

Chapter 2 Information Systems for Competitive Advantage

- 1) Technology is said to _____ when we take a manual process (done by hand) and use computers to perform the task.
- A) strategize
 - B) compete
 - C) informate
 - D) automate

Answer: D

Page Ref: 40

Skill: A

- 2) _____ is using technology as a way to help complete a task within an organization faster and, possibly, more cheaply.
- A) Processing
 - B) Automating
 - C) Strategizing
 - D) Learning

Answer: B

Page Ref: 40

Skill: A

- 3) Technology is said to _____ when it provides information about its operation and the underlying work process that it supports.
- A) innovate
 - B) dominate
 - C) conglomerate
 - D) informate

Answer: D

Page Ref: 41

Skill: A

- 4) A _____ organization is defined as an organization that is "skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights."
- A) learning
 - B) strategizing
 - C) profitable
 - D) technical

Answer: A

Page Ref: 41

Skill: R

- 5) _____ explained that a technology informates when it provides information about its operation and the underlying work process that it supports.
- A) Michael Porter
 - B) Gordon Moore
 - C) Peter Drucker
 - D) Shoshana Zuboff

Answer: D

Page Ref: 41

Skill: R

- 6) _____ is/are a formal group effort for improving the quality of organizational performance and operations.
- A) Total Quality Management
 - B) Corporate Operating Systems
 - C) Group Support Systems
 - D) Information Management

Answer: A

Page Ref: 43

Skill: A

- 7) In a corporate setting, " _____ " involves forming a vision of where the organization needs to head, setting objectives and performance targets, and crafting a strategy to achieve the desired results.
- A) best-cost provider
 - B) competitive advantage
 - C) strategic planning
 - D) total quality management

Answer: C

Page Ref: 44

Skill: A

- 8) Low cost leadership strategy, differentiation strategy, and best-cost provider strategy are examples of strategic planning for:
- A) competitive advantage.
 - B) total quality management.
 - C) organizational learning.
 - D) informing.

Answer: A

Page Ref: 44

Skill: A

- 9) A company like Zellers, which offers the best prices for goods and/or services, are using a(n):
- A) best-cost provider strategy.
 - B) differentiation strategy.
 - C) organizational strategy.
 - D) low-cost leadership strategy.

Answer: D

Page Ref: 44

Skill: R

- 10) Companies like Porsche, Holt Renfrew, and IBM, which offer better products or services than their competitors, are using a(n):
- A) best-cost provider strategy.
 - B) organizational strategy.
 - C) differentiation strategy.
 - D) low-cost leadership strategy.

Answer: C

Page Ref: 44

Skill: R

- 11) Companies like Wal-Mart, which offer products or services at competitive prices, are using a(n):
- A) best-cost provider strategy.
 - B) organizational strategy.
 - C) low-cost leadership strategy.
 - D) differentiation strategy.

Answer: A

Page Ref: 44

Skill: R

- 12) Which of the following is NOT a source of competitive advantage?
- A) Having a well-known brand name
 - B) Achieving lower costs than rivals
 - C) Achieving higher costs than rivals
 - D) Superior customer service

Answer: C

Page Ref: 45

Skill: A

- 13) Avis Rent A Car uses technology to sustain a competitive advantage in the rental car industry. What technology does Avis use to achieve this?
- A) Avis uses Global Positioning Systems in their rental cars to track customer locations.
 - B) Avis uses wireless technology to transmit mileage and fuel levels from returned cars.
 - C) Avis customers who use the Internet get discount rental prices.
 - D) Avis customer services reps use hand-held computers and printers to complete the rental transaction and generate a receipt.

Answer: D

Page Ref: 46

Skill: R

- 14) In an organizational context, what is a value chain?
- A) Administration of a business.
 - B) Process of adding value throughout an organization.
 - C) Gaining a strategic advantage.
 - D) Using technology to enhance operations.

Answer: B

Page Ref: 47

Skill: A

- 15) The five phases of value chain analysis include all of the following EXCEPT:
- A) sales and marketing.
 - B) outbound logistics.
 - C) computer technology.
 - D) service.

Answer: C

Page Ref: 47

Skill: R

16) A system that uses the Internet for business-to-business interaction is called a(n):

- A) intranet.
- B) network topology.
- C) privileged network.
- D) extranet.

Answer: D

Page Ref: 48

Skill: R

17) Which of the following does not lend itself to improving the value chain?

- A) Improving procurement processes
- B) Increasing operating costs
- C) Selling more products
- D) Minimizing marketing expenditures

Answer: B

Page Ref: 47

Skill: A

18) An example of a technology innovation is the McLaren F1 Supercar valued at \$850,000. To diagnose problems with this car,:

- A) the owner presses a self-diagnosis button on the engine.
- B) the owner activates the car's internal computer, which diagnoses the problem and automatically fixes it.
- C) the owner drives to a high-tech auto repair facility.
- D) the owner plugs in a modem which connects by phone to McLaren engineers.

Answer: D

Page Ref: 48

Skill: R

19) What is a computer-aided design system?

- A) The use of computers to design state-of-the-art, high-quality products.
- B) Computer software that dictates the best competitive strategy for your company.
- C) Software that generates innovated designs and artistic patterns.
- D) Using computers to do architecture.

Answer: A

Page Ref: 48

Skill: A

20) "Making the business case" for an information system means:

- A) conducting business process reengineering (BPR).
- B) choosing the best organizational strategy.
- C) choosing the best information system.
- D) identifying the value provided by an information system to the organization or its constituents.

Answer: D

Page Ref: 48

Skill: A

- 21) The reason IS expenditures have risen but productivity has not risen at the same pace is hard to explain. One or more of the contributing factors have to do with:
- A) management expectations of productivity gains are unrealistic.
 - B) government regulation, complex tax codes, more complex products, and employee behaviour such as playing software games, web-surfing, and e-mailing friends.
 - C) new technology is harder to use and more complicated.
 - D) spending is out of control in most companies.

