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

# Chapter Outline

- 2.1 Business Processes
- 2.2 Business Process Reengineering, Business Process Improvement, 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 reengineering, business process improvement, and business process management.
- 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.

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 <a href="http://youtube.com">http://youtube.com</a>. The problem is that sometimes they are product demos or sales videos, but they still usually present relevant information or concepts.

Opening case: The National Basketball Association Enhances the Fan Experience

1. Refer to Porter's strategies for competitive advantage. Which strategy (or strategies) is the NBA pursuing? Provide specific examples to support your answer

### ANSWER:

The NBA is pursuing an innovation strategy as demonstrated by its continuous approach to adopt new products and services to supplement the core product offering: the game. In addition, it is focused on customer orientation strategy because many of the innovative solutions being pursued are not required in order for the NBA to remain strategically placed in the world of sports. Instead, the focus appears to be on providing an increasingly positive customer experience, offering them something that will continually improve their experience of watching the game.

Level: Easy

Section/Learning Objective: Section 2.4 / Learning Objective 4

Bloom's Category: Comprehension AACSB Category: Reflective Thinking

2. Describe how social media, VR, and augmented reality are strategic support systems for the NBA. Provide specific examples for your answer.

## ANSWER:

Social Media: Fans are encouraged to use Snapchat, Instagram and Facebook to share their experiences at the games. By ensuring there is the technology to support this at areas, they are investing in services that will promote their events and also create an experience that can be shared with individuals with similar interests, perhaps even creating a social media community of fans.

VR: This allows for fans to have an up-close experience even if they are far from the action. This allows fans to be engaged and attend games even if they can't afford the courtside seats. It appeals to fans that might not otherwise feel that attending a game is worth the cost when the view would otherwise be worse than on television or streamed online.

Augmented Reality: This will allow the NBA to have fans interact with data available for each player, increasing the engagement level and the desire for each fan to be as 'close' to a player as possible in terms of knowing what they are doing, who they really are, and other information based on their own preferences and interests. This creates a connection.

Level: Easy

Section/Learning Objective: Section 2.4 / Learning Objective 4

Bloom's Category: Comprehension AACSB Category: Reflective Thinking

# IT's About Business - 2.1 NASCAR Uses IT in Its Prerace 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

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. Describe the advantages of the new (2018) app over the previous app.

## ANSWER:

- The benefits of the new app are that it is faster and more efficient than the previous process and stores much more data about each car.

Level: Easy

Section/Learning Objective: Section 2.1 / Learning Objective 1

Bloom's Category: Comprehension AACSB Category: Reflective Thinking

4. Refer to section 2.3. Is the app a strategic information system 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. Describe 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

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 The Digital Divide Persist in America

1. Describe some impacts on individuals and families (not mentioned in the case) resulting from a lack of internet access.

### ANSWER:

Student answers will vary as they must select ideas that are not presented in the case. Some potential responses include:

- Lack of employability (inability to access remote work, or to successfully apply for positions and communicate)
- Potential disadvantage in online networking/communication for personal and business growth reasons
- Inability to complete training to upgrade skills or remain current
- Inability to communicate effectively with local city officials/government in an efficient way or access pertinent information required as citizens (property or safety information)

Level: Easy

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Knowledge

AACSB Category: Reflective Thinking

2. Is affordable, broadband Internet access strategically important to cities? Why or why not? Support your answer.

## ANSWER:

Yes. Internet access is essential to support the growth of cities both in terms of population, but more importantly drivers of such growth. These will include attracting businesses, developing local talent and making it an attractive market to operate in and recruit from. It allows for more effective communication as well, and significantly more efficient, between the cities and it's citizens.

Level: Medium

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Application

AACSB Category: Reflective Thinking

3. Is affordable, broadband Internet access strategically important to the United States? Why or why not? Support your answer.

Yes. Rationale will be largely similar to that of the response to question 2 for this case. Overall, in order to be innovative, and strategically positioned for success, the United States needs to have as many areas connected as possible.

Level: Medium

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Application AACSB Category: Reflective Thinking

# IT's About Business 2.4 Bank of America Transforms its Information Technology

1. What is the relationship between the development of mobile banking customer applications and the closing of banking centers?

## ANSWER:

Bank of America updated its mobile banking customer applications, which allows customers to conduct most of their banking tasks from their phone or iPad, as opposed to needing to go to a banking center. They can view account details, transfer funds, order new debit and credit cards, schedule appointments, pay bills, place a travel notification, and more via the apps, which means that there is significantly less need for banking centers. As a result, many have been closed.

Level: Easy

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Comprehension AACSB Category: Reflective Thinking

2. Refer to Porter's strategies for competitive advantage. Which strategy (or strategies) is (are) Bank of America pursuing? Provide specific examples to support your answer.

