

Experiencing MIS, 5e (Kroenke)

Chapter 2: Business Processes, Information Systems, and Information

Multiple Choice

1) A _____ is a network of activities for accomplishing a business function.

- A) workgroup
- B) task force
- C) business portfolio
- D) business process

Answer: D

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

2) In swimlane format, _____ are specific tasks that need to be accomplished as part of a business process.

- A) repositories
- B) resources
- C) activities
- D) databases

Answer: C

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

3) A _____ is a subset of the activities in a business process that is performed by an actor.

- A) sequence flow
- B) resource
- C) data flow
- D) role

Answer: D

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

4) Activities within a business process are shown in _____.

- A) circles
- B) rectangles
- C) squares
- D) diamonds

Answer: B

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

5) According to the business process modeling notation standard, the start of a business process is symbolized by a _____.

- A) circle having a thick border
- B) circle having a narrow border
- C) square having a thick border
- D) square having a narrow border

Answer: B

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

6) Which of the following statements is true about roles in a business process?

- A) Activities of a business process are made up of roles.
- B) An employee can be associated with only one particular role.
- C) The name of the role is written at the top of the swimlane.
- D) A given role should be fulfilled by just one person.

Answer: C

Difficulty: Moderate

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

7) Which of the following statements is true of swimlane formats?

- A) Roles are written at the top of a swim lane as names can be ambiguous.
- B) Each swimlane shows the activities to be performed by one actor.
- C) An information system cannot fulfill a role by itself.
- D) A particular role may be fulfilled by many people.

Answer: D

Difficulty: Moderate

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

8) According to the business process modeling notation, the end of a business process is symbolized by a _____.

- A) circle having a thick border
- B) circle having a narrow border
- C) square having a thick border
- D) square having a narrow border

Answer: A

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

9) A(n) _____ is a collection of data that is stored within business records.

- A) repository
- B) role
- C) activity
- D) resource

Answer: A

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

10) _____ represent the movement of data from one activity to another.

- A) Data charts
- B) Data buses
- C) Data modules
- D) Data flows

Answer: D

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

11) According to the business process modeling notation standard, an activity with a boxed plus sign inside it indicates a _____.

- A) subprocess
- B) data flow
- C) sequence flow
- D) data repository

Answer: A

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

12) Which of the following statements is true about business process modeling notation?

- A) Sequence flows are indicated by dashed lines.
- B) Data flows are indicated by solid labeled lines.
- C) A subprocess is indicated by a rectangle with a circle inside it.
- D) The medium of data delivery is unimportant in a BPMN diagram.

Answer: D

Difficulty: Moderate

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

13) _____ is the ratio of benefits to costs.

- A) Effectiveness
- B) Efficiency
- C) Scalability
- D) Performance rating

Answer: B

Difficulty: Easy

Chapter LO: 3

Course LO: Discuss the role of information systems in supporting business processes

14) Which of the following statements is true of business processes?

- A) Process effectiveness is determined by the ratio of benefits to costs.
- B) An effective business process enables an organization to accomplish its strategy.
- C) If two versions of a business process create the same benefit, then the higher cost one is more efficient.
- D) Cost of infrastructure is not included under cost of business process.

Answer: B

Difficulty: Moderate

Chapter LO: 3

Course LO: Discuss the role of information systems in supporting business processes

15) The outermost components of the IS framework _____.

- A) can take action
- B) are the costliest components in the framework
- C) form a bridge between the human and computer sides
- D) represent sunk costs

Answer: A

Difficulty: Moderate

AACSB: Information Technology

Chapter LO: 3

Course LO: Discuss the role of information systems in supporting business processes

16) The software and procedure components of the IS framework are both _____.

- A) actors
- B) sets of instructions
- C) the outermost components
- D) bridges between the human side and the computer side

Answer: B

Difficulty: Moderate

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

17) The _____ component of the IS framework provides instructions for people.

- A) procedure
- B) software
- C) information
- D) data

Answer: A

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

18) In an IS framework, _____ is the bridge between the computer side on the left and the human side on the right.

- A) hardware
- B) software
- C) information technology
- D) data

Answer: D

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

19) Which of the following pairs consists of the two actors in an information system?

- A) software and hardware
- B) procedures and people
- C) data and software
- D) hardware and people

Answer: D

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

20) When work that was formerly done by people has been moved to computers, it is said to be _____.

- A) outsourced
- B) automated
- C) documented
- D) systematized

Answer: B

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

21) Automation of a process activity consists of moving work from the _____ of the symmetrical five-component framework.

- A) computer side to the human side
- B) data side to the procedures side
- C) human side to the computer side
- D) software side to the hardware side

Answer: C

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

22) Which of the following statements is true of using an information system to improve process quality?

