

Experiencing MIS, 9e (Kroenke)

Chapter Extension 2 Artificial Intelligence and Automation

1) _____ is the ability of a machine to simulate human abilities such as vision, communication and learning in order to achieve a goal.

- A) Artificial intelligence
- B) Virtual reality
- C) Automation
- D) Machine learning

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

2) Artificial Intelligence can be used to increase _____ or the process of making systems operation without human intervention.

- A) completed tasks
- B) understanding
- C) automation
- D) machine learning

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

3) _____ is the ability of a machine to simulate human abilities such as vision, communication and learning in order to achieve a goal.

- A) Artificial intelligence
- B) Virtual reality
- C) Automation
- D) Machine learning

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

4) When artificial intelligence was being researched, the field developed a bad reputation.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

5) List the six forces driving artificial intelligence innovation.

Answer: Increases in computing power. Availability of large datasets for training. Cloud scalability and applications. Increased device connectivity. New AI techniques. Practical AI applications.

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

6) _____ has helped with increased AI usage because AI requires large amounts of rich data to use and it is now available.

A) Availability of large datasets

B) Computing power

C) Deep learning

D) Cloud computing

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

7) _____ has greatly increased the accuracy and practical usefulness of AI.

A) Advancements in the cloud

B) Computer processing

C) Deep learning

D) Machine learning

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

8) Provide some examples of practical AI applications.

Answer: Answers may vary. Amazon: Alexa, Echo, Amazon Machine Learning. Facebook: DeepText, newsfeed, search rankings. Google: Google Assistant, Home, Google Brain, Openframeworks. Microsoft: Cortana, Face, Bing Image search. Apple, Siri, HomePod, iWatch.

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

9) Users are sometimes unknowingly interacting with AI on a daily basis.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

10) Which of the following forces is providing vast amounts of data for AI applications?

A) reading abilities

B) cloud computing

C) deep learning

D) network-connected smart devices

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

11) A business owner must understand how AI is going to affect the organization.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Be able to identify the use of artificial intelligence in business operations.

Learning Obj: LO CE2-2: How Will AI and Automation Affect Organizations?

Classification: Concept

12) List productivity gains from automation.

Answer: Can work 24 hours, 365 days; immediately trained; no breaks during work hours; no impaired workers; not time-wasting activities; no accidents or injuries; no arguments with other employees or managers; no scheduling issues; all holiday shifts covered, and more accurate, precise, and consistent.

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Be able to identify the use of artificial intelligence in business operations.

Learning Obj: LO CE2-2: How Will AI and Automation Affect Organizations?

Classification: Concept

13) All of these costs are true of human employees EXCEPT _____.

A) not going on strike

B) discrimination lawsuits

C) fraud

D) unionization

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Be able to identify the use of artificial intelligence in business operations.

Learning Obj: LO CE2-2: How Will AI and Automation Affect Organizations?

Classification: Concept

14) Which of the following is a benefit of AI?

A) increased costs

B) less employee fraud

C) decreased need for managers

D) higher wages

Answer: B

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Be able to identify the use of artificial intelligence in business operations.

Learning Obj: LO CE2-2: How Will AI and Automation Affect Organizations?

Classification: Concept

15) All of these costs are examples of employee fraud EXCEPT _____.

A) nepotism

B) skimming

C) payroll

D) cash larceny

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Be able to identify the use of artificial intelligence in business operations.

Learning Obj: LO CE2-2: How Will AI and Automation Affect Organizations?

Classification: Concept

16) There are two distinct reactions to AI. Those who see it as an opportunity and those who see it as a threat.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

17) Jobs requiring _____ physical and mental tasks are prime candidates for automation.

A) hard

B) unstructured

C) routine

D) strong

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

18) Jason is looking at his budgets and decides he needs to lower labor costs. Which task is most likely to become automated with AI?

A) new employee trainer

B) computer programmer

C) middle manager

D) assembly line worker

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

19) The following are all potential unwanted dirty jobs that can be completed with AI EXCEPT _____.

A) child care

B) house cleaning

C) gardening

D) garbage pickup

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

20) With AI new types of jobs will be created.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

21) Describe ways AI-enabled machines will need human counterparts.

Answer: AI machines will need human workers to take care of them. AIs also need training.

Machines will need humans because machines lack instinct. Machines need humans to survive and improve.

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

22) Machines lack all of these skills EXCEPT _____.

A) creativity

B) adaptability

C) the ability to learn

D) the ability to define new problems

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

23) _____ will always be needed for AI-enabled machines.

A) Rechargeable batteries

B) Human domain experts

C) The Internet

D) The ability to work on instinct

Answer: B

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

24) Jobs requiring _____ physical and mental tasks are prime candidates for automation.

- A) hard
- B) unstructured
- C) routine
- D) strong

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

25) Without _____ machines won't last long.

- A) instincts
- B) the ability to quickly solve problems
- C) routine
- D) processing power

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

26) Humans and machines need each other.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

27) What is the goal of strong AI?

- A) to assist human beings
- B) to complete all of the same tasks as humans
- C) to complete a single specific task well
- D) the capability of having more advanced intelligence than humans

Answer: B

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify weak and strong artificial intelligence tasks in an organization.

Learning Obj: LO CE2-4: What Is the Goal of AI?

Classification: Concept

28) Joshua wanted to know if his AI program could be mistaken for another human while interacting with a human. He wanted to see if his program could pass _____.

