Management Information Systems: Managing the Digital Firm, 11e (Laudon/Laudon)
Chapter 12   Enhancing Decision Making

1) Unstructured decisions are novel and nonroutine, and there is no well-understood or agreed-on procedure for making them.
Answer: TRUE
Diff: 1   Page Ref: 452
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

2) A structured decision can be made by following a well-defined set of procedures. No "feel" or intuition is necessary.
Answer: TRUE
Diff: 1   Page Ref: 452
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

3) Middle management tends to face more unstructured decision scenarios, but may include some structured components.
Answer: FALSE
Diff: 2   Page Ref: 452
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

4) Unstructured decision making is most prevalent at lower organizational levels.
Answer: FALSE
Diff: 1   Page Ref: 453
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

5) Rank-and-file employees tend to make more structured decisions.
Answer: TRUE
Diff: 1   Page Ref: 453
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

6) The intelligence phase of decision making consists of discovering, identifying, and understanding the problems occurring in the organization.
Answer: TRUE
Diff: 1   Page Ref: 454
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

7) The implementation phase of Simon's decision making model includes choosing among solution alternatives.
Answer: FALSE
Diff: 2   Page Ref: 454
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

8) The first stage in Simon's decision-making process model is the design stage.
Answer: FALSE
Diff: 2   Page Ref: 454
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

9) The classical model of management does not address what exactly managers do when they plan, decide things, and control the work of others.
Answer: TRUE
Diff: 2   Page Ref: 454
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

10) MIS typically produce fixed, regularly scheduled reports based on data extracted and summarized from the firm's underlying transaction processing systems.
Answer: TRUE
Diff: 1   Page Ref: 457
AACSB: Use of information technology
CASE: Content
Objective: 12.2

11) DSS primarily address structured problems.
Answer: FALSE
Diff: 1   Page Ref: 457
AACSB: Use of information technology
CASE: Content
Objective: 12.3

12) The earliest DSS were data-driven.
Answer: FALSE
Diff: 2   Page Ref: 457
AACSB: Use of information technology
CASE: Content
Objective: 12.3

13) What-if analysis works forward from known or assumed conditions.
Answer: TRUE
Diff: 1   Page Ref: 462
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

14) Backward sensitivity analysis software is used for goal seeking.
Answer: TRUE
Diff: 1   Page Ref: 463
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

15) Data visualization technologies help distill large amounts of information into easily read textual lists.
Answer: FALSE
Diff: 1   Page Ref: 465
AACSB: Use of information technology
CASE: Content
Objective: 12.2

16) DSS are a special category of GIS.
Answer: FALSE
Diff: 1   Page Ref: 465
AACSB: Use of information technology
CASE: Content
Objective: 12.3

17) A geographic information system is a decision support system designed specifically to work with spatial information.
Answer: TRUE
Diff: 1   Page Ref: 465-466
AACSB: Use of information technology
CASE: Content
Objective: 12.2

18) GDSS facilitate the solution of unstructured problems by a set of decision makers working together as a group in either the same location or different locations.
Answer: TRUE
Diff: 1   Page Ref: 467
AACSB: Use of information technology
CASE: Content
Objective: 12.5

19) Web-based tools for videoconferencing and electronic meetings are the primary tools for GDSS.
Answer: FALSE
Diff: 3   Page Ref: 467-468
AACSB: Use of information technology
CASE: Content
Objective: 12.5

20) During a GDSS meeting, the attendees control the use of GDSS tools.
Answer: FALSE
Diff: 1   Page Ref: 468
AACSB: Use of information technology
CASE: Content
Objective: 12.5

21) Which of the following was NOT a challenge Eastern Mountain Sports was facing in its management information systems and decision making?
A) Employees had to craft most management reports by hand.
B) Data was stored in unconnected sources.
C) Data was not being acquired by the proper channels.
D) Managers were unable to make good decisions about stocking stores.
Answer: C
Diff: 2   Page Ref: 449-450
AACSB: Analytic skills
CASE: Evaluation
Objective: 12.2

22) Which of the following statements best describes the business value of improved decision making?
A) Improved decision making creates better products.
B) Improved decision making results in a large monetary value for the firm as numerous small daily decisions affecting efficiency, production, costs, and more add up to large annual values.
C) Improved decision making enables senior executives to more accurately foresee future financial trends.
D) Improved decision making strengthens customer and supplier intimacy, which reduces costs.
Answer: B
Diff: 1   Page Ref: 451
AACSB: Analytic skills
CASE: Analysis
Objective: 12.1

