Chapter 02 Information Systems in Organizations

TRUEFALSE

1. While information systems were once used primarily to automate manual processes, they have transformed the nature of work and the shape of organizations themselves.

(A) True

(B) False

Answer : (A)

2. An organization's structure is independent of its goals and approach to management.

(A) True

(B) False

Answer : (B)

3. An organization is a system, which means that it has inputs, processing, outputs, and feedback.

(A) True

(B) False

Answer : (A)

4. Organizations cannot have many value chains.

(A) True

(B) False

Answer : (B)

5. The concept of a value chain is not significant to organizations that do not manufacture products.

(A) True

(B) False

Answer : (B)

6. A traditional view of information systems holds that organizations use them to control and monitor processes and ensure effectiveness and efficiency.

(A) True

(B) False

Answer : (A)

7. A sustaining innovation is one that initially provides a lower level of performance than the marketplace has grown to accept.

(A) True

(B) False

Answer : (B)

8. Over time, disruptive innovation tends to become less attractive to users in a new market.

(A) True

(B) False

Answer : (B)

9. Reengineering and continuous improvement mean the same thing.

(A) True

(B) False

Answer : (B)

10. Organizational culture consists of the major understandings and assumptions for an organization.

(A) True

(B) False

Answer : (A)

11. Perceived usefulness and ease of use of a system influence an individual's attitude toward the system.

(A) True

(B) False

Answer : (A)

12. Studies have shown that user satisfaction and technology acceptance are not particularly significant in healthcare as professionals in this industry are quick to learn and accept new technology.

(A) True

(B) False

Answer : (B)

13. The diffusion of innovation theory states that adoption of any innovation happens all at once for all members of the targeted population.

(A) True

(B) False

Answer : (B)

14. The diffusion of innovation theory can be useful in planning the rollout of a new information system.

(A) True

(B) False

Answer : (A)

15. An organization can spend less than another on information systems but still get better value.

(A) True

(B) False

Answer : (A)

16. Few organizations believe it necessary to align IS goals and organizational goals to achieve a competitive advantage.

(A) True

(B) False

Answer : (B)

17. According to Porter's five-forces model, the more the forces combine in any instance, the less likely firms will seek competitive advantage and the less dramatic the results of such an advantage will be.

(A) True

(B) False

Answer : (B)

18. When the threat of new market entrants is high, the desire to seek and maintain competitive advantage to dissuade new entrants is also usually high.

(A) True

(B) False

Answer : (A)

19. The shorter the payback period, the more attractive is the project.

(A) True

(B) False

Answer : (A)

20. An advantage of the payback method is that it does not take into account the time value of money.

(A) True

(B) False

Answer : (B)

21. A disadvantage of the payback method is that it fails to include cash flows beyond the payback period.

(A) True

(B) False

Answer : (A)

22. The higher the internal rate of return, the more attractive the project is from a financial standpoint.

(A) True

(B) False

Answer : (A)

23. The lower the net present value, the more financially attractive the project is.

(A) True

(B) False

Answer : (B)

24. A serious problem with both the internal rate of return and net present value methods is that it is difficult to forecast cash flow accurately over a number of years.

(A) True

(B) False

Answer : (A)

25. Non-technical skills such as communications skills and knowledge of the organization are not important to IS personnel.

(A) True

(B) False

Answer : (B)

26. Opportunities in information systems are available to people from foreign countries, including Russia and India.

(A) True

(B) False

Answer : (A)

27. The operations group is responsible for the day-to-day running of IS hardware to process the organization's information systems workload.

(A) True

(B) False

Answer : (A)

28. The role of a systems analyst is narrowly defined and seldom involves communications with others.

(A) True

(B) False

Answer : (B)

29. The systems development organization focuses solely on the development of new information systems and seldom becomes involved in maintenance and review of information systems.

(A) True

(B) False

Answer : (B)

30. The IS support organization is a multi-faceted group providing user assistance in hardware and software acquisition and use, data administration, user training and assistance, and software development.

