

Chapter 4

Ethical and Social Issues in Information Systems

True-False Questions

1. The cases of Enron, Worldcom, Parmalat, and Bristol-Meyers Squibb are examples of failed ethical judgment by information systems managers.
Answer: False **Difficulty: Easy** **Reference: pp. 127–128**
2. Firms that cooperate with prosecutors may receive reduced charges against the entire firm for obstructing investigations.
Answer: True **Difficulty: Easy** **Reference: p. 128**
3. Political institutions require time to develop new laws and often require the demonstration of real harm before they act.
Answer: True **Difficulty: Easy** **Reference: p. 130**
4. Advances in data storage have made routine violation of individual privacy more difficult.
Answer: False **Difficulty: Easy** **Reference: p. 131**
5. The Utilitarian Principle states that if an action is not right for everyone to take it is not right for anyone to take.
Answer: False **Difficulty: Medium** **Reference: p. 137**
6. Privacy is the right to be left alone when you want to be, without surveillance or interference from other individuals or organizations.
Answer: True **Difficulty: Easy** **Reference: p. 139**
7. Standards for ensuring the accuracy and reliability of any corporate information systems are enforced through the Gramm–Leach–Bliley Act.
Answer: False **Difficulty: Easy** **Reference: p. 140**

8. The FIP principles direct Web sites to disclose their information practices before collecting data.
Answer: True **Difficulty: Medium** **Reference: p. 140**
9. “Cookies” are designed to directly obtain the names and addresses of Web site visitors.
Answer: False **Difficulty: Medium** **Reference: p. 142**
10. Spyware is software that comes hidden in free downloadable software and can track your online movements.
Answer: True **Difficulty: Easy** **Reference: pp. 142–143**
11. P3P encrypts or scrambles e-mail or data so that it cannot be read illicitly.
Answer: False **Difficulty: Medium** **Reference: p. 144**
12. Protection for trade secrets is enforced at the federal level.
Answer: False **Difficulty: Hard** **Reference: p. 145**
13. The drawback to copyright protection is that the underlying ideas behind the work are not protected, only their manifestation in a product.
Answer: True **Difficulty: Hard** **Reference: p. 146**
14. According to the courts, in the creation of unique software, similar concepts, general functional features, and even colors are protectable by copyright law.
Answer: False **Difficulty: Medium** **Reference: p. 146**
15. The key concepts in patent law are originality, novelty, and invention.
Answer: True **Difficulty: Easy** **Reference: p. 146**
16. Computers and information technologies potentially can destroy valuable elements of our culture in society even while they bring us benefits.
Answer: True **Difficulty: Easy** **Reference: p. 150**
17. Despite the passage of several laws defining and addressing computer crime, accessing a computer system without authorization is not yet a federal crime.
Answer: False **Difficulty: Easy** **Reference: p. 152**
18. Spam is unsolicited e-mail.
Answer: True **Difficulty: Easy** **Reference: p. 152**

19. The European Parliament has passed a ban on unsolicited commercial messaging.

Answer: True **Difficulty: Easy** **Reference: p. 154**

20. Radiation from computer display screens has been proved to be a factor in CVS.

Answer: False **Difficulty: Easy** **Reference: p. 156**

Multiple-Choice Questions

21. *(Evaluation)*

What central issue of this chapter does the Washington, D.C., public school bus system's technical innovations illustrate?

- a. Information technology often has unexpected effects.
- b. Technology can be a double-edged sword.
- c. The negative effects of technology are little understood.
- d. In most cases, the positive effects of technology overshadow the negative effects.

Answer: b **Difficulty: Easy** **Reference: pp. 125–126**

(Evaluation in terms of appraise, assess)

22. *(Analysis)*

Which of the five moral dimensions of the information age did the D.C. school bus information system raise?

- a. Quality of life
- b. System quality
- c. Accountability and control
- d. Information rights and obligations

Answer: d **Difficulty: Easy** **Reference: pp. 125, 130**

23. Which ethical issues will be most central if your career is in finance and accounting?

- a. Protecting information systems from fraud and abuse
- b. Enforcing corporate ethics policies
- c. Responsibility regarding data accuracy and quality
- d. Privacy issues concerning customer data

Answer: a **Difficulty: Easy** **Reference: p. 127**

24. Information systems:

- a. pose traditional ethical situations in new manners.
- b. raise new ethical questions.
- c. raise the same ethical questions created by the industrial revolution.
- d. raise ethical questions primarily related to information rights and obligations.