23) When there is no well-understood or agreed-on procedure for making a decision, it is said to be
A) undocumented.
B) unstructured.
C) documented.
D) semistructured.
Answer: B
Diff: 1   Page Ref: 452
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

24) The type of decision that can made by following a definite procedure is called a(n) _____ decision.
A) structured
B) unstructured
C) semistructured
D) procedural
Answer: A
Diff: 1   Page Ref: 452
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

25) Which type of decision is deciding whether to introduce a new product line?
A) structured
B) unstructured
C) recurring
D) nonrecurring
Answer: B
Diff: 1   Page Ref: 452
AACSB: Analytic skills
CASE: Analysis
Objective: 12.1

26) Which type of decision is calculating gross pay for hourly workers?
A) structured
B) unstructured
C) semistructured
D) none of the above
Answer: A
Diff: 1   Page Ref: 452
AACSB: Analytic skills
CASE: Analysis
Objective: 12.1

27) The decision to approve a capital budget is an example of a(n) _____ decision.
A) semistructured
B) unstructured
C) structured
D) undocumented
Answer: B
Diff: 2   Page Ref: 452
AACSB: Analytic skills
CASE: Analysis
Objective: 12.1

28) The decisions involved in creating and producing a corporate intranet can be classified as _____ decisions.
A) procedural
B) unstructured
C) structured
D) semistructured
Answer: D
Diff: 2   Page Ref: 452
AACSB: Analytic skills
CASE: Analysis
Objective: 12.1

29) Checking store inventory is an example of a(n) _____ decision.
A) semistructured
B) unstructured
C) structured
D) none of the above
Answer: C
Diff: 2   Page Ref: 452
AACSB: Analytic skills
CASE: Analysis
Objective: 12.1

30) Simon's description of decision making consists of which four stages?
A) planning, financing, implementation, and maintenance.
B) planning, design, implementation, and maintenance.
C) intelligence, design, choice, and implementation.
D) intelligence, design, financing, and implementation.
Answer: C
Diff: 2   Page Ref: 453
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

31) Which phase of decision making finds or recognizes a problem, need, or opportunity?
A) design
B) intelligence
C) choice
D) implementation
Answer: B
Diff: 1   Page Ref: 454
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

32) The five classical functions of managers are planning, organizing, deciding, controlling, and
A) coordinating.
B) leading.
C) managing.
D) negotiating.
Answer: A
Diff: 3   Page Ref: 454
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

33) In contrast to the classical model of management, behavioral models see the actual behavior of managers as being more
A) systematic.
B) informal.
C) reflective.
D) well organized.
Answer: B
Diff: 2   Page Ref: 454
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

34) Behavioral models of managers find that, from observation, managers
A) perform often fewer than 100 activities a day.
B) operate best with standardized, predictable, printed information.
C) create a formalized, hierarchic structure of contacts to provide filtered information.
D) typically work in a fragmented manner, with only 10% of activities exceeding an hour in duration.
Answer: D
Diff: 2   Page Ref: 454
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

35) Mintzberg's classification of managerial roles outlines which three main categories?
A) interpersonal, informational, and decisional
B) symbolic, decisional, and interpersonal
C) symbolic, interpersonal, and technical
D) technical, interpersonal, and informational
Answer: A
Diff: 2   Page Ref: 455
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

36) The role of liaison falls into which of Mintzberg's managerial classifications?
A) decisional
B) informational
C) interpersonal
D) symbolic
Answer: C
Diff: 3   Page Ref: 455
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

37) The role of entrepreneur falls into which of Mintzberg's managerial classifications?
A) decisional
B) informational
C) interpersonal
D) symbolic
Answer: A
Diff: 3   Page Ref: 455
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

38) According to Mintzberg, managers in their informational role act as
A) figureheads for the organization.
B) leaders.
C) nerve centers of the organization.
D) negotiators.
Answer: C
Diff: 2   Page Ref: 455
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

39) Which of the following managerial roles is NOT supported by information systems?
A) spokesperson
B) resource allocator
C) leader
D) nerve center
Answer: C
Diff: 3   Page Ref: 455
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

40) As discussed in the chapter text, the three main reasons that investments in information technology do NOT always produce positive results are
A) management support, technical logistics, and user compliance.
B) organization, environment, culture.
C) information quality, information integrity, and information accuracy.
D) information quality, organizational culture, and management filters.
Answer: D
Diff: 2   Page Ref: 456
AACSB: Use of information technology
CASE: Content
Objective: 12.2