Answer: B

Page Ref: 49

Skill: R

- 22) From a productivity standpoint, system efficiency is an important concept. A problem associated with system efficiency is:
- A) that system efficiency is hampered by computer speed.
 - B) that management doesn't understand or doesn't care about system efficiency.
 - C) it is often confused with customer relationship management.
 - D) the difficulty in measuring benefits associated with the system.

Answer: D

Page Ref: 49

Skill: A

- 23) When employees in a business unit (e.g., Accounting or Human Resources) assist in the creation of an information system it is called:
- A) business unit production.
 - B) end-user development.
 - C) a vendor-bender.
 - D) outsourcing.

Answer: B

Page Ref: 50

Skill: A

- 24) Information systems designed to improve decision making are called:
- A) decision support systems.
 - B) strategic systems.
 - C) groupware.
 - D) system efficiency software.

Answer: A

Page Ref: 50

Skill: R

- 25) Information systems that help the organization enter a new market, gain or maintain market share, better serve customers, etc., are known as:
- A) decision support systems.
 - B) groupware.
 - C) system efficiency software.
 - D) strategic systems.

Answer: D

Page Ref: 51

Skill: A

- 26) The intent of _____ is often to help the organization enter a new market, gain or maintain market share, better serve customers, etc.
- A) group support systems
 - B) expert systems
 - C) transaction processing systems
 - D) strategic systems

Answer: D

Page Ref: 51

Skill: A

- 27) Problems for measuring productivity from information systems include the following EXCEPT:
- A) salary costs associated with the development of the system.
 - B) a time lag may occur between system implementation and the time when benefits are realized.
 - C) IS may benefit a particular firm, but not the industry as a whole.
 - D) effectiveness improvements are difficult to measure.

Answer: A

Page Ref: 49-52

Skill: A

- 28) Making the _____ is the process of building and presenting the set of arguments that show that an information system is adding value to the organization.
- A) organizational chart
 - B) business case
 - C) law case
 - D) organizational case

Answer: B

Page Ref: 53-54

Skill: R

- 29) An example of IS mismanagement would EXCLUDE:
- A) lack of providing a detailed cost-benefit analysis.
 - B) relying on technology to fix a problem that is really fundamental to the business process.
 - C) implementing a system poorly.
 - D) building a bad system.

Answer: A

Page Ref: 52-53

Skill: R

- 30) When making a successful business case, "Arguments based on beliefs about organizational strategy, competitive advantage, industry forces, customer perceptions, market share, and so on" are known as:
- A) arguments based on cost-benefits.
 - B) arguments based on faith.
 - C) arguments based on fact.
 - D) arguments based on fear.

Answer: B

Page Ref: 54

Skill: A

- 31) What type of argument is this: "I know I don't have good data to back this up, but I'm convinced that having this CRM system will enable us to serve our customers better"?
- A) An argument based on fact.
 - B) An argument based on faith.
 - C) An argument based on fear.
 - D) An argument based on serendipity.

Answer: B

Page Ref: 54

Skill: A

- 32) When making a successful business case, "Arguments based on the notion that if the system is not implemented, the firm will lose out to the competition or, worse, go out of business" are known as:
- A) arguments based on fact.
 - B) arguments based on dominance.
 - C) arguments based on faith.
 - D) arguments based on fear.

Answer: D

Page Ref: 54

Skill: A

- 33) A mature, stable industry may need IS to _____ the current pace of operations, while a company in a newer, more volatile industry (i.e., a cellular phone company) may find it more important to _____ technology.
- A) reduce, outsource
 - B) advance, reduce
 - C) accelerate, maintain
 - D) maintain, be on the leading edge of

Answer: D

Page Ref: 54

Skill: A

- 34) What type of argument is this: "This analysis shows that implementing the inventory control system will reduce errors by 50% and pay for itself within 18 months."?
- A) An argument based on fiction.
 - B) An argument based on fact
 - C) An argument based on fear
 - D) An argument based on faith

Answer: B

Page Ref: 55

Skill: A

- 35) What type of argument is this: "If we don't implement this ERP system we'll get killed by our competitors because they're using these systems."?
- A) An argument based on fear
 - B) An argument based on fact
 - C) An argument based on faith
 - D) An argument based on pure fiction

Answer: A

Page Ref: 54

Skill: A

- 36) Probably the most important factor that can affect IS investment is the nature of _____ in the industry.
- A) technology
 - B) marketing
 - C) customer service
 - D) competition or rivalry

Answer: D

Page Ref: 55

Skill: R

- 37) All of the following are competitive forces from Porter's Competitive Forces model EXCEPT:
- A) potential new entrants into the market.
 - B) substitute products.
 - C) bargaining power of suppliers.
 - D) online sellers.

Answer: D

Page Ref: 55

Skill: R

- 38) The most common way to make an argument based on fact, where convincing quantitative analysis proves the benefits outweigh the costs, is:
- A) to look at industry trends.
 - B) conduct a cost-benefit analysis.
 - C) to demonstrate what competitors are doing.
 - D) hire independent consultants.

Answer: B

Page Ref: 55

Skill: A

- 39) Costs that are one-time costs that are not expected to continue after the system is implemented are called:
- A) recurring costs.
 - B) intangible costs.
 - C) nonrecurring costs.
 - D) tangible costs.

Answer: C

Page Ref: 55

Skill: A

- 40) Employee salaries and benefits is an example of:
- A) infrastructure costs.
 - B) recurring costs.
 - C) intangible costs.
 - D) high-risk costs.

Answer: B

Page Ref: 55

Skill: A

- 41) _____ costs are ongoing costs that occur throughout the life cycle of systems development, implementation, and maintenance.
- A) High risk
 - B) Recurring
 - C) Intangible
 - D) Infrastructure

Answer: B

Page Ref: 55

Skill: A

- 42) The largest recurring costs are usually:
- A) personnel costs.
 - B) computer equipment costs.
 - C) marketing costs.
 - D) software costs.

