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| CHAPTER LEARNING OBJECTIVE QUESTIONS |  |

CE6-1. Why Is the Cloud the Future for Most Organizations?

CE6-2. How Do Organizations Use the Cloud?

CE6-3. How Can eHermes Use the Cloud?

CE6-4. How Can Organizations Use Cloud Services Securely?

CE6-5. What Does the Cloud Mean for Your Future?

Learning Catalytics™ is a student response tool that helps you generate class discussion, customize your lecture, and promote peer-to-peer learning based on real-time analytics. Learning Catalytics uses students’ smartphones, tablets, or laptops to engage them in more interactive tasks.

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| SO WHAT? |  |

## IRS Systems Overtaxed

1. *Is it time for you to upgrade either your phone or your laptop? If so, what are the indicators that you look for to determine whether your device is beginning to become unstable or fail? What other types of legacy systems have you encountered?*

Students answers will vary depending on their individual experiences.

1. *The IRS system crash of 2018 is the most recent example of a high-profile IT-infrastructure debacle with the U.S. government. Can you think of any other recent examples of government-related IT problems?*

Although the furor has died down, the Web sites providing access to health exchanges associated with the Affordable Care Act had numerous flaws and issues and received considerable attention in the media.

1. *From a security perspective, what are the pros and cons of the government using such outdated IT systems for handling tax filings?*

On one hand, legacy systems built on older, mainframe technology are considered very secure, based on the architecture such systems employ. The problem described in the article on the 2018 Tax Day illustrates the other side of the coin. These older systems can be unstable and need to utilize modern equipment and methods.

1. *What types of interactions do you have with the cloud? Do you back up personal documents, like photos and music, on the cloud? Do you use it strictly for productivity-related files and collaboration? What are the benefits and drawbacks of the cloud for you relative to storing files locally on your devices?*

Student responses to this question will vary. Unless a student has experienced a loss of important data personally, they may not be too diligent about backup procedures. This is a great opportunity to coach them about the potential consequences of not being diligent about data and file management practices.

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| COLLABORATION EXERCISE 6 |  |

*Using the collaboration IS you built in Chapter 1 (pages 25–26), collaborate with a group of students to answer the following questions. If you haven’t built your collaboration IS yet, reread Collaboration Exercise 1 and Chapter Extension 10. Meet with your team and build a collaboration IS that uses tools like Google Docs, SharePoint, or other collaboration tools. Do not forget the need for procedures and team training.*

1. *Using the knowledge of this chapter and the intuition of the members of your team, summarize the threats that cloud services present to such ISVs.*

If our business has been focused on creating and maintaining an IT infrastructure for other businesses, it is likely that we will experience difficult times as existing customers and new businesses choose to utilize cloud-based computing resources. The cloud is a viable, inexpensive alternative to owning and managing computing resources, hence, our traditional business services will no long be needed. (LO: 2, Learning Outcome: Describe the effects of e-commerce on the modern business world, AACSB: Reflective Thinking)

1. *Suppose your team owns and manages one of these ISVs. You learn that more and more of your clients are choosing SaaS cloud services like Google for email, rather than setting up local email servers.*
2. *What, if anything, can you do to prevent the encroachment of SaaS on your business?*

There is probably very little we can do to prevent the encroachment of SaaS on our business. The economics are overwhelmingly in favor of the SaaS providers. Perhaps we could try and keep our customers in the dark about their options that now include the cloud, but eventually they will become aware of it and they might resent that we were not forthcoming about the most cost effective ways for them to obtain their computing resources. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking)

1. *Given your answer to part a, identify three alternative ways you can respond.*

We could just abandon the work we have always done completely. However, companies will still need help in determining the right cloud-based computing options. They will need help in building their databases on the cloud. They will need help in learning to use the cloud-based resources and they will still need training so that their people are comfortable with the systems obtained from the cloud vendors. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking)

1. *Which of the three responses identified in your answer to part b would you choose? Justify your choice.*

Students’ ideas on the responses and the best response will vary. There will be a significant change in the ISV’s business. Under existing conditions, the business emphasizes technical expertise. Now the ISV business will need to emphasize detailed understanding of their customers’ needs for the cloud-based environment. The focus will be on what you can DO with cloud-based offerings to make the business more efficient and effective, not just providing the technical expertise to create the infrastructure. Services will be very people-oriented and will be much less technically-oriented. It is not likely that everyone on the ISV’s staff can adapt to the more people-centered focus of the business. Some highly technical folks are not well suited to providing training and support to business people. Some students may feel the outlook is too pessimistic, but others will most likely focus on new opportunities associated with helping small businesses take advantage of the cloud successfully. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking)

1. *Even if SaaS eliminates the need for email and other local servers, there will still remain viable services that you can provide. Name and describe those services.*

Students’ ideas for services that could be provided for each of these components will vary, but will most likely include training and support to help organizations fully utilize these resources. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking)

1. *Suppose instead of attempting to adapt an existing ISV to the threat of cloud services, you and your teammates decide to set up an entirely new business, one that will succeed in the presence of SaaS and other cloud services. Looking at businesses in and around your campus, identify and describe the IS needs those businesses will have in the cloud services world.*

Students’ ideas are likely to cover a wide range of options. For example, if your university has a medical school, they may identify ways to create and support telemedicine-related businesses. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking)

1. *Describe the IS services that your new business could provide for the business needs you identified in your answer to question 6-7.*

