

## Chapter 2--Information Systems and Knowledge Management

Student: \_\_\_\_\_

1. Data, information, and intelligence all have the potential to create value to the firm through better decision making.  
True False
2. Data are a subset of market intelligence.  
True False
3. Relevant data are facts about things that cannot be changed.  
True False
4. Timely data are the most current data.  
True False
5. Knowledge cannot be managed.  
True False
6. One way to describe business research is to categorize it based on the four possible functions it serves in business: foundational, testing, issues, and validation.  
True False
7. The purpose of a decision support system is to store data and transform data into information that is easily accessible to managers.  
True False
8. The goal of a CRM system is to describe customer relationships so that managers can access information themselves.  
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9. A decision support system requires databases and software.  
True False
10. A data warehouse is the multitiered computer storehouse of current and historical data.  
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11. Input data can come from internal sources of the organization, but not from external sources.  
True False
12. Proprietary marketing research is available to anyone via the Internet.  
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13. An organization's salesforce frequently provides important business intelligence information.  
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14. Modern technology provides new ways of tracking human behavior.  
True False
15. Scanner data is collected at store checkout counters.  
True False
16. Tracking a person's Internet surfing behavior is illegal.  
True False
17. Types of databases include statistical databases, financial databases, and video databases.  
True False
18. Foxnews.com is an example of a content provider on the World Wide Web.  
True False
19. A key word search entails all information gathering designed to detect changes in the external operating environment of the firm.  
True False
20. Data and information can be delivered to consumers or other end users via pull technology or push technology.  
True False
21. Facts or recorded measures of certain phenomena (things or events) are known as \_\_\_\_\_.  
A. data  
B. information  
C. market intelligence  
D. knowledge  
E. value

22. Data formatted (structured) to support decision making or define the relationship between two facts is referred to as \_\_\_\_\_
- A. interpretive
  - B. inductive
  - C. information
  - D. interactive
23. Which of the following is a subset of data and information that actually has some explanatory power enabling effective decisions to be made?
- A. knowledge
  - B. intellectual capital
  - C. business intelligence
  - D. decision support system
24. All of the following are important characteristics used to evaluate the value of information EXCEPT \_\_\_\_\_.
- A. timeliness
  - B. relevance
  - C. completeness
  - D. cost
25. The characteristic of data reflecting how pertinent these particular facts are to the situation at hand is called \_\_\_\_\_.
- A. relevance
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26. A researcher has assessed the reliability and validity of his data and is comfortable in thinking the data accurately matches reality. Which characteristic of valuable information does this best describe?
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28. Merck, a pharmaceutical company, places a tiny chip on drug packaging to track its product from the manufacturing plant to the consumer to ensure the product flows through the proper distribution channel and safety for consumers. The tiny chip is an application of which technology?
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30. Which of the following is an organized collection of computer hardware, software, data, and personnel designed to capture, store, update, manipulate, analyze, and immediately display information about worldwide business activities?
- A. Internet
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31. All of the following are functions supported by marketing research EXCEPT \_\_\_\_\_.
- A. testing
  - B. foundational
  - C. compliance
  - D. performance
32. Harold is conducting research to determine what consumer segment his company should serve with its services. Which function is this research serving?
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34. Which part of the decision support system addresses exchanges between the firm and its customers?
- A. customer relationship management (CRM) system
  - B. data warehouse
  - C. global information system (GIS)
  - D. intellectual capital system
35. Who can provide data to a decision support system?
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  - B. sales managers
  - C. accountants
  - D. all of these choices
36. An organization's mailing list of current customers is an example of \_\_\_\_\_.
- A. a cookie
  - B. software
  - C. a database
  - D. a hyperlink
37. Which of the following is a process that allows important day-to-day operational data to be stored and organized for simplified access?
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  - B. data warehousing
  - C. proprietary business research
  - D. keyword search
38. An organization's inventory figures are a good example of \_\_\_\_\_.
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  - B. internal records
  - C. external records
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  - C. salesperson input
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B. multiple-source data  
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45. The type of exchange that occurs when one company's computer system is integrated with another company's system is called \_\_\_\_\_.  
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B. radio frequency exchanged (RFE)  
C. electronic synergy  
D. realtime communication

