does not pass NASCAR's inspection on the first try, the team is permitted to fix the problem and go through a second inspection, which also requires the team to go to the back of the line. NASCAR also conducts post-qualifying and race-day inspections.

NASCAR's pre-race inspection process is considered a business process because racing is NASCAR's business. So tracking everything in detail involved in the inspection process is important to a NASCAR race's outcome.

Level: Easy

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Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Comprehension
AACSB Category: Reflective Thinking

2. Describe the various benefits that the app provides NASCAR.

ANSWER:
The benefits of NASCAR's app include;
- the app has simplified the pre-race inspection process
- elimination of the paper-based forms previously required
- The app uses a "default good" approach, requiring race officials to now note only those areas where violations are found.
- Provides a method for the collection of data real-time.
- The app provides a method to accumulate data that can be used to identify trends and patterns to maintain a level playing field.

Level: Easy
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Knowledge
AACSB Category: Reflective Thinking

3. Look ahead to Section 2.4. Is the app a strategic information system (SIS) for NASCAR? Why or why not? Support your answer.

ANSWER:
This could be considered a strategic information system for NASCAR. The system automates the previous paper-based system. This enables for the consistent tracking and long-term tracking of the data collected. This enables NASCAR to implement their strategic goals and improve the performance and productivity of those involved in the pre-race inspection process.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Application
AACSB Category: Reflective Thinking

IT's About Business 2.2 BPR, BPI, and BPM at Chevron

1. What was one of the main advantages of BPR at Chevron?

ANSWER:
Chevron used a holistic approach to examine the interdependencies between processes executed in different business units. This ultimately improved the company's overall performance. In a 1996 report, Chevron claimed that the BPR project saved the company $50 million.

Level: Easy
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Comprehension
AACSB Category: Reflective Thinking

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2. Why did Chevron adopt BPI?

ANSWER:
In 1995, Chevron was less than half of its current size today, producing roughly 1 million barrels of oil per day across six plants. The company was divided into three major departments: Refining, Marketing, and Supply and Distribution (S&D). Management decided that they needed to improve their supply chain to better integrate their multiple internal processes.

The company leadership decided the best strategy to dramatically improve performance of the company was to reengineer its end-to-end core processes, from the acquisition of crude oil crude through distribution of final products to Chevron customers.

Level: Medium
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Application
AACSB Category: Technology

3. How does Chevron apply BPM in its operations today?

ANSWER:
Chevron's current BPM strategy is part of a larger companywide management system that focuses on operational excellence. The program requires all Chevron operating companies and business units to adopt a continuous improvement perspective, directed by guidelines, metrics, and targets that are reviewed and adapted every year. Apart from process efficiency, Chevron focuses on metrics related to safety, risk, and the environment. All employees participate in operational excellence activities, and managers receive specific operational excellence training to support the continuous improvement culture.

Level: Medium
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Application
AACSB Category: Reflective Thinking

IT's About Business 2.3 Solar-Powered Tablets in Ethiopia

1. What advantages could result from increasing the literacy of 100 million children around the world? Be specific.

ANSWER:
The advantage of increasing the literacy of children around the world provides the means for those children to teach their parents what they have learned, providing a means for moving those adults towards literacy with their children.

Level: Easy
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Knowledge
AACSB Category: Reflective Thinking

2. In this experiment, the tablets were not connected to the Internet. Discuss the advantages and

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disadvantages to the children if the tablets were connected.

ANSWER:
Where the experiment was conducted, the availability of the Internet connectivity was either limited or non-existent. So to provide connectivity, that infrastructure would have to be built at some cost.

Connectivity would open the world up to the children in the experiment. While this might give them some incentives to learn, it may also slow the process because it might reduce the incentive in some to explore the capabilities of table itself.

Level: Medium
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Application
AACSB Category: Reflective Thinking

IT's About Business 2.4 The Weather Channel

1. Identify several reasons (not discussed in the case) why accurate weather predictions are so important. Can an accurate weather prediction be considered a competitive advantage for an organization that receives this information? Why or why not? Support your answer with specific examples.

