

TRUE/FALSE - Write 'T' if the statement is true and 'F' if the statement is false.

- 1) Accounting and Finance is a primary activity in the value chain.
 - ☐ true
 - ☐ false

- 2) As of today, Accounting Information Systems are all computerized.
 - ☐ true
 - ☐ false

- 3) Business value includes all those items, events and interactions that determine the financial health and well-being of the firm.
 - ☐ true
 - ☐ false

- 4) The Certified Information Technology Professional (CITP) is a professional designation for those with a broad range of technology knowledge and does not require a CPA.
 - ☐ true
 - ☐ false

- 5) The Certified Information Systems Auditor (CISA) is a professional designation generally sought by those performing IT audits.
 - ☐ true
 - ☐ false

- 6) Information is defined as being data organized in a meaningful way that is useful to the user.

- ☐ true
- ☐ false

7) Data is defined as being information organized in a meaningful way that is useful to the user.

- ☐ true
- ☐ false

8) A systems analyst analyzes a business problem that might be addressed by an information system and recommends software or systems to address that problem.

- ☐ true
- ☐ false

9) A value chain is defined as the cost of performing various activities inside a firm.

- ☐ true
- ☐ false

10) Relevant information's most defining characteristic is that it is free from bias and error.

- ☐ true
- ☐ false

11) The characteristics of relevant information include predictive value, feedback value and timeliness.

- ☐ true
- ☐ false

12) A faithful representation of the underlying event should reflect the bias of the system analyst.

- ☐ true
- ☐ false

13) Information overload is defined as the difficulty a person faces in understanding a problem and making a decision as a consequence of too much information.

- ☐ true
- ☐ false

14) The main financial benefit of Customer Relationship Management practices reduces the cost of goods sold.

- ☐ true
- ☐ false

15) An efficient Enterprise System can significantly lower the cost of support processes included in sales, general, and administrative expenses.

- ☐ true
- ☐ false

16) An accounting information system (AIS) is defined as being an information system that records, processes and reports on transactions to provide financial and nonfinancial information for decision making and control.

- ☐ true
- ☐ false

17) An enterprise system is a centralized database that collects data from throughout the firm. This includes data from orders, customers, sales, inventory and employees.

- ☐ true
- ☐ false

18) Outbound logistics are the activities associated with receiving and storing raw materials as well as activities that transform these inputs into finished goods.

- ☐ true
- ☐ false

19) Service Activities as defined in the value chain are those activities that provide the support of customers after the products and services are sold to them (e.g. warranty repairs, parts, instruction manuals, etc.).

- ☐ true
- ☐ false

20) A well-designed and well-functioning AIS can be expected to create value by providing relevant information helpful to management to increase revenues and reduce expenses.

- ☐ true
- ☐ false

21) Production of a 1040 tax form from the AIS to be delivered to the Internal Revenue Service is an example of discretionary information.

- ☐ true
- ☐ false

22) Enterprise Systems do not exist to facilitate decision making.

- ☐ true
- ☐ false

23) The Sarbanes-Oxley Act of 2002 is a federal law in the United States that set new and enhanced standards for all U.S. public companies, their management and public accounting firms.

- ☐ true
- ☐ false

24) CRM software often includes the use of database marketing tools to learn more about the customers and to develop strong firm-to-customer relationships.

- ☐ true
- ☐ false

25) The Certified Information Technology Professional is the position created by the AICPA to recognize CPAs who have the ability to provide skilled professional services on Information Technology.

- ☐ true
- ☐ false

26) Accounting Information Systems which are computerized do not need to maintain internal controls.

- ☐ true
- ☐ false

MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.

27) Accounting information systems:

- A) Are always computerized.
- B) Report only accounting information.
- C) Include records, processes and reports.
- D) Are for computer games.

28) Which of the following is *not* an attribute of useful information?

- A) Bias.
- B) Feedback value.
- C) Predictive value.
- D) Verifiability.

29) Which of the following are considered to be mandatory information required by a regulatory body?

- A) Financial reports for the Securities and Exchange Commission.
- B) The amount of taxes saved by a merger.
- C) The total dollar value of fireworks that are sold on July 4.
- D) The cost to build an all-new Starbucks restaurant in Abu Dhabi.

30) The correct order of effects in the value chain are:

- A) Inbound Logistics → Operations → Service.
- B) Inbound Logistics → Outbound Logistics → Marketing & Sales.
- C) Inbound Logistics → Operations → Outbound Logistics.
- D) Inbound Logistics → Operations → Shipping.