Answer: A

Page Ref: 55

Skill: R

- 43) _____ costs are those that are easily identified and that are easy to recognize and track.
- A) Recurring
 - B) Intangible
 - C) Tangible
 - D) Nonrecurring

Answer: C

Page Ref: 56

Skill: A

- 44) _____ costs are those that are hard to quantify, that is, they are difficult to evaluate and track.
- A) Nonrecurring
 - B) Recurring
 - C) Tangible
 - D) Intangible

Answer: D

Page Ref: 56

Skill: A

- 45) Benefits such as reduction in order entry errors, increase in the customer reach of a new Web-based system, etc. are examples of:
- A) recurring costs.
 - B) nonrecurring costs.
 - C) intangible benefits.
 - D) tangible benefits.

Answer: D

Page Ref: 56

Skill: A

- 46) Benefits such as improved perception of the firm and faster turnaround on order fulfillment are examples of:
- A) tangible benefits.
 - B) nonrecurring costs.
 - C) recurring costs.
 - D) intangible benefits.

Answer: D

Page Ref: 56

Skill: A

- 47) The IS manager:
- A) is a nonrecurring cost.
 - B) is an intangible cost.
 - C) is not in a position to make recommendations to decision makers.
 - D) has overall responsibility for managing IS development, implementation, and maintenance.

Answer: D

Page Ref: 58

Skill: A

- 48) When presenting the business case for a new information system, the case would not be made to:
- A) the steering committee.
 - B) shareholders.
 - C) company executives.
 - D) the IS manager.

Answer: B

Page Ref: 58

Skill: A

- 49) This group (vice presidents or higher) typically represents various stakeholders or interest groups within the organization.
- A) Company executives
 - B) Stockholders
 - C) IS managers
 - D) The steering committee

Answer: A

Page Ref: 58

Skill: R

- 50) The goal of _____ is to get an organizations leaders, who have different interests and agendas, to share the responsibilities and risks that come with aligning IS initiatives with broader business aims.
- A) IS managers
 - B) company executives
 - C) stockholders
 - D) the steering committee

Answer: B

Page Ref: 58

Skill: A

51) One of the best ways to make a business case for a new system is to:

- A) gain influence or control of the executive committee.
- B) take the CEO out to lunch and talk to him/her privately.
- C) take your case to corporate stockholders.
- D) convert benefits to monetary terms.

Answer: D

Page Ref: 58

Skill: A

52) When direct quantification of financial benefits is difficult an alternative is the use of _____, which are measures of changes in terms of perceived value.

- A) work profile matrices
- B) steering committees
- C) outside consultants
- D) proxy variables

Answer: D

Page Ref: 59-60

Skill: A

53) If you use measures of perceived value in making a business case, you can communicate these differences in terms of percentages, increases, or decreases (whatever best conveys the benefits). These changes are demonstrated by using:

- A) work profile matrices.
- B) proxy variables.
- C) steering committees.
- D) outside consultants.

Answer: B

Page Ref: 60

Skill: A

54) The mindset of managers in the past was to think about information systems as a(n) _____. Managers must view IS as a(n) _____.

- A) expense, overhead
- B) necessary evil, asset
- C) resource, expense
- D) competitive advantage, liability

Answer: B

Page Ref: 61

Skill: A

55) A company is said to have _____ when it has gained an edge over its rivals.

- A) monopoly
- B) profitability
- C) computer advantage
- D) competitive advantage

Answer: D

Page Ref: 62

Skill: A

- 56) Sir John Maddox was quoted in 1999 as saying, "The most important discoveries of the next 50 years are likely to be ones of which we cannot now _____."
- A) even conceive
 - B) afford
 - C) invent
 - D) compute

Answer: A

Page Ref: 62

Skill: R

- 57) The term _____ is generally used to mean the use of the Internet and related technologies that support interactive purchasing. The term _____ is used more broadly to mean the use of nearly any information technologies to support business.
- A) e-business, e-commerce
 - B) e-technology, e-business
 - C) e-commerce, e-business
 - D) e-commerce, e-technology

Answer: C

Page Ref: 63

Skill: R

- 58) The four consecutive stages of Choosing, Matching, Executing, and Assessing make up the:
- A) Executive Information System.
 - B) System Development Life Cycle.
 - C) E-Business Innovation Cycle.
 - D) Functional Area Assessment System.

Answer: C

Page Ref: 63

Skill: R

- 59) New technologies that are anticipated to have an impact on businesses are called:
- A) firmware.
 - B) emerging technologies.
 - C) vaporware.
 - D) innovative growth.

Answer: B

Page Ref: 63

Skill: A

- 60) To be successful in e-business it is important to match new technologies with:
- A) new computers.
 - B) new businesses.
 - C) new employees.
 - D) economic opportunities.

Answer: D

Page Ref: 63

Skill: A

61) The E-Business Innovation Cycle questions the conventional wisdom that:

- A) emerging technologies are useful.
- B) marketing dictates which type of technology should be used.
- C) economic opportunities exist.
- D) databases can keep pace with rapid technological changes.

Answer: B

Page Ref: 64

Skill: A

62) Competitive advantage gained by using information systems is usually:

- A) short-lived because competitors can copy emerging information systems.
- B) permanent, because innovation tends to be ongoing.
- C) long lasting because the E-Business Innovation Cycle is cyclical.
- D) a slow process because technology changes slowly.

Answer: A

Page Ref: 64

Skill: A

63) The example of VHS video cassette recorders (VCRs) winning out the marketplace over technologically superior Betamax illustrates that:

- A) emerging technology always entails risk.
- B) VCRs follow the E-Business Innovation Cycle.
- C) technology is more important than marketing.
- D) the best products always win the battle for consumer products.

Answer: A

Page Ref: 64

Skill: R

64) The prediction that the number of transistors that could be squeezed onto a silicon chip (which correlates to microchip processing speed) doubles every 18 months is called:

- A) a coincidence.
- B) Moore's Law.
- C) technological innovation.
- D) competitive advantage.

