Understanding Business, 12e (Nickels)

Bonus Chapter B Using Technology to Manage Information

1) Though the types of technology used by businesses have changed over the last several decades, the role of business technology has remained remarkably constant.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

2) In the 1970s business technology was known as data processing.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

3) Data and information are two different names for essentially the same thing.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

4) Information is data that has been processed and organized so that it can be used for managerial decision making.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

5) During the 1970s, the purpose of data processing was to support the existing business by improving the flow of financial information.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

6) During the 1970s business technology employees often dealt directly with customers.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

7) During the 1980s, the role of business technology changed from supporting business to doing business.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

8) In the late 1980s and early 1990s, businesses began to emphasize finding ways to employ new technologies to improve existing methods of doing business.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking

9) During the 1980s business technology began to emphasize the use of technology to change how business was conducted by introducing new methods.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

10) Today the role of the chief information officer is to help the business use technology to communicate better with others while offering better service and lower costs.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

11) In today's technological environment, the typical chief information officer (CIO) spends the majority of his or her time overcoming glitches and making sure the organization's information system is up and running.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

12) Information technology brings work to people instead of requiring people to go to work.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

13) Business intelligence (BI) changes the traditional flow of information so that the database goes to the individual rather than the individual going to the database.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

14) In the coming years, successful information management will be more concerned with achieving and maintaining stability and predictability, and less concerned with adapting to change.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

15) Information technology has changed the staffing and customer relations of businesses.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

16) Business intelligence is any variety of software applications that analyze an organization's raw data and take useful insights from it.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

17) Over time, business technology has become much more sophisticated, but its basic application has remained to support the existing operations of businesses by providing key financial information.

Answer: FALSE

Explanation: During the 1970s, business technology was used primarily to support business by improving the flow of financial information. In the 1980s the emphasis switched from using technology to support business to using technology to do business. In the late 1980s and into the 1990s the emphasis switched again, to using technology to change business methods. As we've hit the 2000s and 2010s, technology keeps evolving and business must evolve too.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

18) The experiences of the past several decades show that, while improvements in technology frequently enhance the efficiency of basic business operations, such improvements never actually change the fundamental way that businesses operate.

Answer: FALSE

Explanation: During the 1970s, business technology was used primarily to support business by improving the flow of financial information. In the 1980s the emphasis switched from using technology to support business to using technology to do business. In the late 1980s and into the 1990s the emphasis switched again, to using technology to change business methods. As we've hit the 2000s and 2010s, technology keeps evolving and business must evolve too. Much of the focus today is on mobile technology and big data.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

19) As businesses began using business intelligence, managers spent less time finding information and more time using it to make decisions.

Answer: TRUE

Explanation: Business intelligence filters information to make sure it is relevant, and provides that information to decision makers when it is needed. Knowledge technology thus reduces the time managers spend searching for relevant information, giving them more time for decision making.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

20) Samantha's assistant just handed her a report that summarizes and organizes many raw facts and figures into a few key measures that will help her judge whether her department is meeting its key objectives. The summary measures included in the report are information, while the raw facts and figures used to compute these measures are data.

Answer: TRUE

Explanation: Data refers to raw, unanalyzed, and unorganized facts and figures. Information is the processed and organized data that can be used for managerial decision making. Since the measures in the report have been summarized into a form Samantha finds useful, they are examples of information.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

21) Ronald is the CIO for a major corporation. His job requires him to have an extensive knowledge of the hardware and software his company uses, but he will seldom be concerned about the methods and procedures used by specific departments.

Answer: FALSE

Explanation: Today's CIO will be concerned with finding ways to boost business by using technology to change the way the organization operates. Thus the CIO will be concerned with finding ways to implement new technologies that will boost performance in purchasing, operations, marketing, and sales. These new technologies will obviously affect the methods and procedures of a variety of departments within the organization.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

22) RFID devices collect biological data.

Answer: FALSE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

23) Public data includes electronic traces that people leave when posting to the Internet and sending e-mail.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

24) Your online shopping trail provides information that indicates your personal preferences.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

25) A basic truth in management is that you can never have too much information.

Answer: FALSE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

26) In this age of technology, managers can easily become buried in information infoglut.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

27) Useful information has three defining characteristics: (1) it is easily accessible, (2) it is efficiently organized, and (3) it is simple to manipulate.

Answer: FALSE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

28) The quality of management information depends on its accuracy and reliability.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

29) Timeliness is one of the characteristics of useful management information.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

30) Subjectivity is one of the four characteristics of useful information.

Answer: FALSE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

31) Relevance is one of the key characteristics of useful information.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

32) Redundancy is one of the four characteristics of useful information.

Answer: FALSE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

33) The first step in avoiding information overload is to identify four or five key goals and focus only on information that is related to those goals.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

34) Data mining looks for previously unknown relationships among vast amounts of data.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

35) Major retail firms such as Walmart have used data mining to customize the product offerings for each store.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

36) The success of data mining depends on access to data.

Answer: TRUE Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

37) The key to improving management decision making is to provide the manager with as much information as possible.

Answer: FALSE

Explanation: The effectiveness of additional information is definitely subject to the law of diminishing returns. Managers do need an adequate flow of *useful* information in order to make good decisions, but a major problem faced by many of today's managers is that they must sort through too much information (a situation referred to as *infoglut*). This can confuse issues and slow down decision making.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

38) In order for information to be useful to managers, it must satisfy only two criteria: it must be timely, and it must be easy to manipulate.

Answer: FALSE

Explanation: Useful management information must satisfy four criteria: (1) quality (accuracy and reliability), (2) completeness, (3) timeliness, and (4) relevance. Information may be timely, but if it is inaccurate, or if it is not relevant to the manager, it is not very useful.

Difficulty: 2 Medium

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Understand

AACSB: Reflective Thinking

39) Doreen is overwhelmed by information overload. Unfortunately, in this day of technology, there is little she can do to control this problem.

Answer: FALSE

Explanation: There are strategies that can help managers control the flow of information. Perhaps the most effective first step in dealing with information overload is to identify four or five key goals and eliminate information that is not relevant to those goals. This strategy can eliminate much of the information that flows into the manager's office.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

40) Perfect Price Warehouse is a major discount store chain on the east coast. The company wants to do a better job of finding sales patterns and trends that will help it customize the product offerings for different stores. Data mining is one technique that would help Perfect Price Warehouse achieve this goal.

Answer: TRUE

Explanation: Data mining looks for hidden patterns and relationships in data. Retailers such as Walmart have used data mining to track sales and identify local trends and patterns. They use this information to customize product offerings for individual stores.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

41) An intranet is a companywide network that is based on Internet-type technology, but closed to public access.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and

3.0.

Bloom's: Remember

AACSB: Reflective Thinking

42) Intranets use a different, less sophisticated, type of technology than the Internet.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

43) The software or hardware barrier that a business uses to prevent unauthorized users from gaining access to their intranet is known as a tripware.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

44) Firewalls can be constructed using software, hardware, or a combination of both.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

45) The most productive way for firms to use intranets is to publish information that can be accessed by all employees within an organization.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and

3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

46) Interactive intranet applications can save money and increase revenue by reducing paper handling and enabling faster decision making.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

47) The extranet is the next stage in the evolution of the Internet, consisting of a revolutionary new fiber optic technology that will enable computer users throughout the world to send and receive data up to 256 times faster than they can using the technology of the early 2010s.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

48) A common use of an extranet is to extend an intranet to outside customers.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and

3.0.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

49) Compared to intranets, one advantage of an extranet is that it protects a company's information from hackers.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

50) One problem with most extranets is that they use public lines, which makes it possible for hackers to get into the network.