41) The concern that data values of an information source fall within a defined range reflects which quality dimension of information?
A) accuracy
B) integrity
C) validity
D) consistency
Answer: C
Diff: 3   Page Ref: 456
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

42) The concern that the structure of data is consistent within an information source reflects which quality dimension of information?
A) accuracy
B) integrity
C) validity
D) consistency
Answer: B
Diff: 3   Page Ref: 456
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

43) MIS typically produce
A) new ways of looking at data that emphasize change, flexibility, and rapid response.
B) fixed, regularly scheduled reports based on data extracted from the organization's TPS.
C) solutions to semistructured problems appropriate for middle management decision making.
D) assumptions, responses to ad hoc queries, and graphic representations of existing data.
Answer: B
Diff: 1   Page Ref: 457
AACSB: Use of information technology
CASE: Content
Objective: 12.2

44) An information system for a building company that tracks construction costs for various projects across the United States would be categorized as a type of
A) DSS.
B) MIS.
C) GIS.
D) CDSS.
Answer: B
Diff: 1   Page Ref: 457
AACSB: Analytic skills
CASE: Analysis
Objective: 12.2

45) Which type of information system supports decision-making by enabling users to extract useful information that was previously buried in large quantities of data?
A) GSS.
B) ESS.
C) TPS.
D) DSS.
Answer: D
Diff: 1   Page Ref: 481
AACSB: Use of information technology
CASE: Content
Objective: 12.3

46) The components of a DSS are the
A) internal corporate database, external data sources, and analysis tools.
B) data visualization tools, software, and graphics capabilities.
C) database, graphics capabilities, and analysis tools.
D) database, software system, and user interface.
Answer: D
Diff: 2   Page Ref: 458
AACSB: Use of information technology
CASE: Content
Objective: 12.3

47) A system that uses data mining to guide senior marketing executive's decisions about customer retention can be categorized as a(n):
A) CDSS.
B) MIS.
C) DSS.
D) ESS.
Answer: C
Diff: 3   Page Ref: 458
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

48) A DSS database is a collection of
A) historical data extracted from transaction processing systems.
B) current or historical data from several applications or groups.
C) external data typically mined from the Internet and other third-party sources.
D) the corporation's current transaction data.
Answer: B
Diff: 2   Page Ref: 458
AACSB: Use of information technology
CASE: Content
Objective: 12.3

49) The chapter case discussing overbooking on airlines illustrates that
A) inaccuracies that can be magnified throughout a DSS because of incorrect data.
B) organizational and people challenges may defeat a relatively successful technological solution.
C) despite the best efforts of industry experts and sophisticated DSS, overbooking remains a problem.
D) through the use of DSS, genetic algorithms, and neural networks, the problems of overbooking and bumped passengers have largely been solved.
Answer: B
Diff: 2   Page Ref: 459
AACSB: Analytic skills
CASE: Evaluation
Objective: 12.3

50) The chapter case discussing Dick's Sporting Goods stores illustrates the use of
A) DSS to enable greater supplier intimacy.
B) MIS to achieve greater operational excellence.
C) ESS to enable better decision-making.
D) CDSS to enable greater customer intimacy.
Answer: A
Diff: 3   Page Ref: 461-462
AACSB: Analytic skills
CASE: Synthesis
Objective: 12.2

51) Which type of model asks what-if questions repeatedly to determine the impact on outcomes of changes in one or more factors?
A) optimization
B) sensitivity analysis
C) statistical
D) forecasting
Answer: B
Diff: 2   Page Ref: 462
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.3

52) Which type of model is used to help managers use historical data to estimate future conditions and sales figures resulting from these conditions?
A) optimization
B) sensitivity analysis
C) statistical
D) forecasting
Answer: D
Diff: 2   Page Ref: 462
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.3

53) You would use an optimization model to
A) project future conditions and predict the effect of these conditions on sales.
B) determine the proper mix of products within a given market to maximize profits.
C) determine the price of a product given fluctuating sales and advertising budget.
D) establish the best relationship between price and sales and marketing budgets.
Answer: B
Diff: 2   Page Ref: 462
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

54) Backward sensitivity analysis software is used for
A) supply chain optimization.
B) historical what-if analysis.
C) goal seeking.
D) reverse forecasting.
Answer: C
Diff: 3   Page Ref: 463
AACSB: Use of information technology
CASE: Content
Objective: 12.3