Answer: B

Page Ref: 65

Skill: R

65) Before an organization can deploy new systems well, its people, structure, and processes must be:

- A) young and innovative.
- B) more technical than its rivals.
- C) capable of adapting well to change.
- D) knowledge workers.

Answer: C

Page Ref: 65

Skill: A

- 66) In 2005, Stantec's gross sales were \$600 million. In order to reach their goal of \$1 billion by 2010, they had to:
- A) reduce employee numbers through increasing technology
 - B) use office automation systems
 - C) transform some older, traditional business methods
 - D) begin to sell on the web

Answer: C

Page Ref: 39

Skill: R

- 67) Automating the process for loans under \$250,000 was able to reduce the time required for approval from 15 days in the fully manual form to _____ in the fully automated form.

- A) 1 minute
- B) 1 second
- C) 1 hour
- D) 1 week

Answer: B

Page Ref: 41

Skill: R

- 68) A recent survey indicated that _____ percent of respondents had stolen key information from an employer.

- A) 17
- B) 70
- C) 50
- D) 10

Answer: B

Page Ref: 43

Skill: R

- 69) If a system does not 'learn', the increased volume of work performed through automation can lead to:

- A) decreased output.
- B) increased volume of error.
- C) increased input.
- D) manual processing.

Answer: B

Page Ref: 43

Skill: A

- 70) Which car company below takes a Focused Differentiation Strategy?

- A) Porsche
- B) Toyota
- C) Chevrolet
- D) Volkswagen

Answer: A

Page Ref: 44

Skill: A

- 71) For an information system to become a source of competitive advantage, it must be _____ and _____.
- A) economical; efficient
 - B) efficient; effective
 - C) valuable; rare
 - D) targeted; economical

Answer: C

Page Ref: 45

Skill: R

- 72) While technology might be copied by competitors, it is much more difficult to copy the strategic _____ of that technology.
- A) advantage
 - B) use
 - C) hardware
 - D) code

Answer: B

Page Ref: 45

Skill: R

- 73) The Avis airport computer-supported service encounter reduced the total elapsed time for a vehicle checkin from 5-20 minutes to:
- A) 1-5 minutes
 - B) 5-10 minutes
 - C) 5-20 seconds
 - D) 90-110 seconds

Answer: C

Page Ref: 46

Skill: R

- 74) When you 'benchmark' your results with those of your competitors, you are _____ the results.
- A) ignoring
 - B) comparing
 - C) leveraging
 - D) standardizing

Answer: B

Page Ref: 47

Skill: A

- 75) What process is often required in tandem with the introduction of an enterprise information system in order to raise the likelihood of success?
- A) business practice review (BPR)
 - B) workforce rightsizing
 - C) infrastructure renewal initiative (IRI)
 - D) business process reengineering (BPR)

Answer: D

Page Ref: 48

Skill: A

76) In order to be effective, an organizational information system must:

- A) be easy to use
- B) be easy to maintain
- C) be up-to-date
- D) add value

Answer: D

Page Ref: 49

Skill: A

77) Hagendorf (1998) estimated that technology-related spending _____ between the 1980s and the 1990s, leading to the 'productivity paradox.'

- A) doubled
- B) decreased by 100%
- C) increased fivefold
- D) dropped by half

Answer: C

Page Ref: 49

Skill: A

78) The problem with measuring the effect/impact of a Decision Support System (DSS) is that:

- A) DSSs are costly
- B) operators need to come 'up-to-speed' before a fair comparison can be made
- C) the real cost of the DSS is hidden
- D) must compare outcome in the absence of the DSS in order to measure impact

Answer: D

Page Ref: 50

Skill: A

79) Brynjolfsson (1993) estimates that a lag of _____ years is typical before strong organizational impacts of IS investments are felt.

- A) 3-4
- B) 1-2
- C) 2-5
- D) 2-3

Answer: D

Page Ref: 51

Skill: R

80) For a bank, ATMs are more of a(n) _____ than a competitive advantage.

- A) strategic initiative
- B) recurring cost
- C) strategic necessity
- D) productivity paradox

Answer: C

Page Ref: 51

Skill: A

- 81) The example in the textbook regarding bank productivity assessment problems after the introduction of an information system referred to which proxy measure and which technology initiative?
- A) cheques; kiosks
 - B) loan volume; ATMs
 - C) cheques; ATMs
 - D) ATMs; deposits

Answer: C

Page Ref: 51

Skill: A

- 82) In Canada, the number one reason firms stated for adopting Information Systems in 2004 was:
- A) customer communication
 - B) improve quality of service
 - C) reduced cost
 - D) increased efficiency

Answer: D

Page Ref: 52

Skill: R

- 83) Business case arguments can be based on all of the following EXCEPT:
- A) Fear
 - B) Facts
 - C) Faith
 - D) phobia

Answer: D

Page Ref: 53

Skill: R

- 84) If it is so difficult to measure the benefits of information systems, why do organizations continue to invest (heavily) in them?
- A) systems are a business process
 - B) information systems people already in the organization force their implementation
 - C) reduced competition has made systems a necessity
 - D) competitive pressures make them a necessity

Answer: D

Page Ref: 53

Skill: R

- 85) Procter & Gamble has a wide product scope. Such businesses often implement _____ in order to integrate and streamline inventory.
- A) enterprise resource planning
 - B) enterprise database management
 - C) enterprise marketing strategies
 - D) enterprise inventory management

Answer: A

Page Ref: 54

Skill: R

86) An intangible benefit of a web-based system for an organization might be:

- A) overall improved perception of the firm
- B) lower wages and salaries
- C) faster turnaround time for orders
- D) better inventory management

Answer: A

Page Ref: 57

Skill: A

87) Each of the following is one of Rubin's categories for assessing the value of IT infrastructure EXCEPT:

- A) economic value
- B) intrinsic value
- C) operational value
- D) architectural value

Answer: B

Page Ref: 60

Skill: A

88) One of the most important yet simplest ways to show the benefit of an information system is to:

- A) measure what senior managers think is important
- B) ask users what they think of it
- C) look at your competitors assessments of the same (or similar) systems
- D) calculate productivity measures using proxy variables

Answer: A

Page Ref: 60

Skill: R

89) In the E-Business Innovation Cycle (Wheeler 2002), the process proceeds over time in which order?