Answer: b

Difficulty: Easy

Reference: p. 128

25. The introduction of new information technology has a:

- a. dampening effect on the discourse of business ethics.
- b. ripple effect raising new ethical, social, and political issues.
- c. beneficial effect for society as a whole, while raising dilemmas for consumers.
- d. waterfall effect in raising ever more complex ethical issues.

Answer: b

Difficulty: Easy

Reference: p. 129

26. The moral dimensions of the information society:

- a. are geographically and politically biased.
- b. are primarily addressed by existing intellectual property rights laws.
- c. are predominantly quality-of-life issues.
- d. cut across individual, social, and political levels of actions.

Answer: d

Difficulty: Easy

Reference: p. 130

27. The four key technical trends responsible for current ethical stresses related to information technology are:

- a. doubling of computer power every 18 months, data analysis advances, networking advances, the Internet.
- b. doubling of computer power every 18 months, declining data storage costs, data analysis advances, lack of international standards for data protection.
- c. doubling of computer power every 18 months, declining data storage costs, data analysis advances, networking advances and the Internet.
- d. doubling of computer power every 18 months, declining data storage costs, data analysis advances, ease in file sharing and copying.

Answer: c

Difficulty: Medium

Reference: p. 130

28. In the information age, the obligations that individuals and organizations have concerning rights to intellectual property fall within the moral dimension of:

- a. property rights and obligations.
- b. system quality.
- c. accountability and control.
- d. information rights and obligations.

Answer: a

Difficulty: Easy

Reference: p. 130

29. Advances in data storage techniques and rapidly declining storage costs have:

- a. doubled humanity's knowledge.
- b. made universal access possible.
- c. doubled every 18 months.
- d. made routine violations of privacy cheap and effective.

Answer: d

Difficulty: Easy

Reference: p. 131

30. The use of computers to combine data from multiple sources and create electronic dossiers of detailed information on individuals is called:

- a. profiling.
- b. spyware.
- c. spamming.
- d. targeting.

Answer: a

Difficulty: Easy

Reference: p. 131

31. NORA is:

- a. profiling technology used by the EU.
- b. federal privacy law protecting networked data.
- c. a new data analysis technology that finds hidden connections between data in disparate sources.
- d. sentencing guidelines adopted in 1987 mandating stiff sentences on business executives.

Answer: c

Difficulty: Medium

Reference: p. 132

32. (*Analysis*)

Which of the five moral dimensions of the information age do the central business activities of ChoicePoint raise?

- a. Property rights and obligations
- b. System quality
- c. Accountability and control
- d. Information rights and obligations

Answer: d

Difficulty: Medium

Reference: pp. 133–134

(*Analysis in terms of categorize*)

33. Accepting the potential costs, duties, and obligations for the decisions you make is referred to as:

- a. responsibility.
- b. accountability.
- c. liability.
- d. due process.

Answer: a

Difficulty: Medium

Reference: p. 135

34. The feature of social institutions that means mechanisms are in place to determine responsibility for an action is called:

- a. due process.
- b. accountability.
- c. courts of appeal.
- d. judicial system.

Answer: b

Difficulty: Medium

Reference: p. 135

35. The process in law-governed societies in which laws are known and understood and there is an ability to appeal to higher authorities to ensure that the laws are applied correctly is called:

- a. liability.
- b. due process.
- c. courts of appeal.
- d. FOI appeals.

Answer: b

Difficulty: Medium

Reference: p. 136

36. Which of the following is not one of the five steps discussed in the chapter as a process for analyzing an ethical issue?

- a. Assign responsibility.
- b. Identify the stakeholders.
- c. Identify the options you can reasonably take.
- d. Identify and clearly describe the facts.