- A) The quality of performance analysis remains the same with the implementation of an information system.
- B) Development of information systems should be done solely by technical personnel.
- C) Information systems can improve process efficiency but not process effectiveness.
- D) A process that uses a labor saving information system may not be efficient.

Answer: D

Difficulty: Moderate

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

23) _____ is defined as recorded facts or figures.

- A) Information
- B) Substance
- C) Data
- D) Content

Answer: C

Difficulty: Easy

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

24) John's height is 6 feet 3 inches. This is an example of _____.

- A) data
- B) information
- C) a record
- D) content

Answer: A

Difficulty: Moderate

AACSB: Analytical Thinking

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

25) The fact that Joe works 9 hours per day is an example of _____.

- A) a record
- B) content
- C) information
- D) data

Answer: D

Difficulty: Moderate

AACSB: Analytical Thinking

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

26) Which of the following refers to information that is based on correct and complete data and has been processed correctly, as expected?

- A) relevant information
- B) measurable information
- C) accurate information
- D) timely information

Answer: C

Difficulty: Easy

Chapter LO: 5

Course LO: Describe the components of an information system (IS)

27) A monthly report that arrives 6 weeks late is an example of information that is not _____.

- A) timely
- B) relevant
- C) accurate
- D) sufficient

Answer: A

Difficulty: Easy

AACSB: Analytical Thinking

Chapter LO: 5

Course LO: Describe the components of an information system (IS)

28) Which of the following is a characteristic of good information?

- A) It must be freely available.
- B) It must be more than just barely sufficient.
- C) It must be based on incomplete data.
- D) It must be contextually relevant.

Answer: D

Difficulty: Moderate

Chapter LO: 5

Course LO: Describe the components of an information system (IS)

- 29) Which of the following statements is true about data characteristics of quality information?
- A) Information systems that produce real time data are less expensive than those that produce data at a later time.
 - B) The timeliness of information can be measured against events.
 - C) Accurate information can be conceived from inaccurate data.
 - D) Data that appears on any Web page is reliable.

Answer: B

Difficulty: Moderate

Chapter LO: 5

Course LO: Describe the components of an information system (IS)

- 30) As the CEO of a call center, which of the following information is good information for you?
- A) hourly variance reports of performance parameters in each queue
 - B) daily reports of call abandons due to system downtime
 - C) lists of stationery usage consolidated weekly
 - D) department-level averages of revenue generation figures

Answer: D

Difficulty: Moderate

AACSB: Analytical Thinking

Chapter LO: 5

Course LO: Describe the components of an information system (IS)

- 31) _____ information is information that directly pertains both to the context and to the subject.

- A) Timely
- B) Relevant
- C) Measurable
- D) Expensive

Answer: B

Difficulty: Easy

Chapter LO: 5

Course LO: Describe the components of an information system (IS)

- 32) Which of the following statements is true regarding the characteristics of good information?
- A) Information needs to be more than just barely sufficient for the purpose for which it is generated.
 - B) Information must hold an appropriate relationship between its cost and its value.
 - C) Accurate information can be based on incomplete data.
 - D) Good information is just recorded facts and figures.

Answer: B

Difficulty: Moderate

Chapter LO: 5

Course LO: Describe the components of an information system (IS)

True or False

1) Members of a team in a company need to understand business processes since they need to evaluate new technologies.

Answer: TRUE

Difficulty: Easy

Chapter LO: 1

Course LO: Discuss the role of information systems in supporting business processes

2) To design an improved process, it is necessary to understand the existing process.

Answer: TRUE

Difficulty: Easy

Chapter LO: 1

Course LO: Discuss the role of information systems in supporting business processes

3) A role is a subset of activities in a business process.

Answer: TRUE

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

4) Swimlane format is a graphical arrangement in which all of the activities for a given role are shown in a single vertical lane.

Answer: TRUE

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

5) In some business processes, a role can be fulfilled by an information system.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

6) According to the business process modeling notation standard, the start of a business process is symbolized by a circle having a thick border.

Answer: FALSE

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

7) According to the business process modeling notation standard, the end of a business process is symbolized by a circle having a narrow border.

Answer: FALSE

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

8) According to the business process modeling notation standard, solid lines between activities are called sequence flows.

Answer: TRUE

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

9) A collection of files on the Internet is a repository.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 2

Course LO: Describe the components of an information system (IS)

10) Data flows represent the movement of data from one activity to another.

Answer: TRUE

Difficulty: Easy

Chapter LO: 2

Course LO: Describe the components of an information system (IS)

11) A repository can be printed records stored in a shoebox or a collection of files in the cloud.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 2

Course LO: Describe the components of an information system (IS)

12) Buyers read vendor and product data from the vendor data repository, but they don't write data to it.

Answer: FALSE

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

13) Process quality can be measured in two dimensions: process effectiveness and process efficiency.