Answer: TRUE Difficulty: 1 Easy

Topic: The Heart of Knowledge Management: The Internet

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

51) Extranets now allow small firms to share and process data much as large firms have been able to do using electronic data interchange.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and

3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

52) Virtual private networks are quick and easy to set up, but they are less secure than extranets.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

53) Virtual private networks create secure connections over regular Internet lines.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

54) A virtual private network allows information managers to simulate a real intranet in order to identify possible security problems and technical glitches before the company sets up the actual private network.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and

3.0.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

55) Enterprise portals are simply web pages with links to company-specific products and services.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

56) Enterprise portals have the ability to identify users and give them access to specific areas of an organization's intranet depending on their relationship to the organization.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

57) Widebeam is the term used to refer to technologies that give users continuous access to the Internet and greatly increase the speed at which data flows to and from their Internet connection.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and

3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

58) Bandwidth is the term used to describe the rate at which data flows through the Internet.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

59) Internet2 runs more than 22,000 times faster than today's public infrastructure.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

60) Initially, the very-high-speed Internet2 network service was set up to connect government supercomputer centers with a select group of universities.

Answer: TRUE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and

3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

61) Users of Internet2 each pay the same fee for their connection and share bandwidth equally.

Answer: FALSE Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

62) The main purpose of an intranet is to allow a company to keep in close contact with its customers.

Answer: FALSE

Explanation: An intranet is a companywide network that is closed to public access. Customers do not normally have access to the information on an intranet. If customers are allowed into the company network, they do so through a semiprivate network system called an extranet or by setting up a virtual private network (VPN).

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

63) The fact that electronic data interchange technology is so expensive that only large firms can afford to use it puts small firms at a severe disadvantage when it comes to sharing information.

Answer: FALSE

Explanation: Now the Internet allows almost all firms to share information, process orders, specifications, and invoices. A common way of doing this is by setting up an extranet, which uses Internet technology to allow people on different servers to collaborate. Thus the advantages of EDI technology are no longer available only to large firms.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

64) The main reason for setting up an enterprise portal is to ensure that only employees of an organization have access to the information on its intranet.

Answer: FALSE

Explanation: Enterprise portals identify various types of users and allow them access to the intranet based on their roles. These portals often allow customers and suppliers to have access to certain areas of the intranet.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking

65) A major reason for the creation of Internet2 was that private businesses wanted to establish a network that was free from government regulation.

Answer: FALSE

Explanation: A major reason for the development of Internet2 was that the existing Internet was becoming so crowded that scientists and scholars were having an increasingly difficult time gaining access to the network and transmitting data over it. Internet2 was designed to operate at much faster speeds than today's network and to have the capacity to support heavy-duty applications.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

66) Homegrown Design, a company that publishes home design software, wants to set up a temporary link with another firm to collaborate and share data on a short-term basis. Homegrown wants to keep the cost of setting up this connection reasonable, but is concerned about hackers and wants to make sure its link is secure. The best way for Homegrown to achieve its goal is to set up an extranet with dedicated lines.

Answer: FALSE

Explanation: Using dedicated lines for extranet linkages can offer protection from hackers, but the cost is so high that it would be difficult to justify this type of solution for a temporary link. A better solution would be to set up a virtual private network (VPN) that creates secure connections over regular Internet lines. A VPN is simpler and less expensive than a network that uses dedicated lines, but still offers significant protection against hackers.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

67) Tee Time Golf Resorts currently has an intranet, and is considering making use of an extranet. One of the main reasons Tee Time may want an extranet is to allow a select group of outside customers to have access to information on its intranet.

Answer: TRUE

Explanation: Intranets are companywide networks that are closed to public access. Extranets are semiprivate networks that allow a selected group of organizations to share information. A common use of extranets is to allow outside customers to gain access to an intranet.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

68) Information managers at Epic Electronics want to provide a single, seamless interface that will make it easier for customers, suppliers, and employees to gain access to the parts of its intranet that they need. Epic could achieve this result by setting up an enterprise portal.

Answer: TRUE

Explanation: Enterprise portals serve as entry points to an organization's intranet. They identify users as employees, customers, suppliers, etc., and allow them access to the areas of the intranet relevant to their role. Portals generally are convenient to use because they provide access to all the information various users need through one interface.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

69) Western University just obtained a link to Internet2. Researchers at Western intend to make very heavy use of their new link for various forms of collaboration, for videoconferencing and for running complex simulations. Unlike the regular Internet, the more bandwidth Western's researchers use on Internet2, the more the university will have to pay.

Answer: TRUE

Explanation: Unlike the public Internet where bandwidth is divided evenly among users,

Internet2 allows users willing to pay more to use more bandwidth.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

70) Virtual networking is a process that allows software-based networked computers to run multiple operating systems and programs.

Answer: TRUE Difficulty: 1 Easy

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

71) Internal networking shares the resources of all computers with each networked computer.

Answer: FALSE Difficulty: 1 Easy

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Remember

AACSB: Reflective Thinking

72) Cloud computing is a form of virtualization in which a company's data and applications are stored onsite and accessed via an external hard drive.

Answer: FALSE Difficulty: 1 Easy

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

73) There are three types of cloud computing: private clouds, public clouds, and hybrid clouds.

Answer: TRUE Difficulty: 1 Easy

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

74) The advantages of cloud computing are security, possible instability, and data control.

Answer: FALSE Difficulty: 1 Easy

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

75) Some advantages of cloud computing include flexible capacity and easier access.

Answer: TRUE Difficulty: 1 Easy

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Remember

76) Because cloud computing is often too expensive for small businesses, it is rarely used.

Answer: FALSE

Explanation: Two of the advantages of cloud computing are reduced software costs and lower equipment costs. This makes cloud computing *more* accessible to small business owners.

Difficulty: 2 Medium

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

77) Bennett just got started using a storage method called Dropbox. He stores most of his information with this service. Bennett is using cloud computing.

Answer: TRUE

Explanation: Dropbox is one of the many possible clouds where a person could store their

information.

Difficulty: 2 Medium

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

78) The use of computers increases the number of layers of management, resulting in taller organizations.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

79) One of the most revolutionary effects of computer networks is that they give employees the ability to do much of their work at home.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

80) Telecommuting is popular with workers, but it is costly for businesses.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

81) One problem with telecommuting is that it can cause workers to feel like they are isolated and left out of the office loop.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

82) The increasing use of computer networks has made computer security more complicated.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

83) The use of antivirus software completely eliminates the risk of downloading infected files.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

84) A computer virus is a piece of programming code that is inserted into other programming code with the intention of causing some unexpected, and usually undesirable, event for the user of the software.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

85) Phishing is an online security threat in which scammers hold data hostage until you pay the hacker to get it back.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

86) When ransomware software infects a computer, scammers hold data hostage until you pay the hacker to get it back.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

87) In the area of electronic communications, the main focus of corporate and government security officials today is the prevention of credit card fraud.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

88) Today the primary concern of corporate and government security officials concerning electronic communication is in the area of cyberterrorism.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

89) As the result of the terrorist attacks on September 11, 2001, managers of most major corporations have become much more willing to give the government extensive access to information about problems with electronic communication such as viruses and attacks by hackers.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

90) The Critical Infrastructure Protection Board was established after the terrorist attacks of September 11, 2001, as part of the Office of Homeland Security.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

91) It is illegal for companies to scan e-mails written by their employees at work unless the employees have given permission in advance or the firm has received approval from a federal judge.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

92) Most e-mail messages are automatically encrypted to protect them from being intercepted and read by hackers.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

93) Websites often send cookies to a user's computer that are saved on the computer's hard drive.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

94) There are sites online that provide users with easy access to personal information about other people.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

95) When spyware is inadvertently downloaded to a user's computer the software tracks the user's online behavior. Spyware is installed without the user's knowledge and can infect the computer with a virus.

