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| Chapter Outline |

2.1 Business Pressures, Organizational Responses, and Information Technology Support

2.2 Competitive Advantage and Strategic Information Systems

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| Learning Objectives |

2.1 Identify effective IT responses to different kinds of business pressures.

2.2 Describe the strategies that organizations typically adopt to counter Porter’s five competitive forces.

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| 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 used 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 lives too. Some examples are:

* ATM machines and banks in general. (Growing cashless society)
* Grocery store checkout line cash registers with bar code scanners and the ability to use ATM and credit cards for purchases. Some stores also using smartphone apps such as ApplePay, Walmart Pay, Walgreens Pay, among others to process customer payment.
* 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, tables, 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 have access to. Then explain how companies use access controls to manage information stored on their network. For example, in most organizations, each user has a unique 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.

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| 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: Disney Animation Develops Software to Make Big Hero 6 |

1. Is Hyperion a strategic information system for Disney Animation? Why or why not? Provide specific examples to support your answer.

ANSWER

Hyperion is a software application that attempts to create light the way we actually see it in the real world. The software attempts to mimic the many obstacles the sun’s rays encounter in the atmosphere and then diffuse the light the same way natural light does.

Before Hyperion, the process of simulating light was tedious, because each ray of light’s trajectory had to be individually tracked. A single frame of animation could contain several light sources, and each ray of light could bounce o multiple surfaces, making the calculation of those individual pathways computationally intensive.

Level: Easy

Section/Learning Objective: Section 2.1 / Learning Objective 2.1

Bloom’s Category: Synthesis

AACSB Category: Reflective Thinking

2. Will Hyperion provide a sustainable competitive advantage for Disney Animation? Why or why not?

ANSWER

It would take a large amount of resources for a competitor to quickly replicate the system. Disney needed huge amounts of processing power to produce the film. Three Disney server farms in Los Angeles and one in San Francisco were connected to create a supercomputer of 4,600 servers that contained 55,000 central processing units (CPUs). Coda, an automated information management system, integrated the information being processed from the four server farms. Because Disney artists could utilize such a huge amount of computational power to process the images, they could see their work the next morning.

Animated films typically take about four years to produce, and the Disney team was writing the Hyperion software and using it on Big Hero 6 at the same time.

Level: Medium

Section/Learning Objective: Section 2.1 / Learning Objective 2.1

Bloom’s Category: Comprehension

AACSB Category: Reflective Thinking

3. Look ahead in this chapter. Which one of Porter’s strategies for competitive advantage is Disney pursuing? Explain your answer.

ANSWER

The two of Porter’s strategies are:

Differentiation strategy. Offer different products, services, or product features than your competitors.

Innovation strategy. Introduce new products and services, add new features to existing products and services, or develop new ways to produce them.

Level: Easy

Section/Learning Objective: Section 2.1 / Learning Objective 2.1

Bloom’s Category: Comprehension

AACSB Category: Reflective Thinking

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| IT’s About Business - 2.1 Using Information Technology for Social Good |

1. Describe how the Infoladies are a strategic information system for the country of Bangladesh. Provide specific examples to support your answer.

ANSWER

A group of 50 young women travel to the villages to make computers, tablets, smartphones, and digital cameras available to all. The Infoladies also bring a glucometer so that villagers can monitor their blood sugar levels. They also help farmers research information on crops and farming methods. However, the most popular request is for villagers to communicate with male relatives via Skype. Many of these men work in the Middle East.

Level: Easy

Section/Learning Objective: Section 2.1 / Learning Objective 2.1

Bloom’s Category: Comprehension

AACSB Category: Reflective Thinking

2. Discuss how the Rainforest Connection’s use of smartphones is a strategic information system for our planet. Provide specific examples to support your answer.

ANSWER

The Rainforest Connection uses volunteers to put solar panels on old smartphones and place them high in the trees in the middle of a rainforest. The phones can pick up the sound of chainsaws cutting down a tree within one square mile, and emit data to rangers patrolling the forest, who can quickly stop the loggers. Just one phone can save enough trees to stop 15,000 tons of carbon from entering the atmosphere.