ANSWER:
Accurate weather forecasting can be considered a competitive advantage for many organizations. For example, truckers, may be alter routes if they know of a storm ahead of time. Local governments would be able to implement Emergency Management Plans if they had prior notice of severe weather approaching their community. Along those lines, local merchants might be able to have certain supplies brought in to have them on hand for the local community.

Students should be able to come up with addition reasons.

Level: Medium
Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Comprehension
AACSB Category: Analytic

2. Will Dark Sky, Sky Motion, and WeatherSphere enjoy a lasting competitive advantage over The Weather Channel? Why or why not? Support your answer.

ANSWER:
As new competitors enter (and some of the older ones either leave or merge with others) TWC competitive advantage will continue to change. Another factor impacting TWC's advantage is that based on 2015 cable viewership, customers are dropping cable TV service and moving to Internet-based streaming video services (discussed in a future chapter).

Level: Medium
Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Analysis
AACSB Category: Reflective Thinking

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IT's About Business 2.5 The University of Pittsburgh Medical Center Makes Effective Use of IT

1. Describe the strategic advantages that IT provides to UPMC.

ANSWER:
The strategic advantages that IT provides UPMC include developing applications and processes improving operations of UPMC's hospitals and health insurance plan, enhance patient care, and drive down company costs.

Level: Easy
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Comprehension
AACSB Category: Reflective Thinking

2. Which of Porter's competitive strategies is UPMC employing? Support your answer.

ANSWER:
UPMC is employing the following strategies.
1. Innovation strategy.. rather than use off-the-shelf applications, the Technology Development Center developed new application to fill needs, such as Virtual Care Collaboration system.
2. operational effectiveness strategy.. they used the massive amount of data they collected for data analytics for a number of studies of current processes and patient procedures..
3. customer orientation strategy.. by automating some of the reporting processes the doctor's had to perform

Level: Medium
Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Application
AACSB Category: Reflective Thinking

3. Describe how UPMC illustrates effective business–IT alignment.

ANSWER:
When the business could not find an off-the-shelf system to meet their needs, they made the decision to develop the system in-house. An example of this is their Virtual Care Collaboration system.

Level: Easy
Section/Learning Objective:
Bloom's Category: Application
AACSB Category: Reflective Thinking

Review Questions - **Before You Go On...**

Section 2.1 …

1. What is a business process?

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ANSWER:
A business process is an ongoing collection of related activities that create a product or a service of value to the organization, its business partners, and/or its customers. A process has inputs and outputs, and its activities can be measured. Many processes cross functional areas in an organization. For example, product development involves research, design, engineering, manufacturing, marketing, and distribution.

Level: Easy
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Knowledge
AACSB Category: Technology

2. Describe several business processes carried out at your university.

ANSWER:
These include Accounts receivable (tuition), registration, payroll, human resources, etc…

Level: Medium
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Knowledge
AACSB Category: Technology

3. Define a cross-functional business process, and provide several examples of such processes.

ANSWER:
This is a process in which no single functional area is responsible for its completion; multiple functional areas collaborate to perform the function.

Level: Application
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Knowledge
AACSB Category: Technology

4. Pick one of the processes described in questions 2 or 3 given above, identify its inputs, outputs customer(s), and resources. How does the process create value for its customers?

ANSWER:
Students will contribute responses depending on the process they choose.

Level: Medium
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Application
AACSB Category: Reflective Thinking

Section 2.2 …

1. What is business process reengineering?

ANSWER:
A strategy for improving the efficiency and effectiveness of an organization's business processes. The key to BPR is for enterprises to examine their business processes from a "clean sheet"

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perspective and then determine how they can best reconstruct those processes to improve their business functions.

Level: Easy
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Knowledge
AACSB Category: Technology

2. What is business process improvement?

ANSWER:
Business Process Improvement is a less radical, less disruptive, and more incremental approach to business process reengineering..

Level: Easy
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Knowledge
AACSB Category: Technology

3. What is business process management?

ANSWER:
BPM is a management technique that includes methods and tools to support the design, analysis, implementation, management, and optimization of business processes.