## ANSWER:

Operational effectiveness strategy: Bank of America has improved the manner in which it executes its internal business so that it performs these activities more effectively. It has done so by implementing an SDI private cloud, which allowed the bank to reduce its data centers from 64 to 8, and gives the bank more flexibility and speed to react to changes in the bank's dynamic business environment. Customer orientation strategy: Bank of America has concentrated on making customers happy by listening to their desire for the bank to "be where they are" and launching new versions of its apps with new features to make banking easier to do anywhere.

Level: Easy

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Comprehension AACSB Category: Reflective Thinking

# IT's About Business 2.5 Cruise Ships Embrace Technology

1. Are the information technologies mentioned in this case strategic systems for the cruise lines? Why or why not? Support your answer.

## ANSWER:

Yes. The information technologies will help each cruise line to achieve their strategic goals whether it be focused on quality of service, safety, worker efficiency, or overall customer experience. There are some overlaps in the technologies being used by the various cruise lines which may indicate that it is the effective integration and application of such technologies that will set one cruise line apart from another strategically.

Level: Easy

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Comprehension AACSB Category: Reflective Thinking

2. What are the privacy implications of the interactive bracelets from all three cruise lines? (HINT: Look ahead to Chapter 3)

#### ANSWER:

The interactive bracelets may increase the physical safety, as well as improve the overall customer experience; however, it raises concerns with regards to:

- Ownership of data
- Safeguarding of personal information while on the cruise
- Retention of data after the cruise
- Clarification of short-term and long-term use of data by the cruise line.

Level: Medium

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Application

AACSB Category: Reflective Thinking

3. Is it possible that VR applications could actually detract from the cruising experience? Why or why not? Provide examples to support your answer.

## ANSWER:

Students answers will vary. When VR is used to provide a view that is not otherwise available to guests (i.e. those staying in the inside cabins), it could be argued that it will enhance the experience and provide them with the opportunity to view what otherwise was unaffordable. If the VR is used to showcase views that are readily available to passengers or what would have otherwise been available on an excursion, then some may be inclined to use VR rather than experience nature, which many would argue is the fundamental benefit of cruising.

Level: Medium

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Analysis

AACSB Category: Reflective Thinking

Review Questions - Before You Go On...

## Section 2.1

1. What is a business process?

## 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 Question 2 or 3, and identify its inputs, outputs, customer(s), and resources. How does the process create value for its customer(s)?

## 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" 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.

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

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.

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:

Describe the steps necessary for you to register for your classes each semester.

Describe how information technology is used (or is not used) in each step of the process.

### ANSWER:

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

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 increased access to high-speed Internet has affected each one.

- 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

- 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.

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 mass customization by designing your own shoes at <a href="www.nike.com">www.nike.com</a>, your car at <a href="www.iprint.com">www.iprint.com</a>, your business card at <a href="www.iprint.com">www.iprint.com</a>, and your diamond ring at <a href="www.bluenile.com">www.bluenile.com</a>. 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 <u>www.go4customer.com</u>. What does this company do and where is it located? Who are its customers? 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. 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

4. Enter Walmart China (<a href="www.wal-martchina.com/english/index.htm">www.wal-martchina.com/english/index.htm</a>). 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 (<a href="www.costco.com">www.costco.com</a>). 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 (<a href="www.dell.com">www.dell.com</a>). 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 Dell'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

Closing Case: Domino's Pizza

1. Describe how information technology has impacted Domino's production process.

Domino's used information technology to solicit photos from customers in a method to obtain feedback. For example, a badly mangled pizza became part of a subsequent month's ad campaign.

Level: Easy

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Comprehension AACSB Category: Technology

2. Describe how information technology has impacted Domino's order process.

### ANSWER:

The ordering process was changed to include digital orders including Facebook Messenger, Twitter, Twitter with emojis and Apple Watch. Once an order is placed, customers are able to track their orders and drivers so that they can expect when it will be ready for pick-up or at their door for delivery. Domino's also introduced a voice-ordering chatbot that they hoped would be able to be used from any device. IT was tested in 2014 on the floor of the NYSE but did not work because of the surrounding noise.

Level: Medium

Section/Learning Objective: Section 2.3/ Learning Objective 3

Bloom's Category: Comprehension AACSB Category: Technology

3. Describe how information technology has impacted Domino's delivery process.

## ANSWER:

An Australian franchisee owns 2,000 stores and has invested in drones to deliver pizzas wherever there are backyards available for the drone to land safely. In Europe and New Zealand, robots are being tested but are running into issues due to the local infrastructure and restrictions.

Level: Medium

Section/Learning Objective: Section 2.3/ Learning Objective 3

Bloom's Category: Comprehension AACSB Category: Technology

4. Which Domino's process has been impacted the most by information technology.

## ANSWER:

Given the nature, currency and complexity of the technologies being used for the delivery process, it would be accurate to conclude it has been impacted the most by information technology. Manual, human based tasks, are being replaced by robotics and drones.

Level: Medium

Section/Learning Objective: Section 2.3 / Learning Objective 3

Bloom's Category: Analysis AACSB Category: Technology