Level: Medium

Section/Learning Objective: Section 2.1 / Learning Objective 2.1

Bloom’s Category: Comprehension

AACSB Category: Reflective Thinking

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| IT’s About Business 2.2: Innovative Technologies for Airlines and Airports |

1. Look ahead to Porter’s five strategies for competitive advantage. Provide an example of a technology discussed in this case that supports each of Porter’s strategies.

ANSWER

Examples include…

Threat of entry of new competitors  
- Delta airline’s providing their flight attendants with mobile devices to assist with customer service

Bargaining power of suppliers

* Hong Kong Airport’s use of radio frequency identification (RFID) technology to track where bags are and where they should go
* Airports are deploying multifunction kiosks in many areas, allowing passengers to serve themselves without agents’ help

Bargaining power of customers (buyers)

* Delta airline’s providing their flight attendants with mobile devices
* Edinburgh Airport’s use of GOOGLE Glass to provide services to passengers, such as real-time flight information and foreign-language translation
* Helsinki airport’s use of Walkbase to improve the flying experience by alleviating bottlenecks in passenger flow, such as in certain shopping areas or at the security gate.
* Hong Kong Airport’s use of radio frequency identification (RFID) technology to track where bags are and where they should go

Threat of substitute products or services

* Delta airline’s providing their flight attendants with mobile devices

Rivalry among existing firms in the industry

* Edinburgh Airport’s use of GOOGLE Glass to provide services to passengers, such as real-time flight information and foreign-language translation
* Delta airline’s providing their flight attendants with mobile devices
* Delta’s use of mobile devices in maintenance operations.

Level: Medium

Section/Learning Objective: Section 2.2 / Learning Objective 2.2

Bloom’s Category: Synthesis

AACSB Category: Reflective Thinking

2. Propose additional applications that airports and airlines might develop that could create a competitive advantage in the marketplace.

ANSWER

Some examples might include…

* ability of passengers to order (and pay for) food by a smartphone app based on what is sold at the airport and have it delivered to the plane prior to departure.
* passenger selection of movie(s) to watch on plane prior to departure
* passenger ability to select and start watching a movie in the departure area and finish it while on the plane.
* airport parking’s ability to help someone remember where they parked their car (possibly based on license tag reader/tracker)

Level: Medium

Section/Learning Objective: Section 2.2 / Learning Objective 2.2

Bloom’s Category: Synthesis

AACSB Category: Reflective Thinking

3. Are the technologies discussed in this case examples of strategic information systems? Why or why not?

ANSWER

In some cases, it might be a matter of opinion. However, systems such as the one that enables a member of the flight crew to report an in-cabin maintenance issue via their mobile device so that a repair can be completed, if possible, at the next airport might be considered strategic systems. As would the baggage system and system to track passenger flow through the airport.

Level: Medium

Section/Learning Objective: Section 2.2 / Learning Objective 2.2

Bloom’s Category: Synthesis

AACSB Category: Reflective Thinking

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| IT’s About Business 2.3: The “Fit” Problem When Shopping for Clothes Online |

1. Look ahead to Porter’s five strategies for competitive advantage. Take each of the example companies in this case, and identify which of Porter’s strategies that company is using.

ANSWER

Examples include…

Cost leadership strategy

- Zappos.. no cost customer returns

Differentiation strategy

- Virtualize… creating a reference garment silhouette for comparison to help customers shop online

- Zappos.. no cost customer returns

- Cloths Horse… data-driven software that takes data from both consumers (body type, favorite brands, fit preferences) and clothing manufacturers to create a database to custom fit their customers.

- LoveThatFit… allows consumers to upload a full body image taken in tightly fitting clothing. The startup uses proprietary algorithms to address the fit problem.

- Bodymetrics… Bodymetrics provides a “body scanner” that customers can access either at home or in a store. This technology scans the customer’s body, captures more than 150 measurements, and produces a digital replica of the customer’s size and shape.