Answer: TRUE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

96) Computer technology has become so stable and mature in recent years that, except for problems caused by viruses and hackers, major glitches are essentially a thing of the past.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

97) The cause of almost all instability in computer systems can be traced to poorly designed hardware.

Answer: FALSE Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

98) One advantage of networked computers is that they offer much greater computer security than the older mainframe systems.

Answer: FALSE

Explanation: Networked computers give more people access to more information, and increase the risk that people will be able to obtain information not intended for them. With a mainframe system, there was a single data center, and access to information was easier to control.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

99) The Internet has greatly slowed the spread of computer viruses by making it possible to share programs and files by downloading them from online sources rather than sharing diskettes.

Answer: FALSE

Explanation: Although viruses can be spread by using infected diskettes, they can also be spread by downloading infected files over the Internet.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues affected by information technology.

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

100) Studies have shown that all types of workers are likely to become more productive when they are allowed to telecommute.

Answer: FALSE

Explanation: Some workers react poorly to telecommuting. They feel "out of the loop," miss the energy and social interaction of the office environment, or resent the fact that bringing work home intrudes on their personal lives. Some workers may also have a hard time turning the work off. Studies have shown that telecommuting is most likely to be successful among workers who are self-starters, have few distractions at home, and do not require face-to-face interaction with coworkers.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Understand

101) Ransomware only infects individuals' personal computers. Big organizations have too many firewalls in place to allow the virus in.

Answer: FALSE

Explanation: The biggest cyber attack in Internet history took place in May 2017 when ransomware took over 200,000 machines in 150 countries. Large organizations, like Renault and the National Health Service in the UK, were affected.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

102) Corrine has all the technological tools—a laptop, a tablet, and a smartphone that never leaves her side. The computer in home office has a broadband connection to her company's intranet. If Corrine is like most Americans who have access to all of this modern technology, she will enjoy a much shorter workweek than workers in less technologically advanced nations.

Answer: FALSE

Explanation: Although advances in information technology often do improve productivity, most Americans take the results of these gains in the form of increased consumption rather than additional leisure. In fact, the types of information technology available to Corrine make it possible for her to work at home, in her car, and even while on vacation. Blessed with all of this technology, Americans like Corrine now tend to work longer hours than workers in any other nation.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

103) Marcus works for the Critical Infrastructure Protection Board. One of the major challenges he is likely to face is to get CIOs at major corporations to provide the type of information he needs to help his board achieve its mission.

Answer: TRUE

Explanation: After the terrorist attacks on September 11, 2001, the federal government created the Critical Infrastructure Protection Board as part of the Office of Homeland Security. This board was given the responsibility to devise a plan for improving security for America's critical infrastructure. In order to carry out its mission, the board needs corporations to provide them with information about security issues they face, such as virus infections and attacks by hackers. However, many CIOs are reluctant to give this information to the government because they fear that if investors and the public learn of these problems, they will lose confidence in their companies.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

104) Zoe has discovered that several of the sites she recently visited have downloaded small files to her computer's hard drive even though she did not request them. The files she discovered are known as crackers.

Answer: FALSE

Explanation: Small files that websites download to a visitor's computer are known as cookies. These files serve different purposes. Some cookies contain only the user's name and password, but others are used to track the user's movements on the web and send information back to the website to be included in the organization's database.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

105) Dennis just learned that his company has been reading the e-mails he has sent while at work without getting his permission. Dennis can sue the company for invasion of privacy under the Electronic Communications Privacy Act of 1997.

Answer: FALSE

Explanation: Companies can legally read the e-mail their employees send. The text does not discuss the Electronic Communications Privacy Act of 1997, because no such law was actually enacted.

Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

106) In the 1970s, business technology was known as

A) data processing.

B) information processing.

C) information technology.

D) systems analysis.

Answer: A Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

is raw, unanalyzed, and unorganized facts and figures.

A) Statistics

- B) Ratios
- C) Data
- D) Criteria

Answer: C Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

108) The primary role of business technology during the 1970s was to

- A) empower workers by giving them access to ever-greater amounts of information.
- B) implement new production methods that relied on automated equipment.
- C) protect proprietary company information from outsiders.
- D) support existing business by improving the flow of financial information.

Answer: D Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 109) During the 1980s business technology became known as
- A) data processing.
- B) knowledge management.
- C) information systems.
- D) personal computing.

Answer: C Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 110) Beginning with the late 1980s the goal of information technology was to
- A) improve the flow of financial information throughout business organizations.
- B) use new technologies to offer new methods of conducting business.
- C) prevent proprietary information from falling into the hands of competitors.
- D) use new technologies to improve old methods.

Answer: B
Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking

111)	is	ir	formation	charged	with	enough	inte	lligence	to 1	make	it re	levant	and	usefu	1
,								0							

- A) Knowledge
- B) Data
- C) An hypothesis
- D) A theory

Answer: A Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

112) _____ refers to a variety of software applications that analyze an organization's raw data and obtain useful insights from it.

- A) Information processing
- B) Data processing
- C) Artificial intelligence
- D) Business intelligence

Answer: D Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

113) The key distinction between data and information is that data

A) are facts and figures that have been stored in databases so that they can be accessed and manipulated by a computer while information has not been.

- B) is less reliable than information because its accuracy has not been verified.
- C) is mathematical in nature while information is verbal in nature.
- D) are raw, unanalyzed facts and figures while information is data that has been processed and summarized so that is can be used by decision makers.

Answer: D

Explanation: Data are raw, unanalyzed, and unorganized facts and figures. Information is data that has been processed and organized so that it is useful to decision makers.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

- 114) From the 1970s to the present time, the primary role of business technology has
- A) always been to provide businesses with necessary financial information.
- B) always been to provide better customer service.
- C) changed from providing better customer service to improving employee productivity.
- D) changed from supporting business to providing new ways of doing business.

Answer: D

Explanation: In the 1970s, the primary role of business technology was to support business by improving the flow of financial information. By the late 1980s (and continuing into the 2010s), business technology began to change the way businesses operated.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

115) NASDAQ is an example of how information technology can

- A) help engineers design products that exactly meet the needs of a specific target market.
- B) be used to create organizations and provide services that are independent of location.
- C) provide small firms with new opportunities to grow by forming alliances with larger companies.
- D) help the government measure the environmental impact of business activities.

Answer: B

Explanation: NASDAQ is an electronic stock exchange that enables people to make trades over the computer. These exchanges have no physical location.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

- 116) A major impact of information technology has been to
- A) encourage the growth of giant corporations.
- B) create organizations that are independent of location.
- C) reduce the demand for skilled labor.
- D) increase overall costs of production.

Answer: B

Explanation: In the late 1980s, businesses began using new technologies to provide goods and services in new ways that break down barriers of time and space. Businesses that use these new technologies can provide goods and services whenever and wherever customers want them. By breaking down these barriers, information technology has created organizations that are independent of location.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 117) An important advantage knowledge technology has over older versions of business technology is that it
- A) delivers timely information directly to the people who need it.
- B) is much cheaper to incorporate into most business operations.
- C) allows businesses to locate anywhere and still reach their customers.
- D) eliminates the need for businesses to store information electronically.

Answer: A

Explanation: Knowledge technology adds a layer of intelligence to filter appropriate information and deliver it when it is needed. It is designed to reduce the time and effort decision makers spend finding relevant information.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

AACSB: Reflective Thinking

- 118) The use of knowledge technology should result in a(n)
- A) greater reliance on mainframe computers.
- B) increase in the number of firms using spreadsheet software.
- C) reduction in the amount of time managers spend searching for relevant information.
- D) taller organization as firms hire more information specialists to handle the increased flow of information.