Answer: TRUE

Difficulty: Easy

Chapter LO: 3

Course LO: Discuss the role of information systems in supporting business processes

14) An effective business process enables an organization to accomplish its strategy.

Answer: TRUE

Difficulty: Easy

Chapter LO: 3

Course LO: Discuss the role of information systems in supporting business processes

15) Effectiveness is the ratio of benefits to costs.

Answer: FALSE

Difficulty: Easy

Chapter LO: 3

Course LO: Discuss the role of information systems in supporting business processes

16) An activity is considered automated when it is characterized by people following procedures.

Answer: FALSE

Difficulty: Easy

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

17) The outermost components of the symmetrical five-component framework of an IS are data and procedures.

Answer: FALSE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

18) In the five-component framework of an IS, the actors are hardware and people.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

19) In the five-component framework of an IS, data is the bridge between the computer side and the human side.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

20) In an IS framework, data is considered to be a part of the computer side.

Answer: FALSE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

21) In an IS framework, software and procedure components are both sets of instructions.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

22) Procedures act as the bridge between the computer and human sides of the five-component framework of an IS.

Answer: FALSE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

23) Automation is the process in which instructions for humans are transferred to instructions for hardware.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

24) Automation moves work from the software component to the data component.

Answer: FALSE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

25) One of the major benefits of an information system is labor savings.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Explain how IS can be used to gain and sustain competitive advantage

26) Information systems can improve process efficiency but not process effectiveness.

Answer: FALSE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Explain how IS can be used to gain and sustain competitive advantage

27) The major benefit of using an information system is that the data stored in databases and other repositories can readily be processed to produce information.

Answer: TRUE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 4

Course LO: Discuss the role of information systems in supporting business processes

28) Data that is summed is called information.

Answer: TRUE

Difficulty: Easy

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

29) Information is data presented in a meaningful context.

Answer: TRUE

Difficulty: Easy

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

30) Information is data processed by grouping, comparing, or other similar operations.

Answer: TRUE

Difficulty: Easy

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

31) Data is knowledge derived from information.

Answer: FALSE

Difficulty: Easy

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

32) Average wage is knowledge that can be derived from the data of individual wages.

Answer: TRUE

Difficulty: Easy

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

33) As long as information is relevant and timely, it need not always be complete.

Answer: FALSE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss best practices for selecting, evaluating, and managing information systems projects

34) Data delivered with active graphics need not be cross-checked for accuracy.

Answer: FALSE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss best practices for selecting, evaluating, and managing information systems projects

35) Accurate information is information that is based on correct and complete data, and has been processed correctly.

Answer: TRUE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

36) Users develop work-arounds when data from an information system is unreliable.

Answer: TRUE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

37) Timeliness of information can be measured against events.

Answer: TRUE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

38) The quality of thinking determines the quality of the information that is produced.

Answer: TRUE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

39) Just barely sufficient information is information that is sufficient for the purpose for which it is generated.

Answer: TRUE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

40) Relevant data are those which aptly pertain both to the context and to the subject.

Answer: TRUE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

41) All data about an organization are relevant to the higher management.

Answer: FALSE

Difficulty: Easy

Chapter LO: 5

Course LO: Explain how information systems can be used to assist in decision making

42) For data to be worth its cost, an appropriate relationship must exist between the cost of data and its value.

Answer: TRUE

Difficulty: Easy

Chapter LO: 5

Course LO: Discuss the role of information systems in supporting business processes

43) Information systems should not be subject to the same financial analyses to which other assets are subjected.

Answer: FALSE

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 5

Course LO: Discuss the role of information systems in supporting business processes

Essay

1) What is a business process? Define activities.

Answer: A business process is a network of activities for accomplishing a business function.

Activities are specific tasks that need to be accomplished as part of the process.

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

2) Briefly describe activities and roles in swimlane format.

Answer: Swimlane format is a graphical arrangement in which all of the activities for a given role are shown in a single vertical lane. Each swimlane has activities, which are specific tasks that need to be accomplished as part of the process. A role is a subset of the activities in a business process that is performed by an actor, which is a person, group, department, organization, or information system. The name of the role is written at the top of a swimlane, not people's names. This is because a given role may be fulfilled by many people, or the organization may change the people who are assigned to a given role.

Difficulty: Easy

Chapter LO: 2

Course LO: Discuss the role of information systems in supporting business processes

3) Briefly describe a repository.

Answer: A repository is a collection of data that is stored within a business process. A repository can be a cardboard box, a notebook, a list, an Excel spreadsheet, a database, or even a collection of databases. For the purpose of documenting a business process, the particular medium in which repository data is stored is unimportant.

Difficulty: Moderate

AACSB: Information Technology

Chapter LO: 2

Course LO: Discuss best practices for using and managing databases

4) Briefly describe data flows.