Answer: a

Difficulty: Medium

Reference: p. 136

37. (Analysis)

A colleague of yours frequently takes small amounts of office supplies, noting that the loss to the company is minimal. You counter that if everyone were to take the office supplies, the loss would no longer be minimal. Your rationale expresses which historical ethical principle?

- a. Kant's Categorical Imperative
- b. The Golden Rule
- c. Descartes' Rule of Change
- d. The "No free lunch" rule

Answer: a

Difficulty: Medium

Reference p. 137

38. (Analysis)

A classic ethical dilemma is the hypothetical case of a man stealing from a grocery store in order to feed his starving family. If one used the Utilitarian Principle to evaluate this situation, you might argue that:

- a. stealing the food is acceptable, because the grocer suffers the least harm.
- b. stealing the food is acceptable, because the higher value is the survival of the family.
- c. stealing the food is wrong, because the man would not want the grocery to steal from him.
- d. stealing the food is wrong, because if everyone were to do this, the concept of personal property is defeated.

Answer: b

Difficulty: Medium

Reference: p. 137

39. Immanuel Kant's Categorical Imperative states that:

- a. if an action cannot be taken repeatedly, then it is not right to be taken at any time.
- b. one should take the action that produces the least harm or incurs the least cost.
- c. one can put values in rank order and understand the consequences of various courses of action.
- d. if an action is not right for everyone to take, it is not right for anyone to take.

Answer: d

Difficulty: Medium

Reference: p. 137

40. The ethical "no free lunch" rule states that:

- a. if an action cannot be taken repeatedly, then it is not right to be taken at any time.
- b. one should take the action that produces the least harm or incurs the least cost.
- c. one can put values in rank order and understand the consequences of various courses of action.
- d. everything is owned by someone else, and that the creator wants compensation for this work.

Answer: d

Difficulty: Medium

Reference: p. 137

41. The ethical rules discussed in the textbook:
- a. are based on political philosophies.
 - b. cannot always be guides to actions.
 - c. do not always apply in an e-commerce situation.
 - d. do not allow for competing values.

Answer: b **Difficulty: Medium** **Reference: p. 137**

42. Which U.S. act restricts the information the federal government can collect and regulates what they can do with the information?
- a. Privacy Act of 1974
 - b. Gramm-Leach-Bliley Act of 1999
 - c. Freedom of Information Act
 - d. HIPAA of 1996

Answer: a **Difficulty: Medium** **Reference: p. 139**

43. FIP principles are based on the notion of:
- a. accountability.
 - b. responsibility.
 - c. mutuality of interest.
 - d. ethical behavior.

Answer: c **Difficulty: Easy** **Reference: p. 140**

44. The Federal Trade Commission Fair Information Practice principle of Notice/Awareness states that:
- a. customers must be allowed to choose how their information will be used for secondary purposes other than the supporting transaction.
 - b. data collectors must take responsible steps to assure that consumer information is accurate and secure from unauthorized use.
 - c. there is a mechanism in place to enforce FIP principles.
 - d. Web sites must disclose their information practices before collecting data.

Answer: d **Difficulty: Easy** **Reference: p. 140**

45. European privacy protection is _____ than in the United States.
- a. less far-reaching
 - b. less liable to laws
 - c. much less stringent
 - d. much more stringent

Answer: d **Difficulty: Medium** **Reference: p. 141**

46. U.S. businesses are allowed to use personal data from EU countries if they:
- have informed consent.
 - make sure they comply with U.S. data protection laws.
 - develop privacy protection policies that meet EU standards.
 - make their privacy protection policies publicly available.

Answer: c **Difficulty: Medium** **Reference: p. 141**

47. When a cookie is created during a Web site visit, it is stored:
- on the Web site computer.
 - on the visitor's computer.
 - on the ISP's computer.
 - in a Web directory.

Answer: b **Difficulty: Easy** **Reference: p. 142**

48. The Online Privacy Alliance:
- encourages self-regulation to develop a set of privacy guidelines for its members.
 - protects user privacy during interactions with Web sites.
 - has established technical guidelines for ensuring privacy.
 - is a government agency regulating the use of customer information.