55) A pivot table is a
A) spreadsheet tool that displays two or more dimensions of data in a convenient format.
B) type of relational database.
C) chart tool that can rotate columnar data quickly and visually.
D) tool for performing sensitivity analysis.
Answer: A
Diff: 1   Page Ref: 464
AACSB: Use of information technology
CASE: Content
Objective: 12.2

56) Which type of information system uses data visualization technology to analyze and display data for planning and decision making in the form of digitized maps?
A) GIS
B) DSS
C) MIS
D) TPS
Answer: A
Diff: 1   Page Ref: 465
AACSB: Use of information technology
CASE: Content
Objective: 12.3

57) Dell Computer's online tools that allow users of their Web site to customize and order a new PC are a type of
A) DSS.
B) CDSS.
C) Web-based GIS.
D) Intelligent agent.
Answer: B
Diff: 2   Page Ref: 466-467
AACSB: Analytic skills
CASE: Analysis
Objective: 12.4

58) As discussed in the chapter case, the system used in South Carolina to estimate and map the regional damage and losses resulting from an earthquake was a type of
A) CDSS
B) GSS
C) GIS
D) GDSS
Answer: C
Diff: 1   Page Ref: 467
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

59) Saturn.com's "Build Your Own" feature, allowing customers to select the trim, transmission, engine, and other features of a car model is an example of a
A) CDSS
B) GSS
C) GIS
D) GDSS
Answer: A
Diff: 2   Page Ref: 466-467
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

60) GDSS
A) are designed to allow meeting attendees to share their thoughts in real-time with their peers.
B) support decisions that require knowledge about the geographic distribution of resources.
C) are typically used with geographically dispersed attendees.
D) implement structured methods for organizing and evaluating ideas.
Answer: D
Diff: 2   Page Ref: 467-468
AACSB: Use of information technology
CASE: Content
Objective: 12.5

61) An essential component in the ability of GDSS to contribute to a collaborative environment is
A) allowing users to contribute simultaneously.
B) using structured methods for evaluating ideas.
C) identifying users informally.
D) the guarantee of user anonymity.
Answer: D
Diff: 1   Page Ref: 468
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.5

62) GDSS
A) require a small number of attendees in order to maintain high levels of productivity.
B) enable increasing a meeting size without reducing productivity.
C) include specific procedures for priority ranking the order in which participants can respond.
D) utilize shared desktop computers to foster collaboration.
Answer: B
Diff: 2   Page Ref: 468
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.5

63) The information system used by Caesar's Entertainment, which combines data from internal TPS with information from financial systems and external sources to deliver reports such as profit-loss statements, impact analyses, is an example of
A) DSS.
B) ESS.
C) CDSS.
D) MIS.
Answer: B
Diff: 1   Page Ref: 468
AACSB: Analytic skills
CASE: Analysis
Objective: 12.4

64) The leading methodology for understanding the really important information needed by a firm's executives is called the _____ method.
A) digital dashboard
B) balanced scorecard
C) KPI
D) data visualization
Answer: B
Diff: 2   Page Ref: 468
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.4

65) Which of the following features of an ESS displays traditional financial metrics with measurements from additional perspectives, such as customers, or learning and growth, on a single screen?
A) balanced scorecards
B) digital dashboard
C) graphic visualization tools
D) drill-down capabilities
Answer: B
Diff: 1   Page Ref: 471
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.4

66) A system that displays performance overviews of the firm in an easy-to-read graphical interface, along with the ability to drill down into fine-grained sales data can be categorized as a(n)
A) CDSS
B) MIS
C) DSS
D) ESS
Answer: A
Diff: 2   Page Ref: 468-469
AACSB: Analytic skills
CASE: Analysis
Objective: 12.4

67) ESS
A) support the structured decision making of senior executives.
B) have the ability to drill down into lower levels of detail.
C) easily integrate data from different systems.
D) are primarily driven by information derived from a company's transaction processing systems.
Answer: B
Diff: 2   Page Ref: 494469
AACSB: Use of information technology
CASE: Content
Objective: 12.4

68) The easy use of graphics in an ESS allows the user to
A) look at more data in less time with greater clarity.
B) use creative analysis.
C) quickly manipulate TPS and historical data.
D) decentralize decision making.
Answer: A
Diff: 1   Page Ref: 470
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.4

69) Executives need a wide range of _____ as well as internal data.
A) structured
B) informal
C) system
D) external
Answer: D
Diff: 1   Page Ref: 470
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.4