Answer: According to the business process modeling notation (BPMN), the labeled dashed lines are called data flows. They represent the movement of data from one activity to another. The data can be delivered via email, text message, over the phone, by fax, or by some other means. In a BPMN diagram, the medium of the data delivery is also unimportant.

Difficulty: Moderate

Chapter LO: 2

Course LO: Discuss best practices for using and managing databases

5) Describe the process of automation against the background of the five-component framework of an information system.

Answer: The five components of an information system are hardware, software, data, procedures, and people. They are arranged symmetrically in the framework. The outermost components, hardware and people, are both actors; they take action. The software and procedure components are both sets of instructions: Software is instructions for hardware, and procedures are instructions for people. Finally, data is the bridge between the computer side on the left and the human side on the right. When an activity in a business process is handled by an automated system, it means that work formerly done by people following procedures has been moved so that computers now do that work by following instructions in software. Thus, the automation of a process activity consists of moving work from the right-hand side of the five-component IS framework to the left.

Difficulty: Moderate

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

6) Describe the benefits of using an information system to store vendor and product-related data.

Answer: In order to select a vendor, a buyer has to gather data about vendors and products, make analyses of costs and margins, and store the results of those analyses. If an information system (IS) is not used to store these results, accessing past records and results will require a manual search. An IS makes the process of finding reliable data and reports faster and more reliable, improving the efficiency and quality of the business process.

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 3

Course LO: Describe the components of an information system (IS)

7) Define information.

Answer: The most common definition of information is that information is knowledge derived from data.

Difficulty: Easy

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

8) Explain data with an example.

Answer: Data is defined as recorded facts or figures. The facts that an employee of an organization earns \$17.50 per hour and that another employee of the same organization earns \$25.00 per hour are examples of data.

Difficulty: Easy

AACSB: Information Technology

Chapter LO: 4

Course LO: Describe the components of an information system (IS)

9) Describe accurate information. Why is an information system providing accurate information crucial to an organization?

Answer: Good information is accurate information, which is based on correct and complete data, and it has been processed correctly as expected. Accuracy is crucial; business professionals must be able to rely on the results of their information systems. The IS function can develop a bad reputation in an organization if a system is known to produce inaccurate data. In such a case, the information system becomes a waste of time and money as users develop work-arounds to avoid the inaccurate data.

Difficulty: Moderate

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

10) Explain the importance of timeliness of information in an organization.

Answer: Good information requires that data be available in time for its intended use. A monthly report that arrives 6 weeks late is most likely useless. In such a case, the data has arrived long after the decisions that needed that information have been made. An information system that sends a poor customer credit report after the goods have been shipped is unhelpful and frustrating. Notice that timeliness can be measured against a calendar (6 weeks late) or against events (for example, before shipping).

Difficulty: Moderate

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

11) In some cases, developing systems that provide data in near real time is much more difficult and expensive than producing data a few hours later. Provide an example that supports this statement.

Answer: A person who works in marketing needs to be able to assess the effectiveness of new online ad programs. He wants an information system that will not only deliver ads over the Web, but one that will also enable him to determine how frequently customers click on those ads. In this case, determining click ratios in near real time will be very expensive; saving the data in a batch and processing it some hours later will be much easier and cheaper.

If the user can manage with data that is a day or two old, the system will be easier and cheaper to implement.

Difficulty: Moderate

AACSB: Information Technology

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

12) Describe relevant data. Explain the importance of relevant data in an organizational context. Answer: Relevant data is data that directly pertains to both the context and the subject.

Considering context, a CEO needs data that is summarized to an appropriate level for his job. A list of the hourly wage of every employee in the company is unlikely to be useful. More likely, the CEO needs average wage information by department or division. A list of all employee wages is irrelevant in this context.

Data should also be relevant to the subject at hand. If data about short-term interest rates is required to find a possible line of credit, then a report that shows 15-year mortgage interest rates is irrelevant.

Difficulty: Moderate

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

13) Explain the importance of just barely sufficient data in the information age we live in.

Answer: Just barely sufficient data is data that is sufficient for the purpose for which it is generated, but just barely so. We live in an information age; one of the critical decisions that each of us has to make each day is what data to ignore. The higher one rises into management, the more data one will be given, and because there is only so much time, the more data one will need to ignore. So data should be sufficient, but just barely.

Difficulty: Moderate

AACSB: Information Technology

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases

14) What are the costs associated with data? When is data considered to be worth its cost?

Answer: Data is not free. There are costs for developing an information system, costs of operating and maintaining that system, and costs of time and salary for reading and processing the data the system produces. For data to be worth its cost, an appropriate relationship must exist between the cost of data and its value.

Difficulty: Moderate

Chapter LO: 5

Course LO: Discuss best practices for using and managing databases