- A) Choosing, Matching, Assessing, Executing
- B) Executing, Choosing, Matching, Assessing
- C) Matching, Choosing, Executing, Assessing
- D) Choosing, Matching, Executing, Assessing

Answer: D

Page Ref: 63

Skill: R

90) Many would argue that if you start with a strategy and retrofit technology to it, you:

- A) will succeed
- B) will need newer technology
- C) are doomed
- D) will need more efficient technology

Answer: C

Page Ref: 64

Skill: R

91) Who said "Everything that can be invented has been invented."?

- A) H. M. Warner, Warner Brothers
- B) Thomas Watson, chairman, IBM
- C) Lord Kelvin, president, Royal Society
- D) C.H. Duell, commissioner, US Office of Patents

Answer: D

Page Ref: 65

Skill: R

92) To deploy emerging systems well, people in the organization must be willing to do all of the following EXCEPT:

- A) bypass and eliminate internal bureaucracy
- B) determine competitors' strategy
- C) set aside political squabbles
- D) pull together for a common goal

Answer: B

Page Ref: 66

Skill: R

93) An organization with a traditional, conservative culture will most likely:

- A) not tolerate the risk of implementing emerging technology.
- B) tolerate the risk of implementing emerging technology.
- C) embrace emerging technology.
- D) outsource the implementation of emerging technology.

Answer: A

Page Ref: 66

Skill: A

94) Implementing a system to allow your customers to check the status of their order could easily be copied by competitors. In this case, the competitive advantage has become a:

- A) strategic elimination
- B) strategic alliance
- C) competitive intelligence
- D) competitive necessity

Answer: D

Page Ref: 66

Skill: R

95) Bakos and Treacy argue that a firm will sustain competitive advantage from technology if they use it to:

- A) reduce your human resource requirements
- B) make your product or service unique
- C) lower switching costs
- D) reduce barriers to entry in the industry

Answer: B

Page Ref: 66

Skill: R

- 96) Building a sophisticated and comprehensive Customer Relationship Management system to include the entire history of your interactions with your customers could have the effect of:
- A) raising barriers to exit the industry.
 - B) raising switching costs for your customers.
 - C) creating a competitive environment in your industry.
 - D) lowering switching costs for your customers.

Answer: B
Page Ref: 66
Skill: R

- 97) A "learning organization" is defined as an organization that provides educational benefits to its employees.

Answer: True False
Page Ref: 41
Skill: R

- 98) Shoshana Zuboff (1988) explained that a technology informs when it provides information about its operation and the underlying work process that it supports.

Answer: True False
Page Ref: 41
Skill: R

- 99) A combined automating and learning approach, in the long run, is more effective than an automating approach alone.

Answer: True False
Page Ref: 43
Skill: A

- 100) Total quality management is a formal group effort for improving the quality of organizational performance and operations.

Answer: True False
Page Ref: 43
Skill: A

- 101) Low cost leadership strategy, differentiation strategy, and best-cost provider strategy are examples of organizational learning.

Answer: True False
Page Ref: 44
Skill: A

- 102) Companies like Zellers, which offer the best prices for goods and/or services, are examples of the low-cost leadership strategy.

Answer: True False
Page Ref: 44
Skill: R

- 103) Companies like Porsche, Holt Renfrew, and IBM, which offer better products or services than their competitors, are examples of the best-cost provider strategy.

Answer: True False
Page Ref: 44
Skill: R

- 104) An ATM network is unlikely to become a source of competitive advantage for a Canadian bank.
Answer: True False
Page Ref: 45
Skill: A
- 105) Michael Porter developed the value chain analysis model.
Answer: True False
Page Ref: 46
Skill: R
- 106) A system that uses the Internet for business-to-business interaction is called an Intranet.
Answer: True False
Page Ref: 48
Skill: R
- 107) A computer-aided design system uses computers to design state-of-the-art, high-quality products.
Answer: True False
Page Ref: 48
Skill: R
- 108) "Productivity paradox" is when IS expenditures have risen but productivity has not increased at the same rate.
Answer: True False
Page Ref: 49
Skill: R
- 109) When employees in a business unit (e.g., Accounting or Human Resources) assist in the creation of an information system it is called business unit production.
Answer: True False
Page Ref: 50
Skill: R
- 110) Information systems designed to improve decision making are called decision support systems.
Answer: True False
Page Ref: 50
Skill: A
- 111) Making the business case is the process of building and presenting the set of arguments that show that an information system is adding value to the organization.
Answer: True False
Page Ref: 48
Skill: A
- 112) When making a successful business case, "Arguments based on the notion that if the system is not implemented, the firm will lose out to the competition or, worse, go out of business" are known as an argument based on fact.
Answer: True False
Page Ref: 54
Skill: A

- 113) When making a successful business case, "Arguments based on data, quantitative analysis, and/or indisputable factors" is known as an argument based on faith.
Answer: True False
Page Ref: 55
Skill: A
- 114) Probably the most important factor that can affect IS investment is the nature of competition or rivalry in the industry.
Answer: True False
Page Ref: 55
Skill: A
- 115) Moore's Law deals with five primary competitive forces.
Answer: True False
Page Ref: 65
Skill: R
- 116) A cost-benefit analysis is one way to present a business case based on fact.
Answer: True False
Page Ref: 55
Skill: A
- 117) Tangible costs are one-time costs that are not expected to continue after the system is implemented.
Answer: True False
Page Ref: 55
Skill: A
- 118) Employee salaries and benefits are examples of intangible costs.
Answer: True False
Page Ref: 55
Skill: A
- 119) The largest recurring costs are usually computer equipment costs.
Answer: True False
Page Ref: 55
Skill: A
- 120) Tangible costs are those that are hard to quantify, that is, they are difficult to evaluate and track.
Answer: True False
Page Ref: 56
Skill: A
- 121) Benefits such as improved perception of the firm and faster turnaround on order fulfillment are examples of intangible benefits.
Answer: True False
Page Ref: 56
Skill: A