46. When Walmart transmits information electronically each day to Wrangler jeans about unit sales of this product in its retail outlets so that Wrangler can replenish Walmart's inventory on an as-needed basis, this is an example of \_\_\_\_\_.
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47. Where does the content for a particular website physically reside?
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  - B. electronic data interchange
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48. Parties that furnish information on the World Wide Web are called \_\_\_\_\_.
- A. browsers
  - B. content providers
  - C. search engines
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49. What is the opening screen of a Web site called?
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  - B. home page
  - C. hyperlink
  - D. browser
50. A Web site address that Web browsers recognize is called a(n) \_\_\_\_\_.
- A. URL
  - B. EDI
  - C. DSS
  - D. UPC
51. [www.fda.gov](http://www.fda.gov), [www.nike.com](http://www.nike.com), and [www.fsu.edu](http://www.fsu.edu) are examples of \_\_\_\_\_.
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52. Yahoo! and Google are examples of \_\_\_\_\_.
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53. A(n) \_\_\_\_\_ searches through the Internet almost instantly looking for content containing specific words.
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55. What type of medium is the Internet?
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  - B. one-way medium
  - C. flow medium
  - D. ionic medium
56. Melanie is using the Internet to gather information designed to detect changes in her company’s external operating environment. What is Melanie performing?
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57. In which type of technology does the consumer request information from a Web page and the browser then determines a response?
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  - B. push technology
  - C. pull technology
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59. When an Internet user sets up his computer so that it will send him regular news about his favorite professional football team, this is an example of the application of \_\_\_\_\_.
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60. When you visit websites, most likely a small computer file that records your Web usage history is created. Often this is done so the site will know you when you return and you won't have to reenter information if you have already done so on that site. This small computer file is called a(n) \_\_\_\_\_.
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61. Most companies use a private data network that uses Internet standards and technology but only allows those individuals whom the organization deems as appropriate participants to access data. This is an example of a(n) \_\_\_\_\_.
- A. Intranet
  - B. smart network
  - C. internal source
  - D. content provider
62. Which of the following is a collaborative effort involving many universities, government entities, and corporations?
- A. Intranet
  - B. Internet2
  - C. Web2.0
  - D. smart agent network
63. In information technology, \_\_\_\_\_ is data formatted (structured) to support decision-making or define the relationship between two facts.
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64. Information that is accurate, valid, and reliable is said to be of high \_\_\_\_\_.
- \_\_\_\_\_
65. Information that is provided when a manager needs it to make an important decision is said to be \_\_\_\_\_.
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66. When a manager has sufficient information to make a good decision, the information is said to be \_\_\_\_\_.
- \_\_\_\_\_
67. \_\_\_\_\_ management is the process of creating an inclusive, comprehensive, easily accessible organizational memory, which is often called the organization's intellectual capital.
- \_\_\_\_\_
68. A computer-based system that helps managers to solve problems through interaction with databases is known as a(n) \_\_\_\_\_.
- \_\_\_\_\_
69. A decision support system that gathers information about customers such as sales history and customer preferences is known as a(n) \_\_\_\_\_ system.
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70. Numerical, text, voice, and image data that enter a decision support system are known as \_\_\_\_\_.
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71. \_\_\_\_\_ data refers to the accumulated records resulting from point-of-sale data recordings.
- \_\_\_\_\_
72. An \_\_\_\_\_ occurs when one company's computer system is integrated with another company's computer system.
- \_\_\_\_\_
73. A(n) \_\_\_\_\_ is where the content for a particular website physically resides and is accessed.
- \_\_\_\_\_
74. Parties that furnish information on the World Wide Web are called \_\_\_\_\_.
- \_\_\_\_\_

75. A website address that Web browsers recognize is called a(n) \_\_\_\_\_.  
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76. A computerized directory that allows users to search the World Wide Web for information based on a keyword search is called a(n) \_\_\_\_\_.  
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77. When a computer user types in “speed boats” in Google, he or she is conducting a(n) \_\_\_\_\_.  
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78. A medium that a person can use to communicate with and interact with other users is called a(n) \_\_\_\_\_ medium.  
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79. The Internet is a(n) \_\_\_\_\_ medium.  
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80. \_\_\_\_\_ technology refers to users requesting information from a web page and the browser then determining a response.  
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81. \_\_\_\_\_ software is capable of learning an Internet user’s preferences and automatically searching out information and distributing the information to a user’s computer.  
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82. A company's private computer network that uses Internet standard but which is accessible only by its own employees is known as a(n) \_\_\_\_\_.  
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83. Going from data to information to intelligence is like a funnel. Explain what that means.

