

**SOLUTIONS MANUAL**

COLLEGE  
PHYSICS

A STRATEGIC APPROACH



KNIGHT • JONES • FIELD

# *The Importance of Information Systems Management, 8e (McNurlin/Sprague/Bui)*

## **Chapter 2 The Top IS Job**

- 1) The term *waves of innovation* define how IT is used by industries and by enterprises.  
Answer: TRUE  
*Diff: 1 Page Ref: 50*
- 2) Items above the line in the waves of innovation model all require a management focus on operation control.  
Answer: FALSE  
*Diff: 2 Page Ref: 50*
- 3) A recent shift in IS organizations has been towards developing IT computer operations centers.  
Answer: FALSE  
*Diff: 1 Page Ref: 55*
- 4) Architecture management is one of the biggest issues facing IS organizations in the future.  
Answer: TRUE  
*Diff: 2 Page Ref: 56*
- 5) Senior executive involvement in guiding IT use is not needed until wave 5: Reaching the customer.  
Answer: FALSE  
*Diff: 3 Page Ref: 51*
- 6) The IS organization model has evolved to a federal model of centralized and decentralized activities.  
Answer: TRUE  
*Diff: 1 Page Ref: 58*
- 7) Database and network management work best when decentralized to place them closer to customer locations.  
Answer: FALSE  
*Diff: 3 Page Ref: 59*
- 8) Today's CIO has an increased emphasis on IT governance than past eras.  
Answer: TRUE  
*Diff: 1 Page Ref: 62*
- 9) During the mainframe era, the focus of IS was on the delivery of application systems.  
Answer: TRUE  
*Diff: 1 Page Ref: 63*
- 10) During the distributed era, the focus of IS was to be a business visionary.  
Answer: FALSE  
*Diff: 2 Page Ref: 63*
- 11) A line of business is an organization unit that conducts business activities with common customers, products, and market characteristics.  
Answer: TRUE  
*Diff: 1 Page Ref: 66*

- 12) A statement of how the future of the IS organization is going to look is called business alignment.  
Answer: FALSE  
Diff: 2 Page Ref: 68
- 13) Championing an IT innovation is an information-intensive activity.  
Answer: TRUE  
Diff: 2 Page Ref: 72
- 14) Most organizations have centralized at IT functions in order to support increased IT governance requirements.  
Answer: FALSE  
Diff: 2 Page Ref: 75
- 15) A feudal governance style is where one IT group and one business group share a right.  
Answer: FALSE  
Diff: 1 Page Ref: 77
- 16) The leadership of CIOs is no longer limited to IS functions.  
Answer: TRUE  
Diff: 1 Page Ref: 43
- 17) The management of IT in organizations has not changed drastically over the past 50 years.  
Answer: FALSE  
Diff: 2 Page Ref: 46
- 18) *Outsourcing* has spread widely because companies see value in turning IS functions over to specialist companies.  
Answer: TRUE  
Diff: 1 Page Ref: 52
- 19) It is not reasonable to expect an outsourcing service provider to understand and satisfy all the needs of the organization without active management.  
Answer: TRUE  
Diff: 3 Page Ref: 54
- 20) The recent approach to making IT investments is to view all company systems as a portfolio and to make investment decisions from that viewpoint.  
Answer: TRUE  
Diff: 3 Page Ref: 81
- 21) Which wave of innovation focused on achieving clerical and administrative savings by automating manual processes?  
A) Wave 1: Reducing costs  
B) Wave 2: Leveraging investments  
C) Wave 3: Enhancing products and services  
D) Wave 4: Enhancing executive decision making  
Answer: A  
Diff: 2 Page Ref: 51

- 22) Which wave of innovation shifted attention to produce revenue by gaining a strategic advantage?
- A) Wave 1: Reducing costs
  - B) Wave 2: Leveraging investments
  - C) Wave 3: Enhancing products and services
  - D) Wave 4: Enhancing executive decision making

Answer: C

Diff: 2 Page Ref: 51

- 23) Which wave of innovation focused on changing the fundamental structure of an organization?
- A) Wave 1: Reducing costs
  - B) Wave 2: Leveraging investments
  - C) Wave 3: Enhancing products and services
  - D) Wave 4: Enhancing executive decision making

Answer: D

Diff: 2 Page Ref: 51

- 24) The traditional set of IS responsibilities includes all of the following except:
- A) managing corporate data.
  - B) planning systems.
  - C) identifying opportunities for network expansion.
  - D) performing system analysis and design.