(A) True

(B) False

Answer : (B)

MULTICHOICE

31. Providing value to a _____ is the primary goal of any organization.

(A) stakeholder

(B) product

(C) competitor

(D) service

Answer : (A)

32. In a manufacturing organization, the supply chain is a key value chain whose primary activities include all of the following EXCEPT _____.

(A) inbound logistics

(B) finance and accounting

(C) marketing and sales

(D) customer service

Answer : (B)

33. _____ encompasses all the activities required to get the right product into the right consumer's hands in the right quantity at the right time and at the right cost, from acquisition of raw materials through customer delivery.

(A) Supply chain management

(B) Value chain management

(C) Inventory management

(D) Customer management

Answer : (A)

34. A _____ organizational structure is like a managerial pyramid where the power structure of decision making and authority flows from the strategic management at the top down to operational management and nonmanagement employees.

(A) traditional hierarchical

(B) virtual

(C) flat horizontal

(D) matrix

Answer : (A)

35. A _____ organizational structure empowers employees at lower levels to make decisions and solve problems without needing permission from midlevel managers.

(A) virtual

(B) traditional

(C) flat

(D) matrix

Answer : (C)

36. In a _____ , an individual has two reporting superiors (managers)-one functional and one operational.

(A) program organizational structure

(B) traditional organizational structure

(C) product organizational structure

(D) matrix organizational structure

Answer : (D)

37. Which of the following theories explains how a new idea or product gains acceptance and spreads through a specific population or subset of an organization?

(A) The diffusion of innovation theory

(B) The contingency theory

(C) The public choice theory

(D) The two-factor theory

Answer : (A)

38. A(n) _____ innovation initially provides a lower level of performance than the marketplace has grown to accept but is improved to provide some new performance characteristics and becomes more attractive to users in a new market, eventually displacing the former product or way of doing things.

(A) culture

(B) organizational

(C) disruptive

(D) sustaining

Answer : (C)

39. The idea of _____ is a form of innovation that constantly seeks ways to improve business processes and add value to products and services.

(A) reengineering

(B) process redesign

(C) disruptive change

(D) continuous improvement

Answer : (D)

40. Which of the following is one of the main areas of support activities in the supply chain of a manufacturing organization?

(A) Service

(B) Procurement

(C) Marketing and sales

(D) Operations

Answer : (B)

41. _____ involves reducing the number of employees to cut costs.

(A) Outsourcing

(B) Offshoring

(C) Utility computing

(D) Downsizing

Answer : (D)

42. Which of the following is NOT one of five forces identified in Michael Porter's five-forces model?

(A) The rivalry among existing competitors

(B) The threat of new entrants

(C) The threat of substitute products and services

(D) The threat of new information systems

Answer : (D)

43. In a supply chain, _____ involve the transformation, movement, and storage of supplies and raw materials.

(A) virtual flows

(B) matrix flows

(C) information flows

(D) physical flows

Answer : (D)

44. The military is the classic example of a:

(A) matrix organization structure.

(B) traditional hierarchical organizational structure.

(C) project organizational structure.

(D) flat horizontal organizational structure.

Answer : (B)

45. If an industry has low entry and exit costs and the technology needed to start and maintain a business is commonly available, this creates:

(A) a threat of new entrants.

(B) a threat of substitute products and services.

(C) an increased bargaining power of customers and suppliers.

(D) a rivalry among existing competitors.

Answer : (A)

46. In the context of strategic planning for competitive advantage, becoming more efficient with production and manufacturing processes is characteristic of _____ .

(A) differentiation

(B) niche strategy

(C) mass supply

(D) cost leadership

Answer : (D)

47. A company with a(n) _____ strategy for gaining competitive advantage makes only high-performance sports cars and sport utility vehicles (SUVs).

(A) differentiation

(B) niche

(C) cost leadership

(D) industry alteration

Answer : (B)

48. A _____ is an agreement between two or more companies that involves the joint production and distribution of goods and services.