Answer: a **Difficulty: Easy** **Reference: p. 143**

49. *Analysis*

In 2006, new United Kingdom RFID-enhanced biometric passports were cracked by UK security experts in 48 hours using equipment costing less than \$500. The moral questions raised by this accomplishment center primarily around the dimension of:

- information rights.
- property rights.
- system quality.
- quality of life.

Answer: c **Difficulty: Medium** **Reference: p. 130**

50. The P3P standard is concerned with protecting privacy by:
- controlling pop-up ads based on user profiles and preventing ads from collecting or sending information.
 - allowing users to surf the Web anonymously.
 - scrambling data so that it can't be read.
 - blocking or limiting cookies.

Answer: d **Difficulty: Easy** **Reference: pp. 144–145**

51. The limitation of trade secret protection is that although virtually all software programs of any complexity contain unique elements of some sort, it is difficult to prevent the ideas in the work from falling into the public domain when:
- the software is released.
 - the software is open source.
 - the software is widely distributed.
 - a new version of the software is released.

Answer: c

Difficulty: Easy

Reference: p. 145

52. Intellectual property can best be described as:
- intangible property created by individuals or corporations.
 - unique creative work or ideas.
 - tangible property created from a unique idea.
 - the manifestation of an intangible idea.

Answer: a

Difficulty: Easy

Reference: p. 145

53. What legal mechanism protects the owners of intellectual property from having their work copied by others?
- Patent protection
 - Intellectual property law
 - Copyright
 - Fair Use Doctrine

Answer: c

Difficulty: Easy

Reference: p. 145

54. "Look and feel" copyright infringement lawsuits are concerned with:
- the distinction between tangible and intangible ideas.
 - the distinction between an idea and its expression.
 - copying graphical elements of a product.
 - copying creative elements of a product.

Answer: b

Difficulty: Medium

Reference: p. 146

55. The strength of patent protection is that it:
- puts the strength of law behind copyright.
 - allows protection from Internet theft of ideas put forth publicly.
 - is easy to define.
 - grants a monopoly on the underlying concepts and ideas.

Answer: d

Difficulty: Easy

Reference: p. 146

56. One of the difficulties of patent protection is:

- a. that only the underlying ideas are protected.
- b. digital media cannot be patented.
- c. assuring protection against theft.
- d. the years of waiting to receive it.

Answer: d

Difficulty: Hard

Reference: p. 146

57. Which of the following adjusts copyright laws to the Internet age by making it illegal to make, distribute, or use devices that circumvent technology-based protections of copyrighted materials?

- a. Digital Millennium Copyright Act
- b. Privacy Act
- c. Freedom of Information Act
- d. Electronic Communications Privacy Act

Answer: a

Difficulty: Hard

Reference: p. 147

58. In general, it is very difficult to hold software producers liable for their software products when those products are considered to be:

- a. part of a machine.
- b. similar to books.
- c. services.
- d. financial services.

Answer: b

Difficulty: Medium

Reference: p. 148

59. _____ are not held liable for the messages they transmit.

- a. Regulated common carriers
- b. Private individuals
- c. Organizations and businesses
- d. Congressional delegates

Answer: a

Difficulty: Medium

Reference: p. 149

60. It is not feasible for companies to produce error-free software because

- a. any programming code is susceptible to error.
- b. it is too expensive to create perfect software.
- c. errors can be introduced in the maintenance stage of development.
- d. any software of any complexity will have errors.

Answer: b

Difficulty: Medium

Reference: p. 149

61. The “do anything anywhere” computing environment can:

- a. make work environments much more pleasant.
- b. create economies of efficiency.
- c. centralize power at corporate headquarters.
- d. blur the traditional boundaries between work and family time.

Answer: d

Difficulty: Medium

Reference: p. 150

62. The chapter’s case study on the effect of Internet use on school-age children associates a higher use of the Internet with:

- a. lower socialization and interpersonal communications.
- b. increased meaningful relationships.
- c. increased exposure to advertising.
- d. development of a wider variety of meaningful relationships.

Answer: a

Difficulty: Medium

Reference: p. 151

63. The practice of spamming has been growing because:

- a. it is unregulated.
- b. it is good advertising practice and brings in many new customers.
- c. it helps pay for the Internet.
- d. it is so inexpensive and can reach so many people.