Level: Easy
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Knowledge
AACSB Category: Technology

Section 2.3

1. What are the characteristics of the modern business environment?

ANSWER:
It is a combination of social, legal, economic, physical, and political factors in which businesses conduct their operations

Level: Easy
Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Knowledge
AACSB Category: Technology

2. Discuss some of the pressures that characterize the modern global business environment.

ANSWER:
Market pressures are generated by the global economy, intense competition, the changing nature of the workforce, and powerful customers.

Level: Medium
Section/Learning Objective: Section 2.3 / Learning Objective 3

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Bloom's Category: Comprehension
AACSB Category: Technology

3. Identify some of the organizational responses to these pressures. Are any of these responses specific to a particular pressure? If so, which ones?

ANSWER:
Organizations are responding to the various pressures by implementing IT such as strategic systems, customer focus, make-to-order and mass customization, and e-business.

Level: Medium
Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Comprehension
AACSB Category: Technology

Section 2.4

1. What are strategic information systems?

ANSWER:
Any information system which helps an organization gain a competitive advantage or reduce a competitive disadvantage is a strategic information system.

Level: Easy
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Knowledge
AACSB Category: Technology

2. According to Porter, what are the five forces that could endanger a firm's position in its industry or marketplaces?

ANSWER:
- The threat of entry of new competitors.
- The bargaining power of suppliers
- The bargaining power of customers
- The threat of substitute products or services
- The rivalry among existing firms in the industry

Level: Easy
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Knowledge
AACSB Category: Technology

3. Describe Porter's value chain model. Differentiate between Porter's competitive forces model and his value chain model.

ANSWER:
Porter's competitive forces model is focused on analyzing the company's external environment and how competitive the industry is. The value chain model is focused on the internal operations of the company and is a model to allow the firm to analyze its own processes.

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Level: Easy
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Comprehension
AACSB Category: Technology

4. What strategies can companies use to gain competitive advantage?

ANSWER:
- Cost leadership
- Differentiation
- Innovation
- Operational effectiveness

Level: Easy
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Knowledge
AACSB Category: Technology

5. What is business – IT alignment?

ANSWER:
Business-IT alignment is the tight integration of the IT function with the strategy, mission, and goals of the organization. That is, the IT function directly supports the business objectives of the organization

Level: Easy
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Knowledge
AACSB Category: Technology

6. Give examples of business – IT alignment at your university, regarding student systems. (Hint: What are the "business" goals of your university with regard to student registration, fee payment, grade posting, etc.?)

ANSWER:
Responses will depend on the amount of IT support provided at your school. Hopefully that support is high and link to the overall business strategy of the institution.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Analysis
AACSB Category: Technology

Discussion Questions

1. Consider the student registration business process at your university:

ANSWER:

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- Describe the steps necessary for you to register for your classes each semester. Who ar the customers of the process? What inputs and outputs does the process have? What organizational resources are used in the process?
- Describe how information technology is used in each step of the process (or is not used). Evaluate the process performance. Is it efficient? Is it effective? Why or why not?

The responses to this question will be different depending on your school's processes.

Level: Easy
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Knowledge
AACSB Category: Technology

2. Why is it so difficult for an organization to actually implement business process reengineering?

ANSWER:
There are various internal and external factors that make it difficult to do BPR. These include technical limitations, cost factors, management support, legal and political issues, etc.

Level: Medium
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Comprehension
AACSB Category: Technology

3. Explain why IT is both a business pressure and an enabler of response activities that counter business pressures.

ANSWER:
Rapid changes in information technology and capabilities force business to adapt or go out of business. On the other hand, IT assists companies in their efforts to stay up on the latest strategies to provide the best customer service, to provide better quality products, new and different delivery methods..

Level: Medium
Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Comprehension
AACSB Category: Technology

4. What does a flat world mean to you in your choice of a major? In your choice of a career? Will you have to be a "lifelong learner"? Why or why not?

ANSWER:
It means that you need to think about who across the world you might be competing against. You not only will have to think about those in your immediate vicinity, but due to the far reaching impact of the new global, Web-based platform which will continue to grow, you will be competing with anyone who has access to a cell phone or a computer.