Innovation strategy

* Virtualize… creating a reference garment silhouette for comparison to help customers shop online
* Cloths Horse… data-driven software that takes data from both consumers (body type, favorite brands, fit preferences) and clothing manufacturers to create a database to custom fit their customers.
* LoveThatFit… allows consumers to upload a full body image taken in tightly fitting clothing. The startup uses proprietary algorithms to address the fit problem.
* Bodymetrics… Bodymetrics provides a “body scanner” that customers can access either at home or in a store. This technology scans the customer’s body, captures more than 150 measurements, and produces a digital replica of the customer’s size and shape.
* It might be argued is Zappos’ strategy of no returns is Innovative

Operational effectiveness strategy

* Virtualize… creating a reference garment silhouette for comparison to help customers shop online
* Zappos.. no cost customer returns
* Cloths Horse… data-driven software that takes data from both consumers (body type, favorite brands, fit preferences) and clothing manufacturers to create a database to custom fit their customers.
* LoveThatFit… allows consumers to upload a full body image taken in tightly fitting clothing. The startup uses proprietary algorithms to address the fit problem.
* Bodymetrics… Bodymetrics provides a “body scanner” that customers can access either at home or in a store. This technology scans the customer’s body, captures more than 150 measurements, and produces a digital replica of the customer’s size and shape.

Customer orientation strategy

* Virtualize… creating a reference garment silhouette for comparison to help customers shop online
* Zappos.. no cost customer returns
* Cloths Horse… data-driven software that takes data from both consumers (body type, favorite brands, fit preferences) and clothing manufacturers to create a database to custom fit their customers.
* LoveThatFit… allows consumers to upload a full body image taken in tightly fitting clothing. The startup uses proprietary algorithms to address the fit problem.
* Bodymetrics… Bodymetrics provides a “body scanner” that customers can access either at home or in a store. This technology scans the customer’s body, captures more than 150 measurements, and produces a digital replica of the customer’s size and shape.

Level: Medium

Section/Learning Objective: Section 2.2 / Learning Objective 2.2

Bloom’s Category: Synthesis

AACSB Category: Reflective Thinking

2. Do the systems these companies are using constitute strategic information systems? Why or why not?

ANSWER

Each company has a unique way of fitting their garments to their customers. So based on that, each has what constitutes a strategic information system.

Level: Easy

Section/Learning Objective: Section 2.2 / Learning Objective 2.2

Bloom’s Category: Analysis

AACSB Category: Reflective Thinking

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| Before You Go On - 2.1 |

Section 2.1

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 2.3

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 2.3

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 2.3

Bloom’s Category: Comprehension

AACSB Category: Technology

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| Before You Go On - 2.2 |

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 2.4

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 2.4

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 2.4

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 2.4

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 2.4

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 2.4

Bloom’s Category: Analysis

AACSB Category: Technology

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| Discussion Questions |

1. 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 2.3

Bloom’s Category: Comprehension

AACSB Category: Technology

2. 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 2.3

Bloom’s Category: Comprehension

AACSB Category: Technology

3. 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 2.3

Bloom’s Category: Comprehension

AACSB Category: Technology

4. 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 2.4

Bloom’s Category: Analysis

AACSB Category: Technology

5. 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 2.3

Bloom’s Category: Comprehension

AACSB Category: Technology

6. 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
* 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 2.4

Bloom’s Category: Comprehension

AACSB Category: Technology

7. 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 2.4

Bloom’s Category: Application

AACSB Category: Technology

8. 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 2.4

Bloom’s Category: Comprehension

AACSB Category: Technology

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

ANSWER

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 2.4

Bloom’s Category: Comprehension

AACSB Category: Technology

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| 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 2.1