Answer: d

Difficulty: Easy

Reference: p. 153

64. (*Analysis*)

Redesigning and automating business processes can be seen as a double-edged sword because:

- a. the increases in efficiency may be accompanied by job losses.
- b. the increases in efficiency may be accompanied by poor data quality.
- c. the support for middle-management decision making may be offset by poor data quality.
- d. the reliance on technology results in the loss of hands-on knowledge.

Answer: a

Difficulty: Medium

Reference: p. 155

65. The U.S. CAN-SPAM Act of 2003:

- a. makes spamming illegal.
- b. requires spammers to identify themselves.
- c. has dramatically cut down spamming.
- d. does not override state anti-spamming laws.

Answer: b

Difficulty: Hard

Reference: p. 154

66. (Analysis)

Which of the five moral dimensions of the information age does spamming raise?

- a. Quality of life
- b. System quality
- c. Accountability and control
- d. Information rights and obligations

Answer: a

Difficulty: Medium

Reference: pp. 149–154

(Analysis in terms of categorize)

67. Which of the following refers to large disparities in access to computers and the Internet among different social groups and different locations?

- a. Computer divide
- b. Technology divide
- c. Digital divide
- d. Information divide

Answer: c

Difficulty: Easy

Reference: p. 155

68. CVS refers to:

- a. eyestrain related to computer display screen use.
- b. computer virus syndrome.
- c. wrist injuries brought about by incorrect hand position when using a keyboard.
- d. cardiovascular stress induced by technology.

Answer: a

Difficulty: Easy

Reference: p. 156

69. Which of the following is stress induced by computer use, and its symptoms include aggravation, hostility toward humans, impatience, and enervation?

- a. Computer stress
- b. CVS
- c. Carpal tunnel syndrome
- d. Technostress

Answer: d

Difficulty: Easy

Reference: p. 156

70. (Analysis)

As discussed in the chapter case, the National Security Agency's databasing of private U.S. citizen's telephone calls and subsequent hearings and judicial reviews illustrates the complexity of:

- a. assigning accountability for illegal wiretapping.
- b. understanding responsibility issues during wartime.
- c. applying due process in regards to new types of information systems such as data mining.
- d. navigating the partisan views of ethics questions posed by information systems.

Answer: c

Difficulty: Hard

Reference: pp. 162–164

(Analysis in terms of categorize)

Fill in the Blanks

71. The principles of right and wrong that can be used by individuals acting as free moral agents to make choices to guide their behavior are called ethics.

Difficulty: Easy

Reference: p. 128

72. Liability refers to the existence of laws that permit individuals to recover damages done to them by other actors, systems, or organizations.

Difficulty: Medium

Reference: p. 136

73. The ethical principle called Descartes' rule of change states that if an action cannot be taken repeatedly, then it is not right to be taken at any time.

Difficulty: Medium

Reference: p. 137

74. The ethical principle called the Risk Aversion Principle states that one should take the action that produces the least harm or incurs the least cost.

Difficulty: Medium

Reference: p. 137

75. Web bugs are a tiny graphic files embedded in e-mail messages and Web pages designed to monitor online Internet user behavior.

Difficulty: Medium

Reference: p. 142

76. The opt-in is a model of informed consent prohibiting an organization from collecting any personal information unless the individual specifically takes action to approve information collection and use.

Difficulty: Medium

Reference: p. 143

77. A(n) ***trade secret*** is any intellectual work product used for a business purpose, provided it is not based on information in the public domain.

Difficulty: Easy

Reference: p. 145

78. A(n) ***patent*** grants the owner an exclusive monopoly on the ideas behind an invention for 20 years.

Difficulty: Easy

Reference: p. 146

79. The commission of acts involving the computer that may not be illegal but are considered unethical is called ***computer abuse***.

Difficulty: Easy

Reference: p. 152

80. ***Carpal tunnel syndrome (CTS)*** occurs when pressure on the median nerve through the bony structure of the wrist produces pain.