Explanation: Knowledge technology filters information and provides relevant information to managers when they need it. Use of knowledge technology should reduce the amount of time searching for information, and give managers more time to devote to decision making.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

- 119) Edwin, a sales manager, just finished reading some sales statistics comparing his company's performance to that of competitors. The statistics summarize a mass of raw figures into a few meaningful measures that Edwin will use to determine whether he needs to change his sales strategy. The statistics in the printout are
- A) information, while the raw figures used to compute the statistics are data.
- B) data, while the raw figures used to compute the statistics are information.
- C) less useful to Edwin than the raw figures would have been, since summarizing the figures necessarily reduces their accuracy.
- D) an example of how managers have a tendency to oversimplify by reducing complex issues into a few simple numbers.

Answer: A

Explanation: Data are raw, unanalyzed, and unprocessed facts and figures. Information is data that has been processed and summarized into a meaningful form that can be used for decision making.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Apply

- 120) Bigbux Bank has always tried to make use of the newest technologies to expand the services it offers to its customers. For example, depositors can obtain updated financial information about their accounts and handle certain types of transactions whenever they wish simply by using the bank's mobile app with fingerprint login. The type of technology Bigbux Bank uses to provide these services is known as
- A) data processing.
- B) systems processing.
- C) information technology.
- D) knowledge processing.

Explanation: In the late 1980s and into the 1990s businesses started combining new technologies with new methods to change the way of doing business. This approach is known as information technology and it has been used to break down barriers of time and location, allowing firms to provide goods and services whenever and wherever customers want them.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

- 121) Which of the following observations would be the strongest evidence that Marshall Manufacturing has adopted knowledge technology?
- A) Marshall's customers can place orders for its products directly from the company's Internet website.
- B) Marshall has installed software that searches a variety of databases online for information relevant to each employee's current assignment, and sends the information to the appropriate employee's e-mail address.
- C) Marshall has provided all of its employees with a personal computer.
- D) Marshall has initiated a program that allows each employee to sign up for advanced training in the use of spreadsheets, word processors, graphics programs, and other types of software.

Answer: B

Explanation: Knowledge technology provides relevant information to workers when they need it. A big advantage of knowledge technology is that it reduces the time spent finding and obtaining information, thus giving people more time to decide how to use it.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Apply

- 122) Melissa, a new employee at Epic Electronics, is required to perform a variety of bookkeeping and clerical tasks at a workstation. Epic has training software on its workstations that can answer many of the questions she has about what to do on her new job, and how to do it. The software is so good that she rarely asks her supervisor for help. It even tracks the way Melissa performs certain tasks, and offers suggestions to improve her productivity. This software is an example of
- A) the use of a technique called computer aided production (CAP) that is becoming increasingly important in high-tech industries.
- B) the trend toward telecommuting.
- C) the way businesses are using knowledge technology to move relevant information to the people who need it.
- D) why mainframe computer systems are more efficient than network computer systems.

Explanation: Knowledge technology changes the flow of information from an individual going to a database to the data coming to the individual. This is what the training program described in this question does. It provides Jamie with the information she needs to work more efficiently right at her workstation.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

- 123) Mark, a sales rep with a large technology company, is celebrating today because he just closed a large deal, which means a sizeable commission. Even the finance department is thrilled because Mark used ______ to review the credit history of this customer to be sure the deal would be a profitable one for the company.
- A) knowledge transfer
- B) business intelligence
- C) data processing
- D) business process information

Answer: B

Explanation: Business intelligence (BI) refers to a variety of software applications that analyze an organization's raw data and obtain useful insights from it. BI activities include data mining, online analytical process, querying, and reporting. By using BI the sales rep can obtain the right information about the credit history of the customer before closing the sale. This connects the sales activity to the financial requirements in a seamless process.

Difficulty: 3 Hard

Topic: Knowledge Application

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Apply

- 124) Transaction data gathered at the point of sale is known as
- A) physical-world observations.
- B) business process information.
- C) public data.
- D) personal preference data.

Answer: B Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

- 125) Data from RFID devices, miniature cameras, and wireless access used to understand where people or items are located is called
- A) physical-world observations.
- B) biological data.
- C) public data.
- D) business process information.

Answer: A Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

- 126) Information mainly used for security purposes such as fingerprinting and retinal scans is known as
- A) physical-world observations.
- B) biological data.
- C) private data.
- D) public data.

Answer: B

Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

- 127) The amount of information managers receive each day
- A) is never enough; when it comes to managerial decision making, there is no such thing as too much information.
- B) has been managed much more efficiently in recent years, largely due to the development of spreadsheets.
- C) has remained remarkably stable over the years.
- D) has become so great that it now threatens to bury many decision makers in infoglut.

Answer: D
Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 128) Two of the characteristics of useful information are
- A) relevance and timeliness.
- B) redundancy and simplicity.
- C) clarity and confidentiality.
- D) flexibility and durability.

Answer: A Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

129) High-quality information is

A) accurate and reliable.

- B) normative and open ended.
- C) simple and easy to use.
- D) subjective and unique.

Answer: A Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

130)	looks for hidden patterns and unknown relationships among the data a firm has
accumulated.	
A) Tracking co	ftware

- A) Tracking software
- B) Econometric analysis
- C) Data mining
- D) Data parsing

Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

131) ______ is the process of collecting, organizing, storing, and analyzing large sets of data to identify patterns to help make decisions.

- A) Data analytics
- B) Econometric analysis
- C) E-mail organization
- D) Data parsing

Answer: A

Difficulty: 1 Easy

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Remember

- 132) A major problem with the rapid expansion in the amount of information available to managers is that
- A) managers can become overwhelmed with too much information.
- B) information costs are skyrocketing.
- C) the capacities of computer hard drives and other storage media are no longer sufficient to store the huge volume of information being generated.
- D) the need to gather this information has resulted in greater levels of bureaucracy.

Explanation: A major problem faced by managers today is information overload (sometimes referred to as infoglut). Too much information can confuse issues rather than clarify them, and can slow down decision making.

Difficulty: 2 Medium

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 133) The first step a manager should take to cope with information overload is to
- A) obtain a good database management system and use it to organize information more efficiently.
- B) hire a qualified information systems analyst.
- C) identify four or five key goals, and eliminate information that is not related to those goals.
- D) purchase more sophisticated hardware that can process and store information more efficiently.

Answer: C

Explanation: A major reason managers are overburdened with information is that much of the information flowing into their offices is not related to their top priorities. Managers can greatly reduce information overload by focusing on information that is relevant to their key goals.

Difficulty: 2 Medium

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Understand

AACSB: Reflective Thinking

- 134) A firm would use data mining if it wanted to
- A) store copies of crucial data in several different locations to protect against its loss during disasters such as earthquakes, floods, or terrorist attacks.
- B) protect its data from unauthorized outsiders.
- C) increase the rate at which information flows through a firm's intranet.
- D) discover hidden relationships among the data it accumulates.

Answer: D

Explanation: The purpose of a data warehouse is to get data out. Data mining is looking for hidden patterns in a data warehouse. Data-mining software discovers previously unknown relationships among the data.

Difficulty: 2 Medium

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 135) Data mining would be most helpful to a manager that wants to
- A) find the most efficient way to reduce the amount of data collected.
- B) restrict access to the company's data to a few key analysts.
- C) store data in a more secure location.
- D) discover unexpected relationships among the data stored by his or her organization.

Answer: D

Explanation: Data mining looks for hidden patterns in a data warehouse. These patterns can help managers discover unknown relationships among the data. The text explains Walmart's use of data mining to customize the product offerings of individual stores as an example of this approach.

Difficulty: 2 Medium

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Understand

- 136) If a business wanted to gather up-to-the-minute data on its customers, one way to do that would be
- A) database management.
- B) data mining.
- C) social media.
- D) physical-world observations.