31) Which designation would be most appropriate for those professionals possessing IT audit, control and security skills?

- A) Certified Internal Auditor (CIA).
- B) Certified Public Accountant (CPA).
- C) Certified Information Technology Professional (CITP).
- D) Certified Information Systems Auditors (CISA).

32) Which designation is for CPAs with a broad range of technology knowledge and experience?

- A) Certified Internal Auditor (CIA).
- B) Certified Public Accountant (CPA).
- C) Certified Information Technology Professional (CITP).
- D) Certified Information Systems Auditors (CISA).

33) A supply chain:

- A) Refers to the supplies needed to build products.
- B) Refers to the flow of materials, information, payments and services.
- C) Refers to how costs are tracking in an AIS.
- D) Does not apply to a service firm like an accounting firm.

34) A supply chain system does *not* include information about:

- A) Current customers.
- B) Prospective customers.
- C) Availability of inventory.
- D) Current suppliers.

35) The income statement line item most likely affected by an AIS investment in enterprise systems would be:

- A) Revenues.
- B) Cost of Goods Sold.
- C) Selling, General and Administrative Expenses.
- D) Unearned Revenue.

36) The income statement line item most likely affected by an AIS investment in supply chain that would interface with suppliers would be:

- A) Revenues.
- B) Cost of Goods Sold.
- C) Selling, General and Administrative Expenses.
- D) Research and Development Expenses.

37) The IT strategic roles of AIS investments are classified as:

- A) Automate, Informate, Transform.
- B) Value creation, Value Destruction, Value Neutral.
- C) Digitize, Report, Transform.
- D) Automate, Digitize, Transport.

38) According to a recent study, the transform IT strategic role is defined as systems that:

- A) Replace human labor in automating business processes.
- B) Provide information about business activities to all employees.
- C) Provide information about business activities to senior management.
- D) Fundamentally redefine business processes and relationships.

39) According to a recent study, the informate-up IT strategic role is defined as systems that:

- A) Replace human labor in automating business processes.
- B) Provide information about business activities to all employees.
- C) Provide information about business activities to senior management.
- D) Fundamentally redefine business processes and relationships.

40) The income statement account most likely affected by an AIS investment in customer relationship management (CRM) would be:

- A) Revenues.
- B) Cost of Goods Sold.
- C) Selling, General and Administrative Expenses.
- D) Unearned Revenue.

41) Many fast food restaurants now have kiosks where customers can order without speaking to an employee. This is an example of the _____ strategic role.

- A) Automate
- B) Informate– up
- C) Transform
- D) Informate– down

42) When Uber (a ride sharing application) developed their unique platform to match drivers with riders, this was an example of _____ with IT Investments which fundamentally changed how people use car services.

- A) Automating
- B) Informating – up
- C) Transforming

D) Informing – down

43) The Information Value Chain is defined as:

- A) The flow of materials, information, payments, and services.
- B) The use of computer technology to provide information about business activities to employees across the firm.
- C) The overall transformation of data from a business need to the ultimate decision.
- D) A centralized database that collects data from throughout the firm.

44) Customer Relationship Management is best defined as:

- A) A system used to manage and nurture a firm's interactions with its current and potential customers.
- B) A system used to track a customer's past purchases.
- C) A system used to connect a firm's suppliers with a firm's customers.
- D) A system used to advertise current items on sale to customers.

45) The role of accountants in accounting information systems include all *except*:

- A) User.
- B) Manager.
- C) Coder.
- D) Evaluator.

46) A simple information system includes all but the following elements *except*:

- A) Processing.
- B) Storage.
- C) Input.

D) Reporting.

47) Branch profitability is an example of:

- A) Information overload.
- B) Mandatory information.
- C) Discretionary information.
- D) Enterprise System.

48) Bob's manager complains that Bob suffers from "Analysis Paralysis;" that is, he spends too much time reviewing endless reports and is reluctant to make decisions. Bob most likely suffers from _____.

- A) Data gridlock.
- B) Discretionary information.
- C) Information overload.
- D) Data redundancy.

49) Which of the following systems would a company be most likely to employ for the primary purpose of generating additional sales revenue?

- A) MDBMS.
- B) CRM.
- C) SCM.
- D) OCR.

50) The primary transformation of data into information takes place in which of the following activities?

- A) Input.

- B) Storage.
- C) Processing.
- D) Output.

51) Discretionary information is most likely to be used in which of the following activities?