Difficulty: Easy

Reference: p. 155

Essay Questions

81. (*Evaluation*)

Although protecting personal privacy and intellectual property on the Internet are now in the spotlight, there are other pressing ethical issues raised by the widespread use of information systems. List and describe at least two of these issues. Which do you think is the most serious? Why? Support your answer.

The ethical issues involved include establishing accountability for the consequences of information systems; setting standards to safeguard system quality and protect the safety of the individual and society; and preserving values and institutions considered essential to the quality of life in information society.

Students' answers to which of the issues are most serious will differ. A sample answer might be: The most serious of these issues is preserving values and institutions, as these are the most difficult to even discuss and define, let alone govern and protect.

Difficulty: Medium

Reference: pp. 139–157

82. (Evaluation)

List and describe the five moral dimensions that are involved in political, social, and ethical issues. Which do you think will be the most difficult for society to deal with? Support your opinion.

- **Information rights and obligations.** What rights do individuals and organizations have with respect to information pertaining to them?
- **Property rights.** How can intellectual property rights be protected when it is so easy to copy digital materials?
- **Accountability and control.** Who will be held accountable and liable for the harm done to individual and collective information and property rights?
- **System quality.** What standards of data and system quality should we demand to protect individual rights and the safety of society?
- **Quality of life.** What values should be preserved? What institutions must we protect? What cultural values can be harmed?

Individual answers for determining the most difficult for society to deal with will vary. One answer might be: Quality of life issues will be most difficult for society to deal with in societies that are comprised of many different cultural and ethnic groups, such as the United States. It is difficult to regulate concerns that are based on subjective values.

Difficulty: Medium

Reference: p. 130

83. **Discuss at least three key technology trends that raise ethical issues. Give an example of an ethical or moral impact connected to each one.**

- Computing power doubles every 18 months.
Ethical impact: Because more organizations depend on computer systems for critical operations, these systems are vulnerable to computer crime and computer abuse.
- Data storage costs are rapidly declining.
Ethical impact: It is easy to maintain detailed databases on individuals. Who has access to and control of these databases?
- Data analysis advances.
Ethical impact: Vast databases full of individual information may be used to develop detailed profiles of individual behavior.
- Networking advances and the Internet.
Ethical impact: It is easy to copy data from one location to another. Who owns data? How can ownership be protected?

Difficulty: Hard

Reference: pp. 130–131

84. **What are the steps in conducting an ethical analysis?**

- Identify and describe clearly the facts.
- Define the conflict or dilemma and identify the higher-order values involved.
- Identify the stakeholders.
- Identify the options that you can reasonably take.
- Identify the potential consequences of your options.

Difficulty: Medium

Reference: p. 136

85. **List and define the six ethical principles discussed in your text.**

- **The Golden Rule.** Do unto others as you would have them do unto you.
- **Immanuel Kant's Categorical Imperative.** If an action is not right for everyone to take, it is not right for anyone.
- **Descartes' rule of change.** If an action cannot be taken repeatedly, it is not right to take at all.
- **The Utilitarian Principle.** Take the action that achieves the higher or greater value.
- **Risk Aversion Principle.** Take the action that produces the least harm or the least potential cost.
- **Ethical no free lunch rule.** Assume that virtually all tangible and intangible objects are owned by someone else unless there is a specific declaration otherwise.

Difficulty: Medium

Reference: p. 137

86. *(Evaluation)*

Do you believe that professional groups should be allowed to assign their own professional codes of conduct and police themselves from within? Why or why not?

This is an opinion question, but anyone who aspires to management will consider himself or herself a professional and will need to have a clear understanding as to how he or she feels about this matter. With the recent scandals in large business firms, which have devastated our economy, there is likely to be a cry for legally sanctioned codes and outside regulatory agencies.

Difficulty: Medium

Reference: p. 137

87. (Analysis)

Define the basic concepts of responsibility, accountability, and liability as applied to ethical decisions. How are these concepts related?

- **Responsibility** is the first key element of ethical action. Responsibility means that an individual, group, or organization accepts the potential costs, duties, and obligations for decisions made.
- **Accountability** is a feature of systems and social institutions. It means that mechanisms are in place to determine who took responsible action; i.e., who is responsible for the action.
- **Liability** is a feature of political systems in which a body of law is in place that permits individuals to recover the damages done to them by others.