The purpose of telemedicine is to extend the expertise of medical specialists to underserved locations. If we specialized in this field, we could help attract medical talent interested in this practice, train them on how to utilize the telemedicine capabilities, and recruit and train medical personnel in the remote areas to participate in the telemedicine initiatives. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking)

1. *Given your answers to questions 6-4 to 6-8, would you rather be an existing ISV attempting to adapt to this new world or an entirely new company? Compare and contrast the advantages and disadvantages of each alternative.*

Student responses to this question will vary. Clearly, an existing ISV will face challenges in “reinventing” itself, especially adapting to new training roles rather than more technical roles. A business making a fresh start doesn’t have that baggage, but also doesn’t have the established client base as a foundation for the business. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking)

1. *Changing technology has, for centuries, eliminated the need for certain products and services and created the need for new products and services. What is new, today, however, is the rapid pace at which new technology is created and adapted. Using cloud services as an example, create a statement of the posture that business professionals should take with regard to technology in order to thrive in this fast-changing environment. Notice the verb in this assignment is* thrive*, and not just* survive*.*

The most important lesson to be learned here is that technological change is constant. While the changes can be confusing and even frightening, business professionals should welcome the opportunities provided by new technological options and look to the future instead of trying to cling to the past. The information technology world is one of constant change and evolution. No company can assume their market will remain constant over time, no matter how large it is. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking)

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| CASE STUDY 6 |  |

## Saleforce.com

1. *Go to* www.salesforce.com *and click on the “Try for Free” button. Fill in the required fields and start your free trial. This will take you to a test site full of data for a company named Acme. Click on the “Take a Tour of Salesforce.com” link on the upper left-hand side of the screen. Walk through the automated tour labeled “Manage Your Pipeline (13 steps).”*

No specific answer; a task to be performed.

*a. Why would these dashboards be useful to a marketing or sales manager?*

The dashboards enable sales or marketing managers to keep the current value of Key Performance Indicators at their fingertips and identify positive and negative trends quickly. (LO: 2, Learning Outcome: Discuss the role of information systems in supporting business processes, AACSB: Reflective Thinking Skills)

*b. How could Salesforce.com help a sales manager increase sales?*

The sales manager will be more fully informed about the activities and performance of the sales staff. Problems and opportunities will be easier to identify and address quickly. (LO: 2, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking Skills)

*c. How long do you think it would take you to learn the basics of Salesforce.com?*

Student opinions will vary. (LO: 2, Learning Outcome: Discuss the role of information systems in supporting business processes, AACSB: Reflective Thinking Skills)

1. *Explain why a company like Salesforce.com requires so much money to become successful. Once the software is built, what are the incremental costs of adding additional customers? How does this impact profitability?*

Creating a complex software product such as Salesforce requires a tremendous amount of initial capital. The software has to be conceived, built, tested, and a production environment created. The software must be sold to customers and those customers require support. The software must be continually enhanced with new features. All customers require stellar performance, so resources are continually needed to expand the infrastructure as customers are added. While the incremental costs of adding a customer is low, as more and more customers are added the system must scale up. Since the CRM software market is very competitive, Salesforce must keep its pricing attractive, although switching costs will make it less likely to lose customers once they have become Salesforce customers. (LO: 6, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Analytic Skills)

1. *Why was it critical to choose the right team of people to get Salesforce.com off the ground? What types of skills would be necessary to create a CRM like Salesforce.com?*

Any new venture that involves creating a new product (CRM software) delivered in a new way (SaaS) will need an array of talent in order to succeed. From product visionaries and designers, development experts, infrastructure and operations experts, to marketers, accountants, financial managers, etc., many types of talents and skills are needed to be successful in this endeavor. (LO: 6, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Analytic Skills)

1. *Why did tech giants like SAP, Oracle, Microsoft, and IBM miss the opportunity to produce a SaaS CRM like Salesforce.com? What might keep large tech companies from identifying potential opportunities like Salesforce.com?*

The tech giants operated at the time on a business model that involved selling licenses to software. It probably took a new business with a fresh point of view to demonstrate the potential of the SaaS model. (LO: 6, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Analytic Skills)

1. *What could be driving the tremendous growth in Salesforce.com’s stock price and revenue growth? Why do you think investors put such a high premium on Salesforce.com’s stock?*

Salesforce has continually offered superior products and is engaged in extending its product line and cloud computing expertise. Clearly the market is impressed with its progress and prospects for the future. (LO: 6, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking Skills)

1. *Why do you think Salesforce.com chose Trust, Growth, Innovation, and Equality as its four pillars of success? Why are these important for a company that provides CRM software?*

The founder of Salesforce left his previous position with Oracle because he wanted to do something different. The pillars of success reflect his values in terms of the business he wanted to create, and also provide a very positive message to customers using Salesforce products. (LO: 6, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking Skills)

1. *CRM software is just one type of software service. Companies might be open to trying additional types of SaaS after having a great experience with Salesforce.com. What other types of software might be good candidates for future expansion for Salesforce.com? Why?*

Students’ ideas about this will vary. Reasonable candidates might be employee relationship management systems and contractor relationship management systems. (LO: 6, Learning Outcome: Explain how IS can be used to gain and sustain competitive advantage, AACSB: Reflective Thinking Skills)

For an example illustrating the concepts found in this chapter, view the videos in [mymislab.com](http://mymislab.com/).