Answer: C

Diff: 3 Page Ref: 54

- 25) Which of the following has been reduced by the growing capabilities of users?
- A) network operations
  - B) systems architecture
  - C) system maintenance
  - D) business requirements identification

Answer: D

Diff: 1 Page Ref: 57

- 26) The *IS Lite* model suggests that today's IS department should concentrate on:
- A) driving innovation.
  - B) managing supplier and user relationships.
  - C) developing website content.
  - D) Both A and B

Answer: D

Diff: 1 Page Ref: 59

- 27) In the *IS Lite* model the development of Web site standards and operations is an example of the:
- A) outsource model.
  - B) federal model.
  - C) decentralization model.
  - D) None of the above

Answer: B

Diff: 2 Page Ref: 58

- 28) Which of the following is true of today's CIOs?
- A) They are expected to safeguard the privacy of customer data.
  - B) They need to look for IT innovations.
  - C) They are expected to do more with not as much money.
  - D) All of the above

Answer: A

Diff: 1 Page Ref: 62

- 29) The role of the IS executive in the \_\_\_\_\_ was that of being an operational manager of IS.
- A) mainframe era
  - B) distributed era
  - C) Web era
  - D) None of the above

Answer: A

Diff: 1 Page Ref: 63

- 30) The role of the IS executive in the \_\_\_\_\_ was to align IT with the business.
- A) mainframe era
  - B) distributed era
  - C) Web era
  - D) None of the above

Answer: B

Diff: 1 Page Ref: 63

- 31) The role of the IS executive in the \_\_\_\_\_ was to be that of a business visionary.
- A) mainframe era
  - B) distributed era
  - C) Web era
  - D) None of the above

Answer: C

Diff: 1 Page Ref: 63

- 32) During the distributed era, which role did the CIO have to take on?
- A) organizational designer
  - B) technology architect
  - C) informed buyer
  - D) All of the above

Answer: D

Diff: 2 Page Ref: 63

- 33) Which of the following is a method that a CIO could use to learn more about the business?
- A) sponsor weekly briefings
  - B) read industry publications
  - C) partner with a line executive
  - D) All of the above

Answer: D

Diff: 1 Page Ref: 65

- 34) The assignment of decision rights and the accountability framework to encourage desirable behavior in the use of IT is referred to as:
- A) knowledge management.
  - B) IT governance.
  - C) strategic alignment.
  - D) None of the above

Answer: B

Diff: 1 Page Ref: 75

- 35) Which type of risk should be addressed by project managers within their project proposals?
- A) risk that the project will fail
  - B) risk of not doing the project
  - C) risk that it is the wrong project for what is trying to be achieved
  - D) All of the above

Answer: D

Diff: 1 Page Ref: 87

- 36) Which of the following **does not** represent traditional IS functions?
- A) running computers and networks
  - B) developing and maintaining systems
  - C) setting a strategy and maintaining an architecture for **BOTH** IT and information
  - D) helping articulate what the business needs from IT
  - E) None of the above

Answer: E

Diff: 3 Page Ref: 53

- 37) Governance differs from management in that:
- A) governance is about why decisions are made, whereas management is about deciding who makes decisions.
  - B) governance is about when decisions are made, whereas management is about deciding why decisions are made.
  - C) governance is about making decisions once decision rights have been assigned, whereas management is about deciding who makes decisions.
  - D) governance is about deciding who makes decisions, whereas management is about making decisions once decision rights have been assigned.

Answer: D

Diff: 5 Page Ref: 73

- 38) The type of governance arrangement where rights are shared by C-level executives and one other tier of the business hierarchy, such as business-unit presidents is called:
- A) Anarchy.
  - B) Duopoly.
  - C) Federal.
  - D) Business Monarchy.

Answer: C

Diff: 2 Page Ref: 74

- 39) The type of governance arrangement where one IT group and one business group share a right is called:
- A) Anarchy.
  - B) Duopoly.
  - C) Federal.
  - D) Business Monarchy.

Answer: B

Diff: 2 Page Ref: 74

- 40) IT investments, in industries that depend on information processing, create the greatest productivity increases when:
- A) the IT investments targeted the main levers of productivity.
  - B) the IT investments were made in the right sequence and at the right time.
  - C) the IT investments were complemented with innovations in management.
  - D) All of the above

Answer: D

Diff: 2 Page Ref: 78

- 41) Briefly describe the five IT waves of innovation.