- A) Preparing required Environmental Protection Agency emissions reports.
- B) Filing a 10-K with the SEC.
- C) Management decision-making.
- D) Payroll tax reporting.

52) Which of the following is *not* a primary activity in the Value Chain?

- A) Outbound Logistics.
- B) Marketing.
- C) Inbound Logistics.
- D) Information Technology.

53) One of the most important ways that ERPs benefit organizations and their business processes is:

- A) Current information is made available to all users involved in the activities and decisions associated with a company's business processes.
- B) Information is stored in many specialized, distributed databases that each serve separate business processes.
- C) Reducing the amount of time to complete business processes by eliminating all controls associated with the processes.
- D) Preventing external business partners from accessing the organization's data.

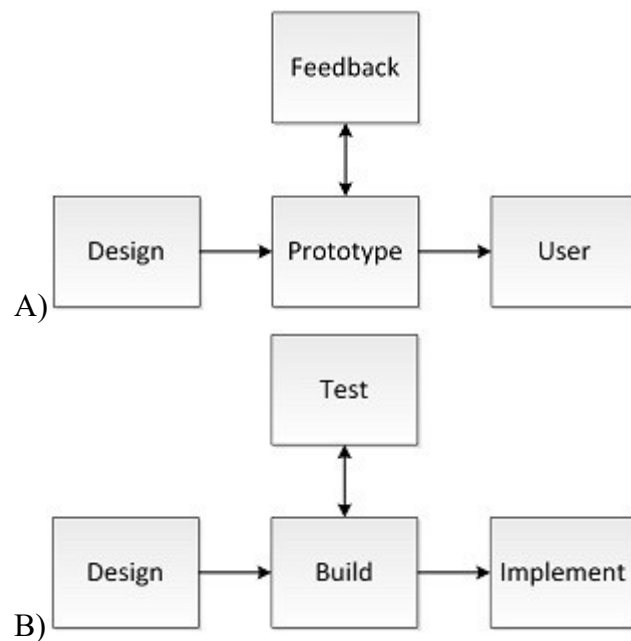
54) Investors reward companies most that announce IT initiatives with which type of strategic role?

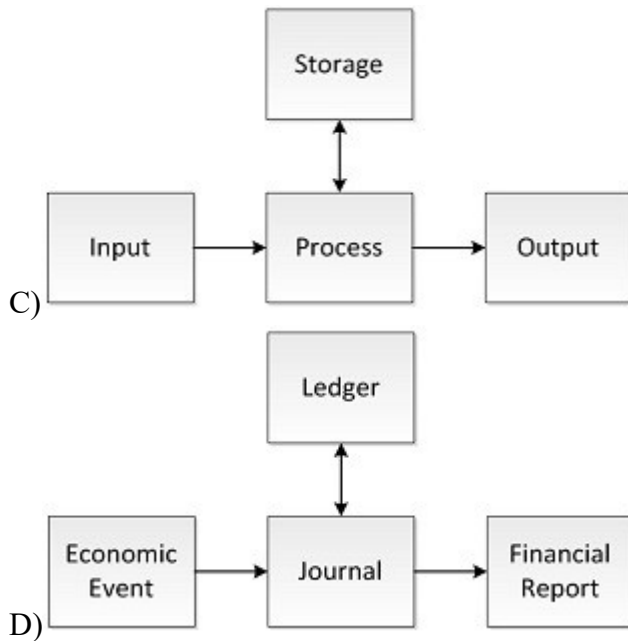
- A) Automate.
- B) Informate – up.
- C) Transform.
- D) Informate – down.

55) A dental practice implemented an upgrade to its AIS that provides the dentists with daily and weekly patient and financial summaries. The practice's upgrade is an example of which IT strategic role?

- A) Automate.
- B) Informate – up.
- C) Transform.
- D) Informate – down.

56) Which of the following diagrams most accurately illustrates an information system?





57) The Sarbanes-Oxley Act of 2002 requires that a company's attest auditors be able to perform which of the following activities?

- A) Evaluate the internal controls in an AIS.
- B) Assess the value of a company's IT assets.
- C) Take over the company's AIS if necessary.
- D) Design and implement the controls used in the AIS.

58) Consider the non-profit organization Doctors without Borders (Médecins Sans Frontières), a Nobel Peace Prize winning organization that provides medical services in war zones and developing countries. For this type of organization, which of the following would likely be the best measure of business value?

- A) Fund balance (i.e., the net of revenues less expenditures).
- B) Lives saved.
- C) Donations raised.
- D) Volunteers deployed.