- A) the Turing Test
- B) the AI test
- C) becoming super intelligent
- D) the government test

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Identify weak and strong artificial intelligence tasks in an organization.

Learning Obj: LO CE2-4: What Is the Goal of AI?

Classification: Concept

29) Weak AI focuses on completing a single specific task.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify weak and strong artificial intelligence tasks in an organization.

Learning Obj: LO CE2-4: What Is the Goal of AI?

Classification: Concept

30) We are very close to AI that displays superintelligence.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify weak and strong artificial intelligence tasks in an organization.

Learning Obj: LO CE2-4: What Is the Goal of AI?

Classification: Concept

31) All of these are examples of AI in a self-driving car EXCEPT _____.

- A) LIDAR
- B) GPS
- C) tunnel vision
- D) gyroscopes

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Identify weak and strong artificial intelligence tasks in an organization.

Learning Obj: LO CE2-4: What Is the Goal of AI?

Classification: Concept

32) For some companies, saying yes to AI may be painful but it is a necessary decision.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify weak and strong artificial intelligence tasks in an organization.

Learning Obj: LO CE2-4: What Is the Goal of AI?

Classification: Concept

33) Describe what types of changes companies may experience as a result of implementing AI.

Answer: Answers may vary. The types of jobs that need to be filled will change. Workers will have to continually develop new skills for new jobs. Workers may find themselves doing jobs that have little to do with their formal education.

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Identify weak and strong artificial intelligence tasks in an organization.

Learning Obj: LO CE2-4: What Is the Goal of AI?

Classification: Concept

34) Understanding AI may assist businesses with solving organizational problems.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

35) _____, a subset of AI, is the extraction of knowledge data based on algorithms created from training data.

A) Algorithms

B) Gyroscopes

C) Machine learning

D) Naïve Bayes Classifier

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

36) Machines learn through experience.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

37) Georgia is attempting to solve a mathematical problem. She chooses the correct procedure or _____ that best fits the situation.

- A) algorithms
- B) method
- C) classifier
- D) system

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

38) Sam is going to use a program that predicts the possibility of a certain outcome based on prior occurrences of related events to predict if a car is most likely to run a red light. He decides to use _____.

- A) Nielson's Law
- B) a random number generator
- C) machine learning
- D) Naïve Bayes Classifier

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

39) Machine learning can be used in all of the following tasks EXCEPT _____.

- A) college admissions
- B) credit approvals
- C) fraud detection
- D) body fat interpretation

Answer: D

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

40) _____, a subset of AI, is the extraction of knowledge data based on algorithms created from training data.

- A) Algorithms
- B) Gyroscopes
- C) Machine learning
- D) Naïve Bayes Classifier

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

41) As a business person it is important to know how Watson works so you can identify potential applications.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

42) How does Watson work?

Answer: First Watson acquires content from sources like dictionaries, encyclopedias, literature, reports, and databases. It extracts valuable pieces of data from these sources. It adds this data to a corpus of knowledge. Once the corpus is built, it can start answering questions. Each question that comes in goes through analysis where Watson determines what kind of question is being asked and then analyzes the question. Next it generates a hypothesis about what might be the right answer. It searches for possible candidate answers reviewing the top 250 candidates and then filters that down to top 100 answers. Finally, it merges all of the scored candidate answers, identifies the best possible answers, and estimates the probability that an answer is correct. All of this happens in about 3 seconds.

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

43) How long did it take for Watson to become a trivia question champion?

- A) one year
- B) five years
- C) ten years
- D) Watson is not a trivia question champion.

Answer: B

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

44) Because of Moore's law what can Watson do forever?

- A) Get processor upgrades on demand that are twice as fast every eighteen months.
- B) Get memory updates every year.
- C) Be able to add new processes on demand.
- D) Be connected to other AI machines indefinitely.

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

45) _____ is the ability of a computer system to understand human language.

- A) Natural language processing
- B) Speech recognition
- C) Peoplespeak
- D) Machine language conversion

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept

46) XYZ Corp decides to change the process of putting widgets on a board from a human assembly to robots. XYZ Corp is _____.

- A) creating artificial intelligence
- B) using virtual reality
- C) automating their system
- D) teaching machine learning

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss why artificial intelligence is important to business.

Learning Obj: LO CE2-1: Why Is Artificial Intelligence Important?

Classification: Concept

47) What is one benefit of automation?

- A) increase in productivity
- B) increase in labor costs
- C) perfect employee attendance
- D) stopping employees from striking

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Be able to identify the use of artificial intelligence in business operations.

Learning Obj: LO CE2-2: How Will AI and Automation Affect Organizations?

Classification: Concept

48) AI can perform some of the dirty jobs that humans do not want to do.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Identify how artificial intelligence opportunities can enhance business operations.

Learning Obj: LO CE2-3: How Will AI Affect Me?

Classification: Concept

49) All of the following are areas of research for artificial intelligence (AI) EXCEPT _____.

- A) natural language processing
- B) computer vision
- C) the Turing Test
- D) robotics

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Identify weak and strong artificial intelligence tasks in an organization.

Learning Obj: LO CE2-4: What Is the Goal of AI?

Classification: Concept

50) Watson will disappear in the future because it takes it too long to learn things.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe how artificial intelligence works in an organization.

Learning Obj: LO CE2-5: How Does AI Work?

Classification: Concept