Explanation: About 90% of the data used by businesses today has been collected in the last two years and most of it has come from "unstructured" sources like social media. With social media monitoring, businesses can collect up-to-the-minute data on customers.

Difficulty: 2 Medium

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 137) Brianna, a marketing manager for a chain of clothing stores, recently received an e-mail with some timely and reliable information about trends in men's clothing for next season. Unfortunately, her store sells only women's clothes. The information in the newsletter was not useful to Brianna because it lacked
- A) redundancy.
- B) accuracy.
- C) relevance.
- D) selectivity.

Answer: C

Explanation: Useful information has four characteristics: quality (accuracy and reliability), completeness, timeliness, and relevance. The information about men's clothing was not information that met Brianna's needs, so it was not relevant.

Difficulty: 3 Hard

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Apply

- 138) Aubrey is a manager who wants to be well informed. Like many managers, however, she is often overwhelmed by information overload. Which of the following would probably be the most useful first step for her to take in order to deal with this problem?
- A) Hire an assistant to summarize all of the information for him.
- B) Identify four or five key goals and eliminate information that is not relevant to those goals.
- C) Purchase hardware and software that will process the information more efficiently.
- D) Establish a "time budget" with a specified time period set aside each day for reading reports, studies and other sources of information.

Answer: B

Explanation: Much of the information that a typical manager deals with is not really relevant to his or her most important goals. Eliminating this irrelevant information can reduce the overall flow of information to a manageable level.

Difficulty: 3 Hard

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

- 139) Steve has convinced top management at his company that they can use data-mining techniques to develop new marketing strategies. One of the keys to the success of his suggestion is
- A) obtaining a powerful mainframe computer that can perform sophisticated statistical analysis on huge amounts of data.
- B) converting all data into a quantitative format so that it can be easily manipulated.
- C) outsourcing all IT functions to an outside expert that can look at the data with "fresh eyes."
- D) finding a way to access and integrate information from all of the different departments and divisions within the organization.

Answer: D

Explanation: Perhaps the most important factor in the success of data mining is to obtain access to all of the data that should be mined. Many organizations have multiple data storage systems that run on different incompatible platforms. Moreover, departments and divisions sometimes jealously guard their data. These problems must be overcome before a firm can use data-mining techniques successfully.

Difficulty: 3 Hard

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Apply

- 140) The HR department at Pages and Pages Booksellers wants to reduce the cost of benefits it offers its employees. A department specialist suggested that the company consider ______ its HR system. By sorting and analyzing the demographics and lifestyle characteristics of its employees, Pages and Pages hopes to determine which benefits are most important, and possibly which can be eliminated. Marketers utilize the same technology to keep pace with sales trends.
- A) pre-programming
- B) post-programming
- C) data mining
- D) data storing

Explanation: For many companies, the answer to handling the glut of data is to establish data warehouses, which store information about a single subject over a specified period of time.

Difficulty: 3 Hard

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

141) A(n) ______ is a companywide network that is based on Internet-like technology, but is closed to public access.

A) enternet

B) alter-net

C) intranet

D) inner-net

Answer: C

Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

142) A company can use a(n) to prevent unauthorized outsiders from accessing information on its intranet. A) firewall B) disconnector C) entry sentry D) tripwire
Answer: A
Difficulty: 1 Easy
Topic: Knowledge Management
Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual
private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.
Bloom's: Remember
AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
143) A(n) is a semiprivate network that uses Internet technology to enable more than one company to access the same information or to allow people on different servers to collaborate. A) crossnet B) extranet C) outernet D) alternet
Answer: B
Difficulty: 1 Easy
Topic: Knowledge Management
Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual
private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.
Bloom's: Remember
AACSB: Reflective Thinking
Accessibility: Keyboard Navigation

- 144) Many businesses choose to open their intranets to other selected organizations through the use of
- A) crossnets.
- B) alternets.
- C) outernets.
- D) extranets.

Answer: D
Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

- 145) One of the most common reasons firms make use of an extranet is to
- A) prevent employees from using the Internet for private purposes on company time.
- B) post information that can be accessed only by employees of the organization.
- C) extend an organization's intranet to outside customers.
- D) increase the speed at which employees can access information on the Internet.

Answer: C Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

- 146) The advantages of electronic data interchange are no longer limited to large companies, because even small firms can exchange and process data such as orders, invoices, and payments using
- A) groupware.
- B) an extranet.
- C) spreadsheet software.
- D) integrated software suites.

Answer: B Difficulty: 1 Easy

Topic: The Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

147) A(n) _____ serves as an entry point to a variety of resources on an organization's information network.

A) personal information manager

B) e-transfer page

C) enterprise portal

D) subscription web page

Answer: C Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

148) One of the problems with extranets is that they

- A) are semiprivate, so it is possible for hackers to gain access to information on the system.
- B) use an old technology that is not as fast at transferring data as the Internet.
- C) cannot be accessed by people unless they are employees of the company.
- D) have no ability to handle common e-mail protocols.

Answer: A Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

149) A(n) _____ is a private data network that creates secure connections over regular Internet lines.

A) extranet

- B) secured common linkage network
- C) virtual private network
- D) monitored network system

Answer: C Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking

150) is a new system that is designed to overcome the speed limitations of the Internet and support heavy-duty applications such as videoconferencing and distance education. A) Internet2 B) Supernet C) Maxinet D) Ultranet
Answer: A
Difficulty: 1 Easy
Topic: Knowledge Management
Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.
Bloom's: Remember
AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
151) technology uses a continuous Internet connection that allows users to send and receive mammoth files that include voice, video, and data much faster than ever before. A) Widebeam B) Least resistance C) Analog D) Broadband
Answer: D
Difficulty: 1 Easy
Topic: Knowledge Management
Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual
private networks and explain how broadband technology enabled the evolution to Web 2.0 and

Bloom's: Remember

3.0.

- 152) A key element of Internet2 is
- A) the requirement that all users log on to each site with a unique password.
- B) the very-high-speed backbone network service (vBNS).
- C) a new security system that eliminates the risk that unauthorized users will be able to access private information.
- D) the high-speed resource allocation prioritizer (hsRAP).

Answer: B Difficulty: 1 Easy

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 153) A firm that wanted to enable its employees to use and share data without allowing outsiders to gain access could do so by establishing a(n)
- A) extranet.
- B) innernet.
- C) enternet.
- D) intranet.

Answer: D

Explanation: An intranet is a companywide network closed to public access. Companies use intranets to give employees access to information such as phone lists and policy manuals. Intranets can also contain interactive applications that allow employees to update information and share it with others.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking

- 154) The key difference between an intranet and an extranet is that an intranet
- A) uses technology based on current Internet standards, while an extranet uses technology based on Internet2.
- B) uses public lines to transmit information, but an extranet uses private lines.
- C) is closed to public access, while an extranet allows selected outsiders access to the network.
- D) allows many different organizations to share data and resources, while an extranet is limited to only two organizations.

Explanation: An intranet is a companywide network that is closed to public access. An extranet is a companywide network that allows outsiders who have specific needs to interact with the company to have access to the network. For example, an extranet may give suppliers access to the network, or it may give researchers at another institution the ability to collaborate with researchers within the organization.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 155) The organizations that benefit the most from an intranet are the ones that
- A) publish information on the intranet that all employees can access.
- B) operate the intranet over a mainframe system.
- C) base the intranet interface on one of the popular web browsers.
- D) develop interactive intranet applications.

Answer: D

Explanation: Interactive intranet applications allow employees to update information and submit forms such as supply requisitions, time sheets, and payroll forms online. This saves money and enables faster decision making.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking

- 156) A company that wanted to provide a single, unified entry point to its network that would allow different types of users access to different types of resources could do so by establishing a(n)
- A) enterprise portal.
- B) broadband interface.
- C) intranet.
- D) mainframe network.