70) A well-designed ESS will allow management to
A) have greater span of control.
B) assign lower levels of management greater control.
C) reduce their need to review lower levels of operation.
D) all of the above.
Answer: D
Diff: 2   Page Ref: 470
AACSB: Use of information technology
CASE: Content
Objective: 12.4

71) A(n) _____ decision is repetitive and routine, for which known algorithms provide
solutions.
Answer: structured
Diff: 1   Page Ref: 452
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

72) The third stage in Simon's description of decision making is _____.
Answer: choice
Diff: 2   Page Ref: 453
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.1

73) The concept of management _____ describes situations in which managers act on biases
that reject information that does not conform to their expectations.
Answer: filters
Diff: 2   Page Ref: 456
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

74) _____-driven DSS have analysis capabilities based on strong theories and used to
perform "what-if" and similar kinds of analyses.
Answer: Model
Diff: 1   Page Ref: 457
AACSB: Use of information technology
CASE: Content
Objective: 12.3

75) Of the three main DSS components, the _____ system comprises the tools used for data analysis.
Answer: software
Diff: 2   Page Ref: 458
AACSB: Use of information technology
CASE: Content
Objective: 12.3

76) A(n) _____ is an abstract representation illustrating the components or relationships of a phenomenon.
Answer: model
Diff: 1   Page Ref: 458
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.2

77) A(n) _____ model determines the best resource allocation to maximize or minimize specified variables.
Answer: optimization
Diff: 2   Page Ref: 462
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.3

78) A(n) _____ supports the decision-making processes of an existing or potential customer.
Answer: customer decision-support system, CDSS
Diff: 1   Page Ref: 466
AACSB: Use of information technology
CASE: Content
Objective: 12.3

79) A(n) _____ facilitates the solution to unstructured problems by a set of decision-makers working together as a group.
Answer: group decision-support systems, GDSS
Diff: 2   Page Ref: 467
AACSB: Use of information technology
CASE: Content
Objective: 12.5

80) A(n) _____ uses easy-to-understand displays of information to provide management with a comprehensive view of firm performance on a single screen.
Answer: digital dashboard, executive dashboard
Diff: 2   Page Ref: 471
AACSB: Reflective thinking skills
CASE: Content
Objective: 12.4

81) Describe MIS and DSS and differentiate between them.
Answer: MIS provide information on the firm's performance to help managers monitor and control the business. They typically produce hard copy, fixed, regularly scheduled reports based on data extracted and summarized from the organization's underlying transaction processing systems. DSS provide new sets of capabilities for nonroutine decisions and user control. MIS accents reports based on routine flows of data and assists in the general control of the organization. DSS emphasizes change, flexibility, and rapid response to unstructured problems.
Diff: 2   Page Ref: 457-458
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

82) What is the difference between a model-driven and a data-driven DSS?
Answer: Model-driven DSS use some type of model to perform "what-if" and other types of analyses. Their analysis capabilities were based on a strong theory or model combined with a good user interface to make the model easy to use. Data-driven DSS analyze large pools of data found in major organizational systems. They support decision making by allowing users to extract useful information that was previously buried in large quantities of data.
Diff: 2   Page Ref: 458-463
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

83) Discuss four types of models commonly used by DSS.
Answer: Statistical modeling software can be used to help establish relationships, such as relating product sales to differences in age, income, or other factors between communities.
    Optimization models determined optimal resource allocation to maximize or minimize specified variables such as cost or time. A classic use of optimization models is to determine the proper mix of products within a given market to maximize profits.
    Forecasting models are often used to forecast sales. The user of this type of model might supply a range of historical data to project future conditions and the sales that might result from those conditions. Companies often use this software to predict the actions of competitors.
    Sensitivity analysis models ask "what-if" questions repeatedly to determine the impact of changes in one or more factors on outcomes.
Diff: 3   Page Ref: 462-463
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

84) What is the business value of a DSS?
Answer: DSS can help companies improve supply chain management and customer relationship management. Some take advantage of the company-wide data provided by enterprise systems. DSS today can also harness the interactive capabilities of the Web to provide decision-support tools to both employees and customers.
Diff: 2   Page Ref: 457-465
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

85) If both contemporary ESS and DSS incorporate tools for modeling and analysis, what qualities distinguish the two types of system?
Answer: DSS are concerned with solving more specific business problems, such as determining the best pricing for a product, establishing optimized delivery routes, whereas ESS are designed specifically for executives to use as a way of managing the company and seeing an overview of both external and internal information in order to monitor more general business situations. The ESS modeling tools would be used to provide different views of status, rather than to analyze large amounts of data to arrive at a solution for a specific problem.
Diff: 2   Page Ref: 458-459, 468-470
AACSB: Analytic skills
CASE: Analysis
Objective: 12.3

86) What is a GIS? Describe at least three ways in which a GIS could be used by modern business.
Answer: Geographic information systems are a special category of DSS that use data visualization technology to analyze and display data for planning and decision making in the form of digitized maps. GIS can best be used to support decisions that require knowledge about the geographic distribution of people or other resources in scientific research, resource management, and development planning. GIS have modeling capabilities, allowing managers to change data and automatically revise business scenarios to find better solutions.