59) Effective use of Supply Chain Management software is generally expected to provide all of the following benefits *except*:

- A) Reduced inventory carrying costs.
- B) Lower production costs.
- C) Lower payroll costs.
- D) Better communications with suppliers.

60) Which of the following is usually the primary objective for companies when creating mandatory information?

- A) Increase stock price.
- B) Minimize cost.
- C) Improve business decisions.
- D) Ensure proper controls over business processes.

61) Which of the following is an example of information as opposed to just data:

- A) Number of dresses sold.
- B) Color of dresses sold.
- C) Dress sales in Michigan at Walmart Store #3458.
- D) Types of dresses sold per region and season.

62) Which of the following statements is most true:

- A) Relevant information does not help predict the future.
- B) There are sometimes tradeoffs between information that is relevant and a faithful representation.
- C) Information must always be audited to be insightful an organization.

- D) Information does not need to be neutral or free from bias.

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

63) After a college football game, a box score is produced detailing the number of yards passing and running, receptions made and the number of interceptions and fumbles lost (among other statistics). Using the characteristics of useful information (including relevance and reliability), please explain how this box score meets (or does not meet) the characteristics of useful information. How would the football coach use this information to prepare for the next game, decide which players to start, etc.?

64) List and explain three ways that AIS affects the income statement and the firm's profitability.

65) Some would argue that the role of accounting is simply as an information provider. Others suggest that accountants serve the role of business analyst. Which role produces more value for a company like Starbucks? In the area of accounting information systems, what specifically can the accountant do to serve as a business analyst to help address business opportunities?

66) Explain the types of discretionary information a company like Google would collect from its accounting information system.

67) Why would the transform IT strategic role be more impactful on stock price than the automate IT strategic role?

68) Stephen Gillett, Starbucks CIO, argues that his most crucial duty is to enhance Starbucks' ability to mine its customer data to help "reignite our passion with our customers." Starbucks used loyalty cards (Starbucks' Reward cards) and surveys to track its customers' purchases and build profiles of their customers as mentioned in the opening chapter vignette. Why is this a good example of customer relationship management (CRM)?

69) Michael Dell of Dell Computer explained:“We tell our suppliers exactly what our daily production requirements are so it is not, "Well, every two weeks deliver 5,000 to this warehouse, and we'll put them on the shelf, and then we'll take them off the shelf." It is, "Tomorrow morning we need 8,562, and deliver them to door number seven by 7 am."How does the supply chain management software allow this to happen? And how does it save Dell money?

70) Amazon.com is one of the best at fostering its interaction with their customers by keeping a record of their past purchases and product searches and using that information to recommend other similar products for the customer to consider. How can they use that information to help them in their marketing efforts?

71) The Certified Information Systems Auditors (CISA) designation identifies those professionals possessing IT audit, control and security skills. How do you think a professional designation is helpful for IT auditors?

72) The American Institute of Certified Public Accountants (AICPA) and International Federation of Accountants (IFAC) assumes that, at a minimum, all accountants will be proficient in the AIS user role and at least one other role listed above (manager or designer or evaluator). Why would the AICPA and IFAC expect this proficiency?

73) The International Federation of Accountants says:“IT has grown (and will continue to grow) in importance at such a rapid pace and with such far reaching effects that it can no longer be considered a discipline peripheral to accounting. Rather, professional accounting has merged and developed with IT to such an extent that one can hardly conceive of accounting independent from IT.”In your opinion, why is accounting now interdependent with IT?

74) Wal-Mart’s Retail Link database is one of the world’s largest databases and allows many of their suppliers to view real-time sales data of their products for each store. This allows suppliers to assess the demand for their products and to optimize their own level of inventory and related logistics costs. How is this cost savings ultimately passed on to Wal-Mart and its customers?

75) Business value is defined as all items, events and interactions that determine the financial health and well-being of the firm. This value may come from suppliers, customers or employees or even information systems. How would a not-for-profit group like the International Red Cross define business value for its group?

76) Google is known for gathering large quantities of data on its users. Describe what types of data may be gathered on a user and how that data is transformed into useful information. Include in your answer why the information may be useful to Google.