Explanation: An enterprise portal serves as an entry point to a variety of resources. However, these portals are more than simply web pages with links. They identify users when they log on and allow them access to different types of resources depending on their relationship to the firm. Thus customers might be given access to one set of resources, while suppliers were allowed to use other resources.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

157) Compared to the Internet, a major advantage of Internet2 is that it

A) can be accessed even by people without computers; all that is needed is a simple, inexpensive receiver, a television set, and a standard telephone line.

- B) is owned and operated by the United Nations, and is accessible to people in every nation.
- C) can move information much faster than the Internet and has the capacity to handle heavy-duty applications.
- D) allows firms to set up their own protocols for transferring and processing information.

Answer: C

Explanation: Internet2 runs more than 22,000 times faster than today's public interface and supports heavy-duty applications such as videoconferencing and collaborative research.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking

- 158) Most successful businesses utilize social media to communicate with customers. An important strategy for consideration is: Successfully implementing social media will
- A) provide a well-defined purpose for the customer.
- B) mostly serve as an outlet for sales promotion, for example, the distribution of coupons and deals.
- C) provide one-way communication: from the business to the customer.
- D) be socially conscious; it will inform customers of the social changes that surround them.

Explanation: Companies that successfully implement social media as part of their promotional presence know that the tool must be interactive, two-way conversation between the company and the customer. The use of social media must always serve a unique purpose for the firm's customers.

Difficulty: 2 Medium

Topic: Social Networking for the Business Environment

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 159) A firm would be most likely to establish an enterprise portal if it wanted to
- A) prevent outsiders from using its information network.
- B) allow users to access different areas of its network depending on their relationship to the firm.
- C) prevent viruses from being downloaded from the company's website.
- D) search for hidden patterns and unknown relationships among data stored in different information systems.

Answer: B

Explanation: An enterprise portal is an entry point into a variety of resources available on an organization's network. However, these portals are more than simply web pages with links. They identify users when they log on and allow them access to different types of resources according to their roles: customers, suppliers, employees, etc., within the firm. Thus customers might be given access to one set of resources while suppliers might be allowed to use other resources.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

- 160) The main reason a firm would establish a firewall for its intranet is that it wants to
- A) prevent outsiders from being able to access information on its network.
- B) protect itself against loss of data in the event of a fire, flood, or other catastrophe.
- C) create an interface to hook into Internet2 using firewire connections.
- D) prevent employees from gaining access to the Internet for personal use.

Explanation: A firewall is hardware or software (or both) that a company uses to protect an organization's information from unauthorized users.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

- 161) The most likely reason a firm would decide to establish an extranet would be the desire to
- A) speed the flow of information on its private network by increasing the bandwidth.
- B) make the information on its network widely available to the general public.
- C) share information and collaborate with a select group of outside organizations or individuals.
- D) overcome the speed and capacity limitations of its external connection to the Internet by gaining access to the very-high-speed Backbone Network Service.

Answer: C

Explanation: An extranet is a semiprivate network that uses Internet technology so that more than one company can access the same information or so that people on different servers can collaborate.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

- 162) Which of the following is the best assessment of the impact extranets have had on the way small businesses operate?
- A) As yet, extranet technology has had little impact on small businesses, because the technology is too new and expensive.
- B) The development of extranets has put small firms at a serious competitive disadvantage, because suppliers and customers are more willing to participate in extranets set up by larger organizations.
- C) The use of extranets enables small firms to share and process data in ways that had been available in the past only to large firms that could afford electronic data interchange technology.
- D) The extranet has made it easier for small firms to offer their goods and services to the general public because of the increased bandwidth this technology provides.

Explanation: The extranets have had a major impact on small businesses by allowing them to share and process data such as orders, specifications, invoices, and payments in ways that were previously only available to large firms that could afford to use EDI technology.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 163) A firm would consider establishing a virtual private network if it wanted to
- A) prevent people who are not employees from being able to access its network.
- B) set up a secure network connection with another firm for a short period of time.
- C) obtain a broadband connection to the Internet.
- D) simulate a network before it became operational in order to identify any security leaks.

Answer: B

Explanation: A virtual private network allows firms to establish a secure connection with other firms over regular Internet lines. This is a simpler, less expensive way to set up a secure connection than using dedicated lines.

Difficulty: 2 Medium

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Understand

- 164) Scientists and engineers at Epic Electronics rely on the Internet to keep in touch with their peers at various universities and research organizations. In recent years these researchers have become frustrated because the increasing congestion on the Internet has disrupted their attempts to communicate and collaborate with colleagues at other institutions. Which of the following developments would be most likely to help Epic Electronics researchers overcome this problem?
- A) set up an intranet
- B) allow its scientists and engineers to telecommute
- C) assign each employee a second e-mail address
- D) gain access to Internet2

Answer: D

Explanation: Internet2 uses the very-high-speed backbone network system to speed the flow of information and support heavy-duty applications such as collaborative research.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

- 165) A local university, connected to Internet2, employs several professors in its school of engineering that are part of a research project that makes extremely heavy use of the bandwidth this connection provides. In fact, the engineering professors would like to get even more bandwidth. Given the way its designers set up Internet2, the researchers at the university A) are out of luck. One drawback of Internet2 is that, unlike the regular Internet, the technology of Internet2 can allocate only a fixed amount of bandwidth to each user.
- B) may be able to obtain more bandwidth, but only if the university is willing to pay for it.
- C) must petition the Internet2 Usage Committee and obtain approval.
- D) can install a simple bandwidth amplification card in each computer that compresses data, thus allowing it to flow more rapidly.

Answer: B

Explanation: Unlike the regular Internet, which allocates bandwidth equally, Internet2 allows different users to obtain more bandwidth if they are willing to pay for it.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Apply

166) Fran is shopping online for jeans and she clicks on a style she likes. The site quickly presents her with a close-up view and additional information that will help her make a decision. When she adds the jeans to her shopping bag, the website quickly shows her that other customers that purchased the same pair of jeans also purchased a particular shirt and boots. As the retailer's website learns more about Fran and her purchase preferences, it is able to push other ideas toward her, and potentially increase the online retailer's units per transaction. The technology that generates this type of intelligence and personalization is called

A) social media.

B) cookie mining.

C) Web 2.0.

D) Web 3.0.

Answer: D

Explanation: Web 3.0 is called the personal web. It advances Web 1.0, known as the static

Web, and Web 2.0, known as the social web.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and

3.0.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

167) ______ is a process that allows software-based networked computers to run multiple operating systems and programs, and share storage.

A) Public domain softwaring

B) Groupwaring

C) Virtual networking

D) Cloud computing

Answer: C

Difficulty: 1 Easy

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Remember

AACSB: Reflective Thinking

168) ______ is a form of virtualization in which a company's data and applications are stored offsite.

- A) Data warehousing
- B) Data mining
- C) Cloud computing
- D) Mobile softwaring

Answer: C Difficulty: 1 Easy

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

169) The three types of cloud computing are

A) public, private, and personal clouds.

B) application, analytic, and informative clouds.

C) power, private, and virtual clouds.

D) public, private, and hybrid clouds.

Answer: D

Explanation: The three types of cloud computing are private, public, and hybrid clouds.

Difficulty: 2 Medium

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Understand

- 170) Gary has been using Dropbox. The cloud he is storing his information to is called a
- A) private cloud.
- B) public cloud.
- C) hybrid cloud.
- D) analytical cloud.

Answer: B

Explanation: Dropbox and other similar clouds are public clouds.