- 122) The IS manager has overall responsibility for managing IS development, implementation, and maintenance.
Answer: True False
Page Ref: 58
Skill: A
- 123) One might present a business case to any of these: the IS manager, company executives, or a steering committee.
Answer: True False
Page Ref: 58
Skill: A
- 124) Work profile matrices measure changes in terms of perceived value.
Answer: True False
Page Ref: 59
Skill: R
- 125) A company is said to have a monopoly when it has gained an edge over its rivals.
Answer: True False
Page Ref: 62
Skill: A
- 126) The term e-commerce is generally used to mean the use of the Internet and related technologies that support interactive purchasing.
Answer: True False
Page Ref: 63
Skill: R
- 127) The four consecutive stages of Choosing, Matching, Executing, and Assessing make up the System Development Life Cycle.
Answer: True False
Page Ref: 63
Skill: R
- 128) New technologies that are anticipated to have an impact on businesses are called firmware.
Answer: True False
Page Ref: 63
Skill: R
- 129) To be successful in e-business it is important to match new technologies with economic opportunities.
Answer: True False
Page Ref: 63
Skill: A
- 130) Competitive advantage gained by using information systems is usually short-lived because competitors can copy emerging information systems.
Answer: True False
Page Ref: 63
Skill: A

- 131) The prediction that the number of transistors that could be squeezed onto a silicon chip (which correlates to microchip processing speed) doubles every 18 months is called Moore's Law.
Answer: True False
Page Ref: 65
Skill: R
- 132) Without 'learning' it is more difficult to uncover bad business processes underlying the information system.
Answer: True False
Page Ref: 43
Skill: R
- 133) A recent survey found that 7% of employees had stolen key information from an employer.
Answer: True False
Page Ref: 43
Skill: R
- 134) An organization displays competitive necessity whenever it has an edge over rivals in attracting customers and defending against competitive forces.
Answer: True False
Page Ref: 44
Skill: A
- 135) For an information system to become the source of competitive advantage it must be valuable and rare.
Answer: True False
Page Ref: 45
Skill: R
- 136) The Avis airport computer-supported checkin system reduced the elapsed time for the transaction from 5-20 minutes to 1-5 minutes.
Answer: True False
Page Ref: 46
Skill: R
- 137) Benchmarking refers to comparing the cost of your system with that of your competitor's system.
Answer: True False
Page Ref: 47
Skill: R
- 138) A system that is not adding value to an organization should be maintained.
Answer: True False
Page Ref: 49
Skill: R
- 139) It is estimated (Hagendorf, 1998) that technology-related spending increased twofold between the 1980s and the 1990s.
Answer: True False
Page Ref: 49
Skill: R

- 140) One of the difficulties with measuring the value added by a DSS is that it is difficult to compare the outcome of the decision with and without the DSS since, by definition, the latter never occurred.
Answer: True False
Page Ref: 50
Skill: A
- 141) Often productivity gains can be masked owing to using the same proxy measure before and after technology introduction.
Answer: True False
Page Ref: 51
Skill: A
- 142) ATMs have become a strategic necessity in the baking industry.
Answer: True False
Page Ref: 51
Skill: R
- 143) In a 2004 survey, the number one reason cited by Canadian businesses for introducing technology was to reduce costs.
Answer: True False
Page Ref: 52
Skill: R
- 144) Rubin (CIO, June 2004) suggested four categories for assessing the value of the IT infrastructure. These are: economic value; architectural value; operational value and regulatory and compliance value.
Answer: True False
Page Ref: 60
Skill: R
- 145) Implementing a system is easy. What is difficult is using the system to create and sustain competitive advantage.
Answer: True False
Page Ref: 66
Skill: R
- 146) If the necessary skills for deployment of an IS are not available within the organization, the system is doomed to failure.
Answer: True False
Page Ref: 66
Skill: A
- 147) One of the prerequisites for introducing an IS that allows customers to see internal information is that such information must be shared inside the organization first.
Answer: True False
Page Ref: 66
Skill: A

- 148) Technology is said to _____ when we take a manual process (done by hand) and use computers to perform the task.
Answer: automate
Page Ref: 41
Skill: R
- 149) Technology is said to _____ when it provides information about its operation and the underlying work process that it supports.
Answer: informate
Page Ref: 41
Skill: R
- 150) In a corporate setting, " _____ planning" involves forming a vision of where the organization needs to head, setting objectives and performance targets, and crafting a strategy to achieve the desired results.
Answer: strategic
Page Ref: 44
Skill: A
- 151) Companies like Porsche, Holt Renfrew, and IBM, which offer better products or services than their competitors, are examples of the _____ strategy.
Answer: differentiation
Page Ref: 44
Skill: A
- 152) The process of adding value throughout an organization is called a _____ chain.
Answer: value
Page Ref: 47
Skill: R
- 153) A system that uses the Internet for business-to-business interaction is called a(n) _____.
Answer: Extranet
Page Ref: 48
Skill: R
- 154) The use of computers to design state-of-the-art, high-quality products is called a _____ system.
Answer: computer aided design (CAD)
Page Ref: 48
Skill: R
- 155) "Making the _____ case" for an information system means identifying the value provided by an information system to the organization or its constituents.
Answer: business
Page Ref: 48
Skill: A
- 156) The "productivity _____" is the realization that while IS expenditures have risen, productivity has not increased at the same rate.
Answer: paradox
Page Ref: 49
Skill: R