You clearly will be a lifelong learner since there will be new devices, new applications and new ways in which they are used. Anyone who stops learning will be left behind very quickly..

Level: Medium

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Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Comprehension
AACSB Category: Technology

5. What might the impact of a flat world be on your standard of living?

ANSWER:
Resources that were previously very expensive or unattainable will become increasingly more available. Your ability to find inexpensive travel options are a good example.

Level: Easy
Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Comprehension
AACSB Category: Technology

6. Is IT a strategic weapon or a survival tool? Discuss.

ANSWER:
It is both. Used to establish a competitive advantage in an industry, IT helps an organization implement its strategic goals and increase its performance and productivity. As a survival tool, it is used to fend off various threats such as new entrants, suppliers and customers bargaining power, substitute products or services, and rivalries among existing firms in the industry.

Level: Hard
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Analysis
AACSB Category: Technology

7. Why might it be difficult to justify a strategic information system?

ANSWER:
SISs are often very complex and very expensive to develop and outcomes may take years to observe and measure.

Level: Medium
Section/Learning Objective: Section 2.3 / Learning Objective 3
Bloom's Category: Comprehension
AACSB Category: Technology

8. Describe the five forces in Porter's competitive forces model, and explain how the Internet has affected each one.

ANSWER:
- The threat of entry of new competitors.
- In the CarMax case we saw how the use of communications and the Internet allow
- a company to gain an advantage by providing access to its inventory.
- The bargaining power of suppliers
- Companies can find potential suppliers and compare prices giving buyers a better chance to negotiate terms.
- The bargaining power of customers

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- Customers' power has increased tremendously with the availability of information on the Internet. Much the same as suppliers above, they have a much more information about sources of goods and services and pricing to help them when they are making purchasing decisions. (The demon customer case drives this point home)
- The threat of substitute products or services
- Any industry which is primarily based on digitized information is at risk, and must take the threat of Internet delivered products and services seriously.
- The rivalry among existing firms in the industry
- The Internet makes competition more intense.
- Keeping anything secret is impossible once it is available on the Internet. Competitors can see the systems and match their features to remain competitive.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Comprehension
AACSB Category: Technology

9. Describe Porter's value chain model. What is the relationship between the competitive forces model and the value chain model?

ANSWER:
The competitive forces model is useful for identifying general strategies, organizations us the value chain model to identify specific activities where they can use competitive strategies for greatest impact.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Application
AACSB Category: Technology

10. Describe how IT can be used to support different value chains for different companies?

ANSWER:
A value chain is a sequence of activities through which the organization's inputs, whatever they are, are transformed into more valuable outputs, whatever they are. So, based on this definition, IT can support the HR/Payroll, Accounting, Purchasing, etc. for different value chains.

Nearly every company has to have an IT operation that performs these functions (HR/Payroll. Accounting, etc) even though they have different value chains.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Comprehension
AACSB Category: Technology

11. Discuss the idea that an information system by itself can rarely provide a sustainable competitive advantage.

ANSWER:

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Information Technology is a tool. It is management's responsibility to use it to the best advantage that will help to sustain a competitive advantage.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Comprehension
AACSB Category: Technology

Problem Solving Activities

1. Surf the Internet for information about the Department of Homeland Security. Examine the available information, and comment on the role of information technologies in the department.

ANSWER:
Have the students report what they found.

Level: Easy
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Knowledge
AACSB Category: Technology

2. Experience customization by designing your own shoes at www.nike.com, your car at www.jaguar.com, your CD at www.easternrecording.com, your business card at www.iprint.com, and your diamond ring at www.bluenile.com. Summarize your experiences.

ANSWER:
Before starting this activity, you might consider asking the students if any have already used any of these sites and discuss their experiences.

Level: Easy
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Knowledge
AACSB Category: Technology

3. Access www.go4customer.com. What does this company do and where is it located? Who are its customers? Which of Friedman's flatteners does this company fit? Provide examples of how a U.S. company would use its services.