Answer Key

Test name: Chapter 1

- 1) FALSE
- 2) FALSE
- 3) TRUE
- 4) FALSE
- 5) TRUE
- 6) TRUE
- 7) FALSE
- 8) TRUE
- 9) FALSE
- 10) FALSE
- 11) TRUE
- 12) FALSE
- 13) TRUE
- 14) FALSE
- 15) TRUE
- 16) TRUE
- 17) TRUE

18) FALSE

19) TRUE

20) TRUE

21) FALSE

22) FALSE

23) TRUE

24) TRUE

25) TRUE

26) FALSE

27) C

28) A

29) A

30) C

31) D

32) C

33) B

34) B

35) C

36) B

37) A

38) D

39) C

40) A

41) A

42) C

43) C

44) A

45) C

46) D

47) C

48) C

49) B

50) C

51) C

52) D

53) A

54) C

55) B

56) C

57) A

58) B

59) C

60) B

61) C

62) B

63) Answers will vary, especially with respect to their knowledge of American Football! The instructor may wish to include other sports or other activities where a box score might be produced. In American Football, yards per carry, turnover margin, interceptions, fumbles, run vs. pass plays, 3rd down plays and success, yards per catch, yards after catch, number of tackles, etc. would all be useful.

64)

Income Statement

Revenues

Effect of AIS on Income Statement

Customer Relationship Management techniques could attract new customers, generating additional sales revenue.

Less: Cost of Goods Sold

Supply Chain Management Software allows firms to carry the right inventory and have it in the right place at the right time. This, in turn, will lower obsolescence as well as logistics and procurement costs.

Gross Margin

Less: Selling, General and Administrative Expenses (SG&A)

An efficient **Enterprise System** can significantly lower the cost of support processes included in sales, general, and administrative expenses.

Less: Interest Expense

Supply Chain Management Software allows the firm to carry less inventory. The less inventory the firm has to carry leaves less assets to finance, and may possibly reduce debt and its related interest.

Net Income

All combined, a well-designed and well-functioning AIS with investments in **Enterprise Systems, Supply Chain Management** and/or **Customer Relationship Management**

can be expected to improve net income.

65) Answers will vary! Accountants carry out an important function by providing information. However, it is arguable that accountants can add value to a company by serving as a business analyst; that is, understand what information needs to be collected and then help in its interpretation.

66) Answers will vary! Google might want some managerial accounting information about how various products and lines of business have done, the cost of production for various advertising products, the cost of employee incentives (stock options, etc.) that would all be useful in helping it manage its business.

67) Answers will vary! A potential answer might include that automate IT strategic role just automates something that was done before by hand. This generally represents a cost reduction rather than a new revenue opportunity. The transform IT strategic involves using technology to establish a new business model. New business models, while fraught with risk, often suggest new ways to make money that were not envisioned before and thus might encourage shareholders to pay more for a company's stock.

68) Answers will vary. Using loyalty cards will help Starbucks understand its customers; that is, what they buy, when they buy it, where they buy it, in what quantities, etc., which is exactly the role of CRM.

69) Answers will vary. The supply chain allows Dell to forecast demand for its various products and share that demand with its suppliers. Suppliers will know the long-term plan and thus not be surprised when an actual order arrives. Dell saves money by not having to hold inventory too long saving investment dollars and warehouse space.

70) Answers will vary. By getting this information, Amazon understand its customers; that is, what they buy, when they buy it, in what quantities, etc., and can use it to encourage its customers to buy more products that computer models suggest they might be interested in.

71) Answers will vary. The answer should emphasize the need for specialized skills in order to fully understand and audit an AIS and the technology surrounding it. The CISA designation recognizes that the IS auditor has demonstrated those skills through demonstration of knowledge and practical experience.

72) Answers will vary. A potential answer might indicate that all accountants are users in some sense; at a minimum, they will request and use information in the AIS to perform their jobs, no matter which role they play. The additional role they play will depend on the function being performed, whether as an employee of a company, an auditor for a CPA firm, a tax advisor, an AIS consultant, or other some other function.

73) Answers will vary. A potential answer might reflect information presented in the class or textbook about the IT nature of accounting and the importance of accountants being proficient in roles associated with IT.

74) Answers will vary. A potential answer might reflect that Retail Link saves Wal-Mart and its supplier's money due to its assessment of what sells and what does not sell. This helps suppliers to save money and Wal-Mart thus requires that this savings be shared between suppliers, Wal-Mart, and Wal-Mart suppliers.

75) Answers will vary. A not-for-profit group like the International Red Cross might define value by the number of lives saved, the number of liters of blood in storage, its ability to react to a disasters, etc.

76) Answers will vary. Google collects search history data for users of their search engine. This data is then analyzed and transformed into information concerning a users interests. Google can monetize the information on interests by selling it to companies wishing to market a related product.