(A) strategic alliance

(B) differentiation partnership

(C) niche alliance

(D) cost leadership

Answer : (A)

49. The _____ takes into account the fact that a dollar today is worth more than a dollar paid in the future.

(A) time value of money

(B) cash flow

(C) payback period

(D) financial flow

Answer : (A)

50. The payback period is:

(A) the net present value of all cash flows (benefits and costs) generated by a project.

(B) any cost savings associated with a project, such as savings from reduction in staff, equipment rental fees, and outsourcing fees.

(C) any capital investment required to buy equipment, software, or office space.

(D) the number of years required to recover the initial cost of an investment.

Answer : (D)

51. The _____ of an investment makes the net present value of all cash flows (benefits and costs) generated by a project equal to zero.

(A) net present value

(B) internal rate of return

(C) earnings growth

(D) market share

Answer : (B)

52. The _____ method of evaluating a project is the sum of the present value of the net cash flow for each time period.

(A) net present value

(B) internal rate of return

(C) earnings growth

(D) gross cash flow

Answer : (A)

53. _____ is a visa program that allows skilled employees from foreign lands into the United States.

(A) L-1B

(B) H-1B

(C) 4F

(D) G-5

Answer : (B)

54. _____ are responsible for running and maintaining information system equipment and also for scheduling, hardware maintenance, and preparing input and output.

(A) Data-entry operators

(B) System operators

(C) Web operators

(D) Local area network operators

Answer : (B)

55. The role of the _____ is to employ an information system (IS) department's equipment and personnel to help an organization attain its goals.

(A) information systems security analyst

(B) chief information officer

(C) data administrator

(D) system operator

Answer : (B)

SHORTANSWER

56. A(n) _____ is a group of people that is structured and managed to meet its mission or set of group

goals.**Answer :** organization

57. The _____ is a series of activities that an organization performs to transform inputs into outputs in such a way that the value of the input is increased.**Answer :** value chain

58. _____ refers to organizational subunits and the way they relate to the overall organization.**Answer :** Organizational structure

59. Giving employees and their managers more responsibility and authority to make decisions, take action, and have more control over their jobs is known as _____.**Answer :** empowerment

60. A(n) _____ is a group of individuals whose members are distributed geographically, but who collaborate and complete work through the use of information systems technology.**Answer :** virtual team

61. The radical redesign of business processes, organizational structures, information systems, and values of an organization to achieve a breakthrough in business results is known as _____.**Answer :** reengineering

62. _____ is a set of major understandings and assumptions shared by a group, such as within an ethic group or country.**Answer :** Culture

63. _____ is a theory that proposes that every organizational system is made up of four main components-people, tasks, structure, and technology-with an interaction among the four components so that any change in one of these elements will necessitate a change in the other three elements.**Answer :** Leavitt's diamond

64. The _____ specifies the factors that can lead to better attitudes about use of a new information system, along with its higher acceptance and usage.**Answer :** technology acceptance model (TAM)

65. In the technology acceptance model (TAM), _____ is defined as the degree to which individuals believe that use of the system will improve their performance. **Answer :** perceived usefulness

66. _____ means the ability of a product or a service to meet or exceed customer expectations.**Answer :** Quality

67. A(n) _____ is a significant and ideally long-term benefit to a company over its competition and can result in higher-quality products, better
customer service, and lower costs.**Answer :** competitive advantage

68. _____ is a philosophy that considers using resources for any purpose other than to create value for the customer to be wasteful and therefore a target for elimination.**Answer :** Lean enterprise management

69. Porter's _____ model is a widely accepted model that identifies the key factors that can lead to attainment of competitive advantage.**Answer :** five-forces

70. The _____ strategy for competitive advantage involves producing a variety of products, giving customers more choices, or delivering higher quality products and services.**Answer :** differentiation