These concepts are related as follows: I will assume the blame or benefit for the actions I take (responsibility); this blame or benefit accrues to me through the requirement that I be able to explain why I have taken the actions I have (accountability) for actions traceable to me by defined mechanisms in the organization, and if those actions result in harm to another, I will be held by law to reparations for those actions (liability).

(Analysis in terms of discriminate, diagram)

Difficulty: Hard

Reference: pp. 135–136

88. (Synthesis)

What do system quality, data quality, and system errors have to do with ethics, social issues, or political issues?

The central quality-related ethical issue that information systems raise is at what point should I release software or services for consumption by others? At what point can I conclude that my software or service achieves an economically and technologically adequate level of quality? What am I obligated to know about the quality of my software, its procedures for testing, and its operational characteristics?

The leading quality-related social issue deals with expectations: As a society, do we want to encourage people to believe that systems are infallible? That data errors are impossible? By heightening awareness of system failure, do we inhibit the development of all systems, which in the end contribute to social well-being?

The leading quality-related political issue concerns the laws of responsibility and accountability, what they should be, and how they should be applied.

(Synthesis in terms of organize, compose)

Difficulty: Hard

Reference: p. 149

89. *(Analysis)*

How does the use of electronic voting machines act as a “double-edged sword?” What moral dimensions are raised by this use of information technology?

Electronic voting machines can be seen as beneficial by making voting easy to accomplish and tabulate. However, it may be easier to tamper with electronic voting machines than with countable paper ballots.

In terms of information rights, it seems possible that methods could be set up to determine how an individual has voted and to store and disseminate this knowledge. Manufacturers of voting machines claim property rights to the voting software, which means that if the software is protected from inspection, there is no regulation in how the software operates or how accurate it is. In terms of accountability and control, if an electronic voting system malfunctions, will it be the responsibility of the government, of the company manufacturing the machines or software, or the programmers who programmed the software? The dimension of system quality raises questions of how the level of accuracy of the machines is to be judged and what level is acceptable? In terms of quality of life, while it may make voting easier and quicker, does the vulnerability to abuse of these systems pose a threat to the democratic principle of one person, one vote?

(Analysis in terms of compare, distinguish)

Difficulty: Hard

Reference: pp. 126–157

90. **Evaluate the case of ChoicePoint and its data brokerage business in relation to the principles of the FTC's FIP principles. Which of the FIP principles seem to be most vulnerable to abuse?**

1. **Notice/awareness (core principle).** ChoicePoint seems to have done the bare minimum in terms of notifying consumers of the quality concerns.
2. **Choice/consent (core principle).** Consumer information is held at ChoicePoint without the consumer being informed, and apparently ChoicePoint is in the business of using this information for secondary purposes only, which would be in direct contradiction to this principle.
3. **Access/participation.** Consumers should be able to review and contest the accuracy and completeness of data collected about them in a timely, inexpensive process. Some individuals have sued ChoicePoint for their dissemination of inaccurate information that caused the individuals harm, so there is a due process for this in place. However, it is unclear how the individual determines where the faulty data came from, and if this is a time consuming or expensive process.
4. **Security.** Data collectors must take responsible steps to assure that consumer information is accurate and secure from unauthorized use. The selling of data to criminals highlights the poor practices of ChoicePoint in protecting its data. The lack of data cleansing means their data is very vulnerable to errors.
5. **Enforcement.** There must be in place a mechanism to enforce FIP principles. This can involve self-regulation, legislation giving consumers legal remedies for violations, or federal statutes and regulations. ChoicePoint used "self-regulation," which obviously did not work. The case calls out for federal regulation for data accuracy and security.

Students will differ on their discussion of the most vulnerable of the FIP principles. A sample answer might be: The FIP principle most vulnerable to abuse is choice/consent. The activities of ChoicePoint can't be seen in any way as being other than secondary, since they receive their information from other sources, not from the consumer giving the information as a result of a transaction. Apparently millions of people have information, likely to be at least partially inaccurate, stored at ChoicePoint without their knowledge.

Difficulty: Hard

Reference: pp. 133–134, 140