Difficulty: 3 Hard

Topic: Virtual Networking

Learning Objective: B-04 Explain virtual networking and discuss the benefits and drawbacks

for cloud computing. Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

- 171) One of the most revolutionary impacts computer technology has had on business has been to
- A) allow employees of organizations to do much of their work at home and on the road.
- B) increase the number of layers of management.
- C) replace human creativity with artificial creativity.
- D) make it easier for businesses to keep proprietary information safe and secure.

Answer: A Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking

172) Employees of a business when they work at home, using computers linked to their organization's office. A) mainstream B) teleproduce C) telecommute D) compucommute
Answer: C Difficulty: 1 Easy Topic: Business Technology Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues affected by information technology. Bloom's: Remember AACSB: Reflective Thinking Accessibility: Keyboard Navigation
173) A(n) is someone who breaks into a computer system for illegal purposes. A) network crasher B) drive jockey C) arbitrageur D) hacker
Answer: D Difficulty: 1 Easy Topic: Business Technology Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues affected by information technology. Bloom's: Remember AACSB: Reflective Thinking Accessibility: Keyboard Navigation
174) A computer is a piece of programming code that is inserted into other programming to cause an unexpected and often-undesirable event for the victim. A) virus B) cold C) wasp D) firecracker
Answer: A Difficulty: 1 Easy Topic: Business Technology Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues affected by information technology. Bloom's: Remember AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 175) When it comes to computers and information technology, government and corporate security officials are now most worried about
- A) credit card fraud.
- B) online theft.
- C) cyberterrorism.
- D) counterfeiting.

Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

176) The _____ was created as a part of the Office of Homeland Security and given the responsibility to devise a plan for improving the security of America's critical infrastructure.

- A) Homeland Security Board
- B) Critical Infrastructure Protection Board
- C) Electronic Communications Security Commission
- D) Committee on Infrastructure Security Procedures

Answer: B Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

177) A	is a small p	iece of software	code a wel	osite downloa	ds onto t	he hard	drives o	Эf
people who visit t	he site.							

A) cookie

B) brownie

C) data marker

D) file portal

Answer: A Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

178) Instability in technology

A) used to be a major problem, but such problems now are largely a thing of the past.

B) still exists, but could be easily eliminated if firms would upgrade to newer equipment and software.

C) remains a serious problem that is caused by a variety of factors.

D) still exists, but its impact on business is greatly exaggerated by the media.

Answer: C Difficulty: 1 Easy

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Remember

- 179) Which of the following is an advantage of telecommuting?
- A) Workers are not included in the office loop.
- B) People who work at home have less trouble letting go of work and relaxing when the workday is over.
- C) Telecommuting increases travel time and costs.
- D) Firms may be able to retain workers who would otherwise leave or retire by allowing them to work at home.

Answer: D

Explanation: Because work is done in the home, there is no separation between the work environment and home environment. People who telecommute often don't know when to turn the work off. Firms may be able to retain valuable employees by allowing them to work at home.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues affected by information technology.

Bloom's: Understand

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

- 180) Which of the following statements about computer viruses is most accurate?
- A) Viruses could be completely eliminated if people would quit sharing infected files.
- B) Wild rumors and sloppy reporting have exaggerated the threat computer viruses pose to typical computer users. Almost all real-world computer viruses turn out to be harmless practical jokes.
- C) The Internet contains built-in safeguards that prevent programs with viruses from being downloaded.
- D) Although antivirus software can help identify and eliminate known viruses, the software must be updated frequently to remain effective.

Answer: D

Explanation: Antivirus programs exist, but new viruses are being developed constantly. Existing antivirus programs cannot identify and eradicate these new viruses unless they are updated on a regular basis.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues affected by information technology.

Bloom's: Understand

AACSB: Reflective Thinking

- 181) When ransomware holds your data hostage, what is most likely to happen?
- A) Hackers will demand you pay them to get your files back.
- B) Hackers permanently delete specific files.
- C) Hackers publicly share your personal information on social media.
- D) Hackers wipe your computer clean and leave it useless.

Explanation: When malicious software holds your data hostage, it's known as ransomware.

Hackers then demand you pay them in order to get your valuable files back.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

- 182) The ability of the Critical Infrastructure Protection Board to achieve its mission depends crucially on
- A) convincing corporations to adopt the more secure Internet2 technology.
- B) finding ways to create artificially intelligent monitors of electronic communications.
- C) convincing information managers in the private sector to report problems such as hacker attacks and viruses to the government.
- D) developing a new wireless technology that provides better data encryption.

Answer: C

Explanation: The Critical Infrastructure Protection Board cannot do a good job of finding ways to protect the nation's infrastructure if it doesn't know the nature and extent of the threats the infrastructure faces. Since about 85 percent of the system the board needs to protect is in the private sector, it is critical to obtain cooperation from the CIOs and other information managers. Unfortunately, many CIOs are reluctant to report incidents, fearing that the faith and confidence of investors and the general public in their companies would be shaken if such incidents became public knowledge.

Difficulty: 2 Medium

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Understand

AACSB: Reflective Thinking

- 183) Jeff's bank recently contacted him to tell him someone illegally accessed the bank's computer system and gained access to information about customer account numbers and PIN numbers. The bank is recommending Jeff and other customers change their account numbers and access numbers for security reasons. The bank and Jeff are victims of a
- A) net crasher.
- B) software pirate.
- C) slammer.
- D) hacker.

Answer: D

Explanation: A hacker is a person who breaks into computer systems for illegal purposes.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Apply

- 184) Alex has never worried about computer viruses. However, a friend who works in IT recently told him about a new wave of viruses. Alex is wondering whether he should pay more attention to this threat, and if so, what he can do to protect his computer. Which of the following represents the best advice for him?
- A) Trying to prevent viruses is likely to be more costly and troublesome than just dealing with the virus if your computer becomes infected. Moreover, the chance of actually getting a virus is very small, and even if you get one, most viruses do very little real damage. Thus the best course of action is to simply continue to ignore the problem.
- B) Although viruses are potentially harmful, there is no effective way to prevent their spread. The best approach is to back up important files on a regular basis and reformat the hard drive any time a virus appears.
- C) The Internet has automatic safeguards that prevent viruses from being transmitted when files are downloaded. Thus, the best way for Tucker to avoid harmful viruses is to use the Internet to send any files he wants to share rather than swapping easily infected diskettes.
- D) There is no absolutely foolproof way to avoid viruses, but one reasonably effective safeguard is to install antivirus software and use it to scan files before downloading them, particularly from unknown sources. It is important to make sure that the software is updated on a regular basis to remain effective.

Answer: D

Explanation: Although some viruses can be playful, others can erase or corrupt valuable data, or even cause the infected hard drive to crash. Viruses can be spread both over the Internet and by using an infected USB storage device. One way to protect against known viruses is to use antivirus software. However, since new viruses are always being developed, this software must be updated regularly to remain effective.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues affected by information technology.

Bloom's: Apply

185) Gretchen works for Securitas Financial Group, but she seldom sees the inside of the offices. Instead, she does most of her work in a home office she put together in a spare bedroom. Her computer is linked to Securitas's office, so her work is distributed as quickly and efficiently as if she were at the office. Gretchen is one of the increasing number of workers who

- A) have become independent contractors.
- B) telecommute.
- C) compucommute.
- D) use linked-access shareware.

Answer: B

Explanation: Workers telecommute when they work from their home, using computers linked to their employers' offices.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues

affected by information technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

186) What are the four characteristics of useful information?

Answer: Useful information has the following characteristics:

- Quality. To be useful, information must be both accurate and reliable.
- Completeness. There must be enough information to make a decision. However, too much information can reduce its usefulness. Today, many managers suffer from information overload.
- Timeliness. Information must be available in time to make a difference. Even if information is accurate, reliable, and complete, it does a decision maker no good if it arrives after the decision has been made.
- Relevance. The information must relate to the goals of the decision maker. One of the ways a manager can deal with information overload is to identify a few key goals and eliminate information that is not relevant to those goals.