- 157) When employees in a business unit (e.g., Accounting or Human Resources) assist in the creation of an information system it is called _____ development.
Answer: end-user
Page Ref: 50
Skill: R
- 158) Information systems designed to improve decision making are called _____ systems.
Answer: decision support
Page Ref: 50
Skill: A
- 159) Information systems that help the organization enter a new market, gain or maintain market share, better serve customers, etc., are known as _____ systems.
Answer: strategic
Page Ref: 51
Skill: A
- 160) Making the _____ case is the process of building and presenting the set of arguments that show that an information system is adding value to the organization.
Answer: business
Page Ref: 53-55
Skill: A
- 161) In cases in which it is not easy to quantify the impact of an investment, you can come up with _____, to help clarify what the impact on the firm will be.
Answer: proxy variables
Page Ref: 59
Skill: R
- 162) _____ business refers to the use of information technologies and systems to support the business.
Answer: Electronic
Page Ref: 63
Skill: A
- 163) Rivals can copy emerging information systems, so this form of competitive advantage can be _____.
Answer: short-lived
Page Ref: 62
Skill: A
- 164) Intel founder Gordon Moore predicted that the number of transistors that could be squeezed onto a silicon chip would double every _____ months.
Answer: eighteen
Page Ref: 65
Skill: R
- 165) Information loaded into Stantec's SMKC system immediately becomes available to employees through the company _____.
Answer: intranet
Page Ref: 39
Skill: R

- 166) In 1993, David Garvin described a _____ as one that is "skilled at creating, acquiring and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights."
Answer: learning organization
Page Ref: 41
Skill: R
- 167) Without learning, it is difficult to uncover bad _____ underlying the information system.
Answer: business processes
Page Ref: 43
Skill: R
- 168) A recent survey found that _____ percent of employees had stolen key information from an employer.
Answer: seventy (70)
Page Ref: 43
Skill: R
- 169) An organization has _____ whenever it has an edge over rivals in attracting customers and defending against competitive forces.
Answer: competitive advantage
Page Ref: 44
Skill: R
- 170) Holt Renfrew pursues a _____ strategy.
Answer: focussed differentiation
Page Ref: 44
Skill: R
- 171) Even if a technology is both valuable and rare, it must resist _____ and _____ if it is to sustain a competitive advantage.
Answer: imitation, substitution
Page Ref: 45
Skill: R
- 172) While it is relatively easy to copy the implementation of technology, it is much for difficult to duplicate the _____ use of that technology.
Answer: strategic
Page Ref: 45
Skill: A
- 173) Simply dropping a system into an organization will not guarantee success, even with the best of technology. Often what is required is a commensurate analysis of and improvement in the way business is done. This process is referred to as a _____.
Answer: business process reengineering
Page Ref: 48
Skill: A

174) Brynjolfsson (1993) reports that lags of 2-3 years are typical before strong organizational impacts of IS _____ are felt.

Answer: investments

Page Ref: 51

Skill: R

175) In Canada, the UK, Australia and Japan, the number one reason for adopting information systems cited by business in 2004 was _____.

Answer: increased efficiency

Page Ref: 52

Skill: A

176) Three types of arguments commonly made in the business case for an information system are those based on _____, _____ and _____.

Answer: fact, faith and fear

Page Ref: 53

Skill: R

177) If an argument were made in a business case that the firm needs a particular information system because "...all of our competitors have it!", this is an argument based on _____.

Answer: fear

Page Ref: 53

Skill: A

178) Explain the value added from automating, informing and strategizing with information systems.

Answer: Automating involves the use of technology to complete a task within an organization faster, better, cheaper, and with greater consistency. Informing goes beyond automating because it involves learning to improve the day-to-day activities within a process. A learning organization is one that is skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights. Strategizing is associated with strategic planning, the process of forming a vision of where the organization needs to head, converting the system into measurable objectives and performance targets, and crafting a strategy to achieve the desired results.

Page Ref: 40-44

Skill: R

179) Discuss various options for organizational strategy. What options are there for strategic planning that might give a company competitive advantage?

Answer: Several options exist for organizational strategy. An organization might pursue a low-cost leadership strategy, like Dell Computers or Zellers, in which it offers the best prices in its industry on goods and services. Another option would be a differentiation strategy where an organization creates better products or services than its competitors. Companies like Holt Renfrew and IBM do this. Or, a middle-of-the-road strategy called the best-cost provider might be an option, where products or services of reasonably good quality are offered at competitive prices. The Bay is an example of a best-cost provider. Other strategies include having the best-made product, having superior customer service, having lower costs, shorter lead times, and well-known name brands.

Page Ref: 44

Skill: A

180) Describe how Avis Rent A Car used technology in an effort to gain competitive advantage over its rivals.

Answer: Avis equipped customer service representatives with hand-held computers and printers strapped to their waists or over their shoulders. As customers would return their rental cars the customer service representatives would input the car license number, mileage, and fuel level. By the time the customer has gotten out of the car and retrieved their luggage, their paperwork and receipt has already been printed. The paperwork is completed right away. The advantage for the customer is a lot of time saved. The advantage for Avis is happier customers, more efficient service, and ultimately more business.

Page Ref: 45-46

Skill: R

181) Discuss the potential role of IS in value chain analysis.

Answer: There are five aspects to the value chain in an organization. These are (1) purchased supplies or inbound logistics, (2) operations, (3) outbound logistics, (4) sales and marketing, and (5) service. Foundational to these five operations are general administration, human resource management, and product R & D, technology, and systems development. IS can enhance the value chain. For example, inbound logistics can be supported by Internet links to suppliers, operations can be enhanced by computer-aided manufacturing systems, and outbound logistics can be facilitated by Internet links to dealers. An online product catalog and ordering would enhance sales and marketing. Service would be enhanced by a customer service response system. A variety of project management software and financial decision support software would bolster the foundational aspects of the value chain.

Page Ref: 46-47

Skill: A

182) The "productivity paradox" is the phenomenon in which productivity doesn't seem to rise proportionally to IS expenditures. What are some of the factors that make a company's productivity difficult to measure?

Answer: Factors that mask, hide, or reduce productivity in an organization include government regulations, complex tax codes, and more complex products. Employees might reduce productivity by spending excessive amounts of time surfing the Web to check sports or other types of Web sites. Other employees might download and play software games. Junk mail slows productivity. Lastly, benefits might not be measurable or detectable. How does one quantify the benefits of, say, e-mail for example? How does one measure the return on investment of project management software? Further complicating the quantification issue is that expected benefits are not always defined in advance.

