Chapter 4

Ethical and Social Issues in Information Systems

Understanding Ethical and Social Issues Related to Systems

Ethics

Principles of right and wrong that individuals, acting as free moral agents, use to make choices to guide their behavior

Information systems and ethics

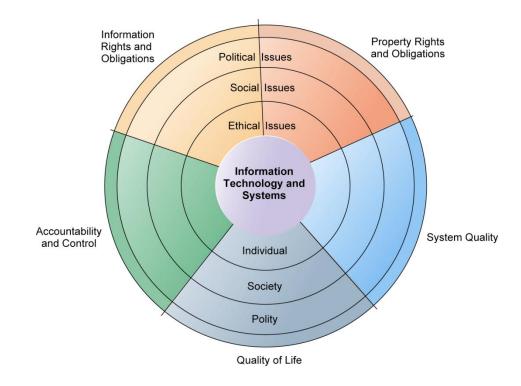
- Information systems raise new ethical questions because they create opportunities for:
 - "Intense social change, threatening existing distributions of power, money, rights, and obligations
 - " New kinds of crime

Understanding Ethical and Social Issues Related to Systems

- A model for thinking about ethical, social, and political issues
 - Society as a calm pond
 - "IT as a rock dropped in pond, creating ripples of new situations not covered by old rules
 - Social and political institutions cannot respond overnight to these ripples - it may take years to develop etiquette, expectations, laws
 - Requires understanding of ethics to make choices in legally gray areas

Understanding Ethical and Social Issues Related to Systems

The Relationship Between Ethical, Social, and Political Issues in an Information Society



The introduction of new information technology has a ripple effect, raising new ethical, social, and political issues that must be dealt with on the individual, social, and political levels. These issues have five moral dimensions: information rights and obligations, property rights and obligations, system quality, quality of life, and accountability and control.

Figure 4-1

Understanding Ethical and Social Issues Related to Systems

- Five moral dimensions of information age
 - Major issues raised by information systems include:
 - "Information rights and obligations
 - " Property rights and obligations
 - " Accountability and control
 - " System quality
 - " Quality of life

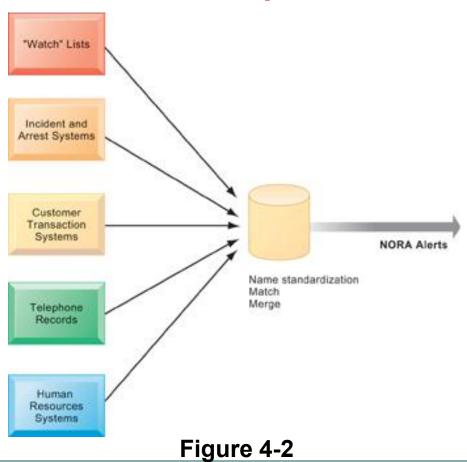
Understanding Ethical and Social Issues Related to Systems

Four key technology trends that raise ethical issues

- Computing power doubles every 18 months
 - " Increased reliance on, and vulnerability to, computer systems
- Data storage costs rapidly declining
 - Multiplying databases on individuals
- Data analysis advances
 - " Greater ability to find detailed personal information on individuals
 - Profiling and nonobvious relationship awareness (NORA)
- Networking advances and the Internet
 - Enables moving and accessing large quantities of personal data

Understanding Ethical and Social Issues Related to Systems

Nonobvious Relationship Awareness (NORA)



NORA technology can take information about people from disparate sources and find obscure, nonobvious relationships. It might discover, for example, that an applicant for a job at a casino shares a telephone number with a known criminal and issue an alert to the hiring manager.

Ethics in an Information Society

- Basic concepts form the underpinning of an ethical analysis of information systems and those who manage them
 - Responsibility: Accepting the potential costs, duties, and obligations for decisions
 - " Accountability: Mechanisms for identifying responsible parties
 - Liability: Permits individuals (and firms) to recover damages done to them
 - Due process: Laws are well known and understood, with an ability to appeal to higher authorities

Ethics in an Information Society

Ethical analysis: A five-step process

- 1. Identify and clearly describe the facts
- 2. Define the conflict or dilemma and identify the higherorder values involved
- 3. Identify the stakeholders
- 4. Identify the options that you can reasonably take
- 5. Identify the potential consequences of your options

Ethics in an Information Society

Candidate Ethical Principles

- 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

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Candidate Ethical Principles (cont.)

" Utilitarian Principle

Take the action that achieves the higher or greater value

" Risk Aversion Principle

Take the action that produces the least harm or least potential cost

Ethical "no free lunch" rule

Assume that virtually all tangible and intangible objects are owned by someone unless there is a specific declaration otherwise

Ethics in an Information Society

Professional codes of conduct

- Promulgated by associations of professionals
 - E.g. AMA, ABA, AITP, ACM
- Promises by professions to regulate themselves in the general interest of society

" Real-world ethical dilemmas

- One set of interests pitted against another
- E.g., Right of company to maximize productivity of workers vs. workers right to use Internet for short personal tasks