71. A(n) _____is also known as a strategic partnership.**Answer :** strategic alliance

72. A process cannot produce more than _____ defects per million opportunities to achieve Six Sigma.**Answer :** 3.4

73. _____ is a long-term business arrangement in which a company contracts for services with an outside organization that has expertise in providing a specific function.**Answer :** Outsourcing

74. _____ are responsible for maintaining the security and integrity of their organizations' systems and data.**Answer :** Information systems security analysts

75. A(n) _____ is a professional in a developmental group of an information systems department who assists in choosing and configuring hardware and software, matching technology to users' needs, monitoring and testing the system in operation, and troubleshooting problems after implementation.**Answer :** systems analyst

76. The _____ group of a typical information systems organization provides customer service for the employees, customers, and business partners who rely on the firm's information systems and service to accomplish their work.**Answer :** support

77. _____ convert a program design developed by a systems analyst or software developer into one of many computer languages.**Answer :** Programmers

78. The _____ group of a typical information systems organization is responsible for the day-to-day running of IS hardware to process the organization's information systems workload.**Answer :** operations

79. _____ design and set up databases to meet an organization's needs.**Answer :** Database administrators (DBAs)

80. _____ is a process for testing skills and knowledge, which results in a statement by the certifying authority that confirms an individual is capable of performing particular tasks.
Answer : Certification

ESSAY

81. Define the term value chain and briefly discuss the purpose of the supply chain component in a manufacturing organization.

Answer :

The value chain is a series (chain) of activities that an organization performs to transform inputs into outputs in such a way that the value of the input is increased. In a manufacturing organization, the supply chain is a key value chain whose primary activities include inbound logistics, operations, outbound logistics, marketing and sales, and service. These primary activities are directly concerned with the creation and/or delivery of the product or service. There are also four main areas of support activities, including technology infrastructure, human resource management, accounting and finance, and procurement.

82. Explain the difference between sustaining and disruptive innovation.

Answer :

Sustaining innovation results in enhancements to existing products, services, and ways of operating. Such innovations are important as they enable an organization to continually increase profits, lower costs, and gain market share. A disruptive innovation is one that initially provides a lower level of performance than the marketplace has grown to accept. Over time, however, the disruptive innovation is improved to provide some new performance characteristics and becomes more attractive to users in a new market. As it continues to improve and begins to provide a higher level of performance, it eventually displaces the former product or way of doing things.

83. Explain the concept of "perceived usefulness" in the context of technology acceptance model (TAM).

Answer :

In the TAM model, "perceived usefulness" is defined as the degree to which individuals believe that use of a system will improve their performance. The perceived ease of use is the degree to which individuals believe that the system will be easy to learn and use. Both the perceived usefulness and ease of use can be strongly influenced by the expressed opinions of others who have used the system and the degree to which the organization supports use of the system (e.g., incentives, offering training and coaching from key users). Perceived usefulness and ease of use in turn influence an individual's attitude toward the system, which affect their behavioral intention to use the system.

84. What is competitive advantage? Identify Porter's five forces that cause firms to seek competitive advantage.

Answer :

A competitive advantage is a significant and ideally long term benefit to a company over its competition and can result in higher-quality products, better customer service, and lower costs. Michael Porter, a prominent management theorist, proposed a now widely accepted competitive forces model, also called the five-forces model. The five forces include (1) the rivalry among existing competitors, (2) the threat of new entrants, (3) the threat of substitute products and services, (4) the bargaining power of buyers, and (5) the bargaining power of suppliers.

85. Discuss the roles, functions, and careers in information systems (IS).

Answer :

Information systems (IS) offers many exciting and rewarding careers. Professionals with careers in information systems can work in an IS department or outside a traditional IS department as Web developers, computer programmers, systems analysts, computer operators, and many other positions. There are also opportunities for IS professionals in the public sector. In addition to technical skills, IS professionals need skills in written and verbal communication, an understanding of organizations and the way they operate, and the ability to work with people and in groups. Most

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