Answer: Wave 1: Reducing Costs □ Achieve clerical and administrative savings by automating manual processes

Wave 2: Leveraging investments □ Effective use of corporate assets to increase profitability

Wave 3: Enhancing products and services □ Shift use of IT to produce revenue by gaining strategic advantage or by creating entirely new businesses.

Wave 4: Enhancing executive decision making □ Create real-time business management systems.

Wave 5: Reaching the customer □ Restructure the industry by creating new businesses using the Internet, e-commerce and wireless technologies.

Diff: 2 Page Ref: 51

- 42) Briefly describe Cox's four functions of IS.

Answer: 1. Run operations □ running computers and networks

2. Develop systems □ developing and maintaining systems, designing new systems, and updating existing ones

3. Develop architecture □ setting a strategy and maintaining architecture for both IT and information, providing a framework or standard for systems operations

4. Identify business requirements □ helping articulate what the business needs from IT

Diff: 1 Page Ref: 54-55

- 43) Distinguish between the roles of the CIO in the mainframe, distributed, and Web Eras.

Answer: In the mainframe era, the CIO was the operational manager of the IT function. In the distributed era, the CIO was expected to align IT with the rest of the business. In the Web era, the CIO's role is to exploit the Internet providing a visionary contribution to the business strategy.

Diff: 2 Page Ref: 63-64

44) List five approaches a CIO could use to increase their understanding of the business and environment.

- Answer: 1. Encourage project teams to study the marketplace.  
2. Concentrate on lines of business.  
3. Sponsor weekly briefings.  
4. Attend industry meetings with line executives.  
5. Read industry publications.  
6. Hold informal listening sessions.  
7. Partner with a line executive.

*Diff: 3 Page Ref: 65*

45) Why has IT governance become a prominent issue?

Answer: IT spending has become so large and diverse that the decision-making process must be rationalized. It is important that decisions regarding the IT portfolio produce high contribution to business value. Lastly, legislation, such as the Sarbanes-Oxley Act has imposed external requirements for IT governance within organizations.

*Diff: 2 Page Ref: 75*

46) Why should a CIO develop a strategic vision?

Answer: A vision of a desirable future can provide stability when it sets direction for an organization. The CIO is expected to set the technical direction for the organization. He/she defines the enterprise's technical architecture, establishes technical standards, and ensures that the organization buys into the plan.

*Diff: 2 Page Ref: 68-69*

47) How can the risk of technological change be managed?

Answer: First, an evaluation of the scope of the change, the sponsor's commitment to the change, the change agent's skills, and the expected support or resistance must be performed. This assessment will help determine if the scope of the change is doable; whether the sponsors are strongly enough committed to push the change through; whether the change agents have the skills required to implement the change; and the strength of the resistance of the change targets. By attending to these issues, technological change can be implemented more successfully.

*Diff: 2 Page Ref: 88*

48) Briefly describe the Enterprise wide Information Management Model.

Answer: The BUSINESS SECTOR involves the a) Strategic Plan of the Enterprise and b) the Business Alignment Organizations that carry out plans. The TECHNOLOGY SECTOR involves a) Information Technology Opportunities and b) Information Systems Architecture. Enterprise information management involves determining the impact of Information Technology Opportunities on the Strategic Plan of the Enterprise, so Information Systems Architectures can be aligned with the business organizations that carry out organizational strategic plans.

*Diff: 4 Page Ref: 63*



49) List three traditional responsibilities of IS and describe how these responsibilities can be “nibbled” away IS departments.

- Answer: 1. Manage Remote Systems — responsibility nibbled away from the IS department through distributed Systems and Outsourcers
2. System Analysis- responsibility nibbled away from the IS department through the introduction of business lead teams.
3. System building - responsibility nibbled away from the IS department through purchasing commercially developed software, consultants and outsourcing.

*Diff: 3 Page Ref: 52*

50) List and briefly describe three decision domains from the Broadbent and Weill IT governance arrangements matrix.

Answer: Any combination of the following.

1. IT principles - high-level statements about how IT will be used to create business value.
2. IT infrastructure strategies - state the approach for building shared and standard
3. IT services across the enterprise.
4. IT architecture - states the technical choices that will meet business needs.
5. Business application needs - where the business defines its application needs.
6. IT investment and prioritization - defines the process for moving IT-based investments through justification, approval, and accountability.

*Diff: 4 Page Ref: 74*