Difficulty: 3 Hard

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of useful information, and discuss how data is stored and analyzed.

Bloom's: Analyze

AACSB: Analytical Thinking Accessibility: Keyboard Navigation

187) What is the key difference between an intranet and an extranet? Why might a firm use a virtual private network instead of an extranet?

Answer: An intranet is a companywide network, closed to public access that uses Internet-type technology. Some firms use intranets mainly to publish information for employees to use, while other firms go further and create intranet applications that enable their employees to work more efficiently. Intranets usually make use of software or hardware (or a combination of both) to create a firewall, which prevents unauthorized outsiders from gaining access to corporate information.

An extranet is essentially an intranet that is open to selected outsiders. Thus, a firm might allow selected companies, such as key suppliers or customers, to have access to its intranet site. Small firms that use extranet technology can gain many of the benefits of electronic data interchange that used to be available only to large companies that could afford EDI systems.

Extranets typically use regular (public) lines for Internet connections. One problem with this approach is that the semiprivate nature of the extranet makes it possible for hackers to get into a corporate system. Although the problem of unauthorized access can be overcome by using dedicated private lines, such a process is expensive and limits usage more than a firm might actually want. A less expensive and more flexible approach is to set up a virtual private network (VPN). A VPN is a private network that sets up secure connections or "tunnels" over regular Internet lines.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Analyze

AACSB: Analytical Thinking Accessibility: Keyboard Navigation 188) Identify and describe the major security issues confronting information managers.

Answer: Among the most serious security issues facing information managers are computer viruses, hackers, phishing, and cyberterrorism.

A computer virus is a piece of programming code that is inserted into other programming to cause an unexpected event. Some viruses are relatively harmless, the electronic equivalent of a practical joke. Other viruses are more serious, and some are downright malicious, erasing valuable data or even causing the hard drive of an infected computer to crash.

Viruses are generally spread by sharing infected diskettes or by downloading infected files over the Internet. Thus, one way to protect against viruses is to avoid downloading files from questionable sites on the Internet and to take care when sharing diskettes. Antivirus software exists which can detect and eradicate known viruses. Antivirus programs can be used to check files downloaded over the Internet and to scan diskettes.

Unfortunately, new viruses are constantly being developed that antivirus programs may have difficulty detecting. Most antivirus programs today allow users to download updates over the Internet that enable the program to identify newer viruses.

Hackers are people who use their programming skills to break into computer systems for illegal purposes, such as gaining access to private or personal information or gaining access to someone's bank account. It is easier for hackers to break into systems that use public lines. Thus, one approach to dealing with hackers is to use secured private lines. Another approach is to use virtual private networks.

Phishing is another type of online security threat. A scammer will embellish an e-mail with a stolen logo for a well-recognized brand such as eBay, PayPal, or Citibank that makes the message look authentic. Phishing messages often state something like "account activation required" to motivate the victim to click on the link contained in the message. When they click they are sent to a phony website that takes their personal data and uses it to commit fraud.

Perhaps the most serious threat to security today comes from cyberterrorism. Cyberterrorists might be able to shut down the nation's communications, transportation, electrical, and financial systems. This threat is so serious that the federal government established the Critical Infrastructure Protection Board as a part of the Office of Homeland Security soon after the terrorist attacks on 9/11. This board is charged with developing a plan to improve the structure of America's information infrastructure. One key to the board's success will be gaining the cooperation of business leaders and information managers in the private sector, because more than 85 percent of the infrastructure is owned by the private sector.

Difficulty: 3 Hard

Topic: Effects of Information Technology on Management

Learning Objective: B-05 Evaluate the human resource, security, privacy, and stability issues affected by information technology.

Bloom's: Analyze

AACSB: Analytical Thinking Accessibility: Keyboard Navigation

Mini-Case

Cy Burspace first began working for Epic Electronics in the mid-1970s as a business technology specialist. Today, he is the department head for the company's information systems department. Cy is well known and respected by everyone in the company, and his coworkers recently threw a party to honor his 30th year with Epic. Cy did a lot of reminiscing at the party, telling the newer employees how things were done in the "old days," and comparing them to newer methods.

"I'm still amazed at how things have changed. When I first came to Epic, we had a central computer to handle everything. It took up a whole room, but all it really did was generate financial reports for management," said Cy. "Today, employees have their own personal computer, and all are hooked up to a network. All of this connectivity has led to big improvements in our operations. For example, if a production worker wants to find out how many units of a particular component we have in inventory, or wants the name and address of a particular supplier who sells us that component, he or she can get the information in the blink of an eye. In fact, we have even given our suppliers and customers access to our network so that we can share information and provide them with better service. That change has really helped us compete against the bigger firms."

"Now," Cy continued, "most of the workers in my department don't even have to be at the office to be connected. We have smartphones and laptops so we can do much of our work from home or while we are on the road."

A new employee asked Cy if he was ready to retire. "No way," he said. "I'm in the middle of a major project right now. We're trying to design a single entry point for people to use when logging on to the Epic network. We want to set it up so that the log-on procedure identifies different types of users and automatically gives them access to the types of resources they need. For example, customers who logged on would be allowed to place orders, check on the status of previous orders, and interact with our technical support staff, but would not have access to other, more proprietary parts of our network. We think this approach will be more convenient for everyone. And," he continued, "once I finish that project, the marketing department has asked me to work on developing better ways to store and analyze the vast amounts of data we collect. So my work is cut out for me for quite a while yet."

- 189) When Cy first came to work for Epic Electronics, the application of business technology was called
- A) data processing.
- B) knowledge technology.
- C) information systems.
- D) backroom computing.

Explanation: During the 1970s, the use of business technology was known as data processing, and its major purpose was to support business by improving the flow of financial information.

Difficulty: 3 Hard

Topic: Business Technology

Learning Objective: B-01 Outline the changing role of business technology.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

- 190) Cy is excited about the ability of customers to obtain access to information on Epic's network so that the company can provide them with better service. This suggests that Epic's is making use of a(n)
- A) shareware arrangement.
- B) integrated network.
- C) mainframe system.
- D) extranet.

Answer: D

Explanation: An extranet is a semiprivate network that lets more than one organization access the same information or lets people from different organizations collaborate. One of the most common uses of an extranet is to extend an intranet to outside customers or suppliers.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Apply

- 191) Cy's new project to provide a single entry point to his company's network that identifies users and allows them access to the areas of the network they need indicates that he is working on a(n)
- A) virtual network.
- B) web router.
- C) enterprise portal.
- D) node-to-node network system.

Explanation: An enterprise portal serves as an entry point to the resources on a company's network. A portal is more than a web page with links. Well-designed portals identify users when they log on to the system and allow them access to areas of the network based on their relationship to the company.

Difficulty: 3 Hard

Topic: Knowledge Management

Learning Objective: B-03 Compare the scope of the Internet, intranets, extranets, and virtual private networks and explain how broadband technology enabled the evolution to Web 2.0 and 3.0.

Bloom's: Apply

AACSB: Knowledge Application Accessibility: Keyboard Navigation

- 192) People in marketing want Cy's help because they are convinced that many hidden patterns and unexpected relationships could be found in the mountains of data the company accumulates. They think that discovering these relationships might help them develop new marketing strategies. This suggests that Cy's next project will be concerned with
- A) datametric analysis.
- B) data mining.
- C) data refining.
- D) data orienteering.

Answer: B

Explanation: Data mining looks for hidden patterns and unexpected relationships among data.

Difficulty: 3 Hard

Topic: Types of Business Information

Learning Objective: B-02 List the types of business information, identify the characteristics of

useful information, and discuss how data is stored and analyzed.

Bloom's: Apply