84. A manager is considering purchasing data from an outside vendor to get a better understanding of the target market for his firm's services. What factors should the manager consider when evaluating the data's usefulness for his needs?
85. What is knowledge management? Explain why is it important for businesses to manage knowledge.
86. Name and describe the four possible functions research serves in business.

87. Explain what a decision support system (DSS) is and how it helps managers.

88. Compare and contrast pull technology and push technology.

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## Key

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**TRUE**
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**FALSE**
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**complete**

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**Knowledge**

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**decision support system (DSS)**

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**customer-relationship management (CRM)**

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**Smart agent**

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**Intranet**

83. Going from data to information to intelligence is like a funnel. Explain what that means.

**Data** are simply facts or recorded measures of certain phenomena (things or events). **Information** is data formatted (structured) to support decision making or define the relationship between two facts. **Business intelligence** is the subset of data and information that actually has some explanatory power enabling effective decisions to be made. So there is more data than information and business intelligence.



84. A manager is considering purchasing data from an outside vendor to get a better understanding of the target market for his firm's services. What factors should the manager consider when evaluating the data's usefulness for his needs?

The four characteristics that help determine how valuable data may be are:

**Relevance** - reflects how pertinent these particular facts are to the situation at hand. Relevant data are facts about things that can be changed, and if they are changed, it will materially alter the situation.

**Quality** - the degree to which data represent the true situation. High-quality data are accurate, valid, and reliable.

**Timeliness** - the data are current enough to still be relevant.

**Completeness** - refers to having the right amount of information.

85. What is knowledge management? Explain why is it important for businesses to manage knowledge.

**Knowledge management** is the process of creating an inclusive, comprehensive, easily accessible organizational memory, which can be called the organization's intellectual capital. The purpose of knowledge management is to organize the intellectual capital of an organization in a formally structured way for easy use. Knowledge is presented in a way that helps managers comprehend and act on that information and make better decisions in all areas of business. Knowledge management systems are particularly useful in making data available across the functional areas of the firm so they can be integrated.

86. Name and describe the four possible functions research serves in business.

The four possible function research serves in business are:

(1) **Foundational** - answers basic questions (e.g., What business should we be in?)

(2) **Testing** - addresses things like new product concepts or promotional ideas (e.g., How effective will they be?)

(3) **Issues** - examines how specific issues impact the firm (e.g., How does organizational structure impact employee job satisfaction and turnover?)

(4) **Performance** - monitors specific metrics including financial statistics like profitability and delivery times. They are critical in real-time management and in "what-if" types of analyses examining the potential impact of a change in policy.

87. Explain what a decision support system (DSS) is and how it helps managers.

A **decision support system (DSS)** is a system that helps decision makers confront problems through direct interaction with computerized databases and analytical software programs. The purpose of a DSS is to store data and transform them into organized information that is easily accessible to managers. Doing so saves managers time so that decisions that might take days or even weeks otherwise can be made in minutes using a DSS. A DSS requires both databases and software. Modern decision support systems greatly facilitate customer relationship management (CRM), which is a system that is part of the DSS that address exchanges between the firm and its customers.

88. Compare and contrast pull technology and push technology.

Data and information can be delivered to consumers or other end users via either pull technology or push technology. Conventionally, **pull technology** refers to consumers requesting information from a Web page and the browser then determines a response. Thus, the consumer is essentially asking for the data. In this case, it is said to be pulled through the channel. The opposite of pull is push. **Push technology** sends data to a user's computer without a request being made. In other words, software is used to guess what information might be interesting to consumers based on the patterns of previous responses. Push technology allows personalized information to be delivered to consumers without the need for them to even be physically at their Internet device.