For instance, a company could display its customers on a map and then design the most efficient delivery route for its products. A second way in which it could be used would be to analyze demographic information to decide where to open branch restaurants. A third use could be customer demographic data and map information to locate people who are likely to become customers for the company's services.
Diff: 3   Page Ref: 466-467
AACSB: Analytic skills
CASE: Synthesis
Objective: 12.3

87) What do you see as the business value of a GDSS?
Answer: GDSS helps groups make decisions about unstructured problems. Firstly, because GDSS provides value by allowing collaboration over important decisions◆the decision doesn't rest in the hands of one person alone. By having more people working on the problem, the decision is more likely to realistically reflect the needs and goals of the group, rather than just one person. Secondly, because anonymity is a feature, people are encouraged to be more honest. This will also enhance the accuracy of the solution. The ability of the GDSS to record the meeting and decisions means that the decision-making process, its ideas and solutions, can be made part of the company's knowledge base. Additionally, by providing structure, the GDSS may enhance the efficiency of the particular type of unstructured decision making.
Diff: 2   Page Ref: 467-468
AACSB: Analytic skills
CASE: Evaluation
Objective: 12.5

88) Describe what technologies, facilities, and capabilities would be required to run a GDSS-enabled meeting.
Answer: GDSS-guided meetings take place in conference rooms with special hardware and software tools to facilitate group decision making. The hardware includes computer and networking equipment, overhead projectors, and display screens. Special electronic meeting software collects, documents, ranks, edits, and stores the ideas offered in a decision-making meeting. The more elaborate GDSS use a professional facilitator and support staff. The facilitator selects the software tools and helps organize and run the meeting. A sophisticated GDSS provides each attendee with a dedicated desktop computer under that person's individual control. No one will be able to see what individuals do on their computers until those participants are ready to share information. Their input is transmitted over a network to a central server that stores information generated by the meeting and makes it available to all on the meeting network. Data can also be projected on a large screen in the meeting room.
Diff: 3   Page Ref: 467-468
AACSB: Analytic skills
CASE: Analysis
Objective: 12.5

89) You have been hired as a consultant for an established bicycle parts manufacturer to assist senior management in planning a new ESS. What factors will you advise management to take into consideration?

Answer: Student answers will vary, but should take into account technical difficulties (integrating data from different systems), the types of information and overview of the organization needed, and change management. An example answer is:

A major challenge of building executive support systems has been to integrate data from systems designed for very different purposes so that senior executives can review organizational performance from a firm-wide perspective. ESS must be designed so that high-level managers and others can use them without much training. One area that merits special attention is the determination of executive information requirements. ESS need to have some facility for environmental scanning. A key information requirement of managers at the strategic level is the capability to detect signals of problems in the organizational environment that indicate strategic threats and opportunities. The ESS need to be designed so that both external and internal sources of information can be used for environmental scanning purposes. Implementation of the ESS must be carefully managed to neutralize the opposition of managers at the lower levels of the organization, because ESS potentially could give top executives the ability to examine their work without their knowledge.

Diff: 2   Page Ref: 468-470
AACSB: Analytic skills
CASE: Evaluation
Objective: 12.4

90) Describe the balanced scorecard model and its role in ESS.

Answer: The balanced score card is a framework for operationalizing a firm's strategic plan by focusing on measurable outcomes on four dimensions of firm performance: financial, business process, customer, and learning and growth. Performance on each dimension is measured using **k**ey performance indicators (KPIs), which are the measures proposed by senior management for understanding how well the firm is performing along any given dimension. The balanced scorecard framework is thought to be "balanced" because it causes managers to focus on more than just financial performance. In this view, financial performance is past history–the result of past actions–and managers should focus on the things they are able to influence today, such as business process efficiency, customer satisfaction, and employee training.

Diff: 2   Page Ref: 468-469
AACSB: Analytic skills
CASE: Analysis
Objective: 12.4