ANSWER:
The company operates call centers located in India. They do everything from market surveys and debt collections, to inbound call center operations. Using Friedman's model, the would be a global company handling outsourced services. A US company could use them for a number of things, including operating their customer call center, telephone marketing, and market surveys.

Level: Easy
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Knowledge
AACSB Category: Technology

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4. Enter Walmart China (www.wal-martchina.com/english/index.htm). How does Walmart China differ from your local Walmart (consider products, prices, services, etc.)? Describe these differences.

ANSWER:
This site is more of a corporate information site than a marketing site. No products listed for sale, however there is some information about a few product lines.

Level: Easy
Section/Learning Objective: Section 2.2 / Learning Objective 2
Bloom's Category: Comprehension
AACSB Category: Technology

5. Apply Porter's value chain model to Costco (www.costco.com). What is Costco's competitive strategy? Who are Costco's major competitors? Describe Costco's business model. Describe the tasks that Costco must accomplish for each primary value chain activity. How would Costco's information systems contribute to Costco's competitive strategy, given the nature of its business?

ANSWER:
Costco's business model is to sell premium merchandize at a lower price to members (captive group of shoppers). Sam's club is their biggest competitor. They need to procure the right merchandise mix targeting their members by building a strong understanding of their base of members. They need to have an efficient supply chain and then be able to track the success of their promotions and marketing efforts.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Application
AACSB Category: Technology

6. Apply Porter's value chain model to Dell (www.dell.com). What is Dell's competitive strategy? Who are Dell's major competitors? Describe Dell's business model. Describe the tasks that Dell must accomplish for each primary value chain activity. How would Dell's information systems contribute to Costco's competitive strategy, given the nature of its business?

ANSWER:
Dells strategy is to offer high-end computers with premium features and components at a lower price and allow for customers to customize their systems using a web-based interface. Dell must support a highly efficient supply chain system and reduce their inventory costs. They need to track new components and offer them to their customers and then track the quality of their components as they are introduced into their systems.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4
Bloom's Category: Application
AACSB Category: Technology

7. The market for optical copiers is shrinking rapidly. It is expected that by 2010 as much as 90 percent of all duplicated documents will be done on computer printers. Can a company such as Xerox Corporation survive?

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Read about the problems and solutions of Xerox from 2000-2010 at www.fortune.com, www.findarticles.com, and www.google.com.
Identify all the business pressures on Xerox.
Find some of Xerox's response strategies (see www.xerox.com, www.yahoo.com, and www.google.com).
Identify the role of IT as a contributor to the business technology pressures (for example, obsolescence).
Identify the role of IT as a facilitator of Xerox's critical response activities.

ANSWER:
Xerox needs to identify new business models and new ways to introduce their technology into products that can support their customers.

Level: Hard
Section/Learning Objective: Section 2.4 / Learning Objective
Bloom's Category: Analysis
AACSB Category: Technology

Closing Case: IBM's Watson

1. What applications can you think of for Watson in a university setting?

ANSWER:
Class scheduling based on projected course needs and demands by students.
Class time scheduling to avoid scheduling conflicts.
Classroom scheduling based on needs of the class and instructor.

You and your students will be able to come up with many more.

Level: Easy
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Application
AACSB Category: Technology

2. What are potential disadvantages of using Watson in healthcare settings?

ANSWER:
Much depends on patients fully recording symptoms and medical professionals recording all diagnostic test that has been done on the patient. Keep in mind that some medical symptoms may mask multiple issues.

However, as a Watson-type system collects more data from multiple patients over time Watson's reliability will increase.

Level: Medium
Section/Learning Objective: Section 2.1 / Learning Objective 1
Bloom's Category: Application
AACSB Category: Technology

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3. Would you consider being diagnosed only by Watson? Why or why not?

ANSWER:
Your student will have different opinions on this.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4, 1
Bloom's Category: Analysis
AACSB Category: Technology

4. Would you consider being diagnosed by your personal physician, if he or she consulted Watson? Why or why not?

ANSWER:
Your student will have different opinions on this.

Level: Medium
Section/Learning Objective: Section 2.4 / Learning Objective 4,1
Bloom's Category: Analysis
AACSB Category: Technology

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