Bloom’s Category: Knowledge

AACSB Category: Technology

1. Experience customization by designing your own shoes at [www.nike.com](http://www.nike.com), your car at [www.jaguar.com](http://www.jaguar.com), your CD at [www.easternrecording.com](http://www.easternrecording.com), your business card at [www.iprint.com](http://www.iprint.com), and your diamond ring at [www.bluenile.com](http://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 2.1

Bloom’s Category: Knowledge

AACSB Category: Technology

1. Access [www.go4customer.com](http://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 2.1

Bloom’s Category: Knowledge

AACSB Category: Technology

1. Enter Walmart China ([www.wal-martchina.com/english/index.htm](http://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 2.2

Bloom’s Category: Comprehension

AACSB Category: Technology

1. Apply Porter’s value chain model to Costco ([www.costco.com](http://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 2.4

Bloom’s Category: Application

AACSB Category: Technology

1. Apply Porter’s value chain model to Dell ([www.dell.com](http://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 2.4

Bloom’s Category: Application

AACSB Category: Technology

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| Closing Case 1: Football Teams Use Virtual Reality |

1. In what other ways could professional and college football programs use virtual reality systems? (Hint: Consider the fan experience.)

ANSWER

Have your students come up with a few ideas, but a few might include

* provide a way for a fan experience what it is like to be on the field during a recent major game
* provide a way for a fan experience what it is like to be on the field during a historical game
* not sports, but the tech could be used by key member’s of the college’s marching band to learn show formations enabling them to train their squads, reducing time on the practice field.

Level: Medium

Section/Learning Objective: Section 2.4 / Learning Objective 2.4,1

Bloom’s Category: Analysis

AACSB Category: Technology

2. Are STriVR and EON strategic information systems for any football program? Why or why not? Support your answer with specific examples.

ANSWER

These information might be considered strategic information systems in that they enable individual players to learn formations and tendencies of other team members faster. This is because the system can reduce the time between plays during practice.

These systems can also be programmed to replicate or mimic tendencies of future opposing teams so that players can see this from field level rather than only from a game film shot from above the field.

Level: Medium

Section/Learning Objective: Section 2.4 / Learning Objective 2.4,1

Bloom’s Category: Analysis

AACSB Category: Technology

3. Will STriVR and EON become competitive necessities for football programs? Why or why not? Support your answer with specific examples.

ANSWER

As these systems mature and develop, as mentioned in the case, the turnaround of game “films” will become faster. This will potentially enable the teams that use it the ability to view, via VR, what another team did in their previous game.

Another reason is that players earn a great deal of money. An injury can be expensive both financially, and if it is a key player, on the field. Using one of these systems, has the potentially of reducing the change of an injury.

Level: Medium

Section/Learning Objective: Section 2.4 / Learning Objective 2.4,1

Bloom’s Category: Analysis

AACSB Category: Technology

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| Closing Case 2: 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

As BofA analyzed their network of banking centers, they found that some of those centers were not being utilized as much as the bank deployed new technologies (i.e online banking, etc…). This enabled BofA to reduce the number of banking centers and ATMs needed to support their customer base.

Level: Easy

Section/Learning Objective: Section 2.4 / Learning Objective 2.4,1

Bloom’s Category: Application

AACSB Category: Technology

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

ANSWER

Cost leadership strategy… reduced operating costs by reducing the number of banking centers and ATMS. Consolidated and reduced the number of data centers

Differentiation and Innovation strategy… provided customers with a banking experience where they can conduct business with the bank using information technology (mobile and web-based) and no longer have to go to an ATM or banking center.

Innovation strategy… annual meet with technology start-ups to assess and, in some cases, adopt new evolving applications and technologies.

Operational effectiveness strategy… reduced operating costs by reducing the number of banking centers and ATMS. Consolidated and reduced the number of data centers

Customer orientation strategy… provided new ways for BofA customer to conduct business and financial transactions with the bank via the bank’s website and smartphone apps.

Have your students come up with others…

Level: Medium

Section/Learning Objective: Section 2.4 / Learning Objective 2.4,1

Bloom’s Category: Analysis

AACSB Category: Technology