Page Ref: 49

Skill: A

183) Arguments for an information system can be based on faith, fear, or fact. Describe all three.

Answer: Arguments based on faith are arguments based on beliefs about organizational strategy, competitive advantage, industry forces, customer perceptions, market share, and so on. An example of an argument by faith would be, "I have a gut feeling that Customer Relationship Management will solve our sales and services problems and enable us to serve our customers better than the competition." Arguments based on fear focus on the negative consequences of *not* taking action with regard to implementing a system. Perhaps the fear centres on lost market share or going out of business. An example of an argument based on fear is, "If we don't acquire Project Management software our competitors will be able to outpace us in the industry." Lastly, arguments based on facts involve the use of data, quantitative analysis, or other indisputable factors. An argument based on fact might be, "This cost/benefit analysis shows that an Enterprise Resource Planning system will save us 25% in reduced operating costs over each of the next three years."

Page Ref: 53-58

Skill: A

184) Discuss some strategies for effectively making a business case to some high-level leaders in an organization.

Answer: First, it is important to know the audience. Whether the audience is an IS manager, company executives (vice presidents or higher), or a steering committee, the key thing is to know the audience and their strategic direction for the company. It is imperative that the desired IS system fit well with the defined goals of the company. Whenever possible, convert the corporate benefits generated by the proposed system into monetary terms. Corporate leaders understand money. They want to know the impact or advantage to the bottom line, that is profitability. Proxy variables that measure changes in perceived value to the company are a good alternative if quantification of financial benefits isn't possible. Another alternative would be to use a work profile matrix to calculate the amount of money or percent of change by work categories within departments. The most important thing to remember in all these benefit assessment methodologies is to measure what is important to management.

Page Ref: 58

Skill: A

185) Describe the E-Business Innovation Cycle.

Answer: The E-Business Innovation Cycle is comprised of four phases. First is choosing enabling or emerging technologies that will enhance the company. Doing so will convey new IT insights into the business. Second, one must match the technology to economic opportunities. The combination of emerging technology matched to economic opportunity sets the stage for e-business initiatives. Third, one must execute business innovation for growth. Then, the innovations or value propositions must be implemented in the marketplace. Fourth and last, assessment of external customer and internal client value must be evaluated. The organizational learning that takes place from assessment must be applied to each of the first three phases (choosing, matching, and executing).

Page Ref: 63

Skill: R

186) What are some of the requirements for a business to be at the cutting edge of technology?

Answer: Being competitive means doing things faster, better, and cheaper than the other guy. Porter's five competitive forces should always be in mind: threats from traditional rivals, new entrants into the market, customer bargaining power, supplier bargaining power, and potential substitute products are all risk factors. The bottom line is to know where the threat is coming from and adapt technology to the high-risk area(s). Still, before an organization can deploy new systems well, its people, structure, and processes must be capable of adapting well to change. And, given a willingness to change, the personnel in your organization must have enough resources, time, knowledge, and skills to adapt. The people must have the appropriate tolerance for risk, uncertainty, and unexpected problems that might arise.

Page Ref: 64-67

Skill: A

187) A Decision Support System (DSS) is designed to improve decision making. Why is measuring the impact of introducing the system difficult?

Answer: One needs to measure the differences in outcome between decisions made WITH and WITHOUT the DSS in place. This kind of comparison is difficult to make in a business setting. Furthermore, it is not clear what constitutes 'adding value' in this context. Does adding value mean making decisions that result in better outcomes, improving the decision-making process, having the capability of making more decisions, being able to justify a decision more effectively, making people feel better about the decision outcomes or the decision-making process, or some combination of these and other factors? Until it becomes clear, the making a decision about the value of a DSS will remain difficult.

Page Ref: 50

Skill: R

188) Appelgate and McFarlan outline five impacts of IS on competitive forces. List the five impacts, their corresponding implications for the firm, and at least one potential use of IS to combat the competitive force.

Answer: 1) Traditional rivals within your industry lead to competition in price, product, distribution and service. Firms can implement an ERP to reduce costs and improve action and reaction time, and/or implement a website to offer better service to customers.

2) Threat of new entrants into your market leads to increased capacity in the industry, reduced prices and/or decreased market share. Firms can implement or improve their website to reach customers and differentiate products; implement inventory control systems to lower costs and better manage excess capacity.

3) Customer bargaining power leads to reduced prices, increased quality and/or demand for more services. Firms can implement a CRM system to serve customers better, implement computer-aided design and/or computer-aided manufacturing to improve product quality.

4) Supplier bargaining power leads to higher prices and reduced quality. Firms can use internet to establish closer electronic ties with suppliers and to create relationships with new suppliers located far away.

5) Threat of substitute products from other industries leads to potential returns on products, decreased market share and/or losing customers for life. Firms can use DSS and customer purchase database to better assess trends and customer needs, and/or use computer-aided design systems to refine products.

Page Ref: 56

Skill: R

189) Rubin (CIO, June 2004) has suggested four categories for assessing the value of IT infrastructure. List and describe each. Use examples as appropriate.

Answer: 1) Economic value: the contribution of the infrastructure to the business. Use important business metrics to gauge the value. An airline might use revenue per passenger mile.

2) Architectural value: the capacity of the infrastructure to meet business needs today and in the future. It depends on characteristics such as interoperability, portability, scalability, recoverability and compatibility. each business unit should provide their own measurements on each dimension.

3) Operational value: An assessment of the actual performance of the infrastructure in meeting business process requirements. Measuring the cost to the business resulting from an outage is a good indicator of loss to revenue, staff productivity or customer base.

4) Regulatory and Compliance value: The extent to which the infrastructure helps to meet requirements for control, security and integrity as required by a governing body or a key customer.

Ruban argues that each should be compared with external benchmarks where possible.

Page Ref: 60-61

Skill: R