

A Gift of Fire

Third edition

Chapter 2: Privacy

What We Will Cover

- Privacy and Computer Technology
- “Big Brother is Watching You”
- Privacy Topics
- Protecting Privacy
- Communications

Privacy and Computer Technology

Key Aspects of Privacy:

- Freedom from intrusion (being left alone)
- Control of information about oneself
- Freedom from surveillance (being tracked, followed, watched)

Privacy and Computer Technology (cont.)

New Technology, New Risks:

- Government and private databases
- Sophisticated tools for surveillance and data analysis
- Vulnerability of data

Privacy and Computer Technology (cont.)

Terminology:

- Invisible information gathering - collection of personal information about someone without the person's knowledge
- Secondary use - use of personal information for a purpose other than the one it was provided for

Privacy and Computer Technology (cont.)

Terminology (cont.):

- Data mining - searching and analyzing masses of data to find patterns and develop new information or knowledge
- Computer matching - combining and comparing information from different databases (using social security number, for example, to match records)

Privacy and Computer Technology (cont.)

Terminology (cont.):

- Computer profiling - analyzing data in computer files to determine characteristics of people most likely to engage in certain behavior

Privacy and Computer Technology (cont.)

Principles for Data Collection and Use:

- Informed consent
- Opt-in and opt-out policies
- Fair Information Principles (or Practices)
- Data retention

Privacy and Computer Technology (cont.)

We value your privacy

We use cookies to enhance your browsing experience,

serve **Granular** ads or content, and analyze our

traffic **opt-in/** Accept All, you consent to our use of

cookies **Opt-out** **Opt-out** **Opt-in**

Customize

Reject All

Accept All

Privacy and Computer Technology

Discussion Questions

- Have you seen opt-in and opt-out choices? Where? How were they worded?
- Were any of them deceptive?
- What are some common elements of privacy policies you have read?

"Big Brother is Watching You"



**BIG BROTHER IS
WATCHING YOU**

"Big Brother is Watching You"

Databases:

- Government Accountability Office (GAO) - monitors government's privacy policies
- Burden of proof and "fishing expeditions"
- Data mining and computer matching to fight terrorism

"Big Brother is Watching You" (cont.)

The Fourth Amendment, Expectation of Privacy and Surveillance Technologies:

- Weakening the Fourth Amendment
- Supreme Court decisions and expectation of privacy
 - Modern surveillance techniques are redefining expectation of privacy

"Big Brother is Watching You" (cont.)

- The Fourth Amendment, Expectation of Privacy and Surveillance Technologies (cont.):
- The USA Patriot Act and national security letters
 - No court order or court oversight needed
 - 2003-2005 report found "widespread and serious misuse" of the FBI's national security letter authorities

"Big Brother is Watching You" (cont.)

Video Surveillance:

- Security cameras
 - Increased security
 - Decreased privacy

"Big Brother is Watching You" (cont.)

Discussion Questions

- What data does the government have about you?
- Who has access to the data?
- How is your data protected?

Diverse Privacy Topics

Marketing, Personalization and Consumer Dossiers:

- Targeted marketing
 - Data mining
 - Paying for consumer information
 - Data firms and consumer profiles
- Credit records

Diverse Privacy Topics (cont.)

Location Tracking:

- Global Positioning Systems (GPS) - computer or communication services that know exactly where a person is at a particular time
- Cell phones and other devices are used for location tracking
- Pros and cons

Diverse Privacy Topics (cont.)

Stolen and Lost Data:

- Hackers
- Physical theft (laptops, thumb-drives, etc.)
- Requesting information under false pretenses
- Bribery of employees who have access

Diverse Privacy Topics (cont.)

What We Do Ourselves:

- Personal information in blogs and online profiles
- Pictures of ourselves and our families
- File sharing and storing
- Is privacy old-fashioned?
 - Young people put less value on privacy than previous generations
 - May not understand the risks

Diverse Privacy Topics (cont.)

Public Records: Access vs. Privacy:

- Public Records - records available to general public (bankruptcy, property, and arrest records, salaries of government employees, etc.)
- Identity theft can arise when public records are accessed
- How should we control access to sensitive public records?

Diverse Privacy Topics (cont.)

National ID System:

- Social Security Numbers
 - Too widely used
 - Easy to falsify

Diverse Privacy Topics (cont.)

National ID System (Cont.):

- A new national ID system - Pros
 - would require the card
 - harder to forge
 - have to carry only one card
- A new national ID system - Cons
 - Threat to freedom and privacy
 - Increased potential for abuse

Diverse Privacy Topics (cont.)

Children:

- The Internet
 - Not able to make decisions on when to provide information
 - Vulnerable to online predators
- Parental monitoring
 - Software to monitor Web usage
 - Web cams to monitor children while parents are at work
 - GPS tracking via cell phones or RFID

Diverse Privacy Topics

Discussion Questions

- Is there information that you have posted to the Web that you later removed? Why did you remove it? Were there consequences to posting the information?
- Have you seen information that others have posted about themselves that you would not reveal about yourself?

Protecting Privacy

Technology and Markets:

- Privacy enhancing-technologies for consumers
- Encryption
 - Public-key cryptography
- Business tools and policies for protecting data

Protecting Privacy (cont.)

Rights and laws:

- Theories
 - Warren and Brandeis
 - Thomson
- Transactions
- Ownership of personal data
- Regulation
 - Health Insurance Portability and Accountability Act (HIPAA)

Protecting Privacy (cont.)

Rights and laws: Contrasting Viewpoints:

- Free Market View
 - Freedom of consumers to make voluntary agreements
 - Diversity of individual tastes and values
 - Response of the market to consumer preferences
 - Usefulness of contracts
 - Flaws of regulatory solutions

Protecting Privacy (cont.)

Rights and laws: Contrasting Viewpoints (cont.):

- Consumer Protection View
 - Uses of personal information
 - Costly and disruptive results of errors in databases
 - Ease with which personal information leaks out
 - Consumers need protection from their own lack of knowledge, judgment, or interest

Protecting Privacy (cont.)

Privacy Regulations in the European Union (EU):

- Data Protection Directive
 - More strict than U.S. regulations
 - Abuses still occur
 - Puts requirements on businesses outside the EU

Protecting Privacy Discussion Question

- How would the free-market view and the consumer protection view differ on errors in Credit Bureau databases?
- Who is the consumer in this situation?

Communication

Wiretapping and E-mail Protection:

- Telephone
 - 1934 Communications Act prohibited interception of messages
 - 1968 Omnibus Crime Control and Safe Streets Act allowed wiretapping and electronic surveillance by law-enforcement (with court order)
- E-mail and other new communications
 - Electronic Communications Privacy Act of 1986 (ECPA) extended the 1968 wiretapping laws to include electronic communications, restricts government access to e-mail

Communication (cont.)

Designing Communications Systems for Interception:

- Communications Assistance for Law Enforcement Act of 1994 (CALEA)
 - Telecommunications equipment must be designed to ensure government can intercept telephone calls
 - Rules and requirements written by Federal Communications Commission (FCC)

Communication (cont.)

Secret Intelligence Gathering:

- The National Security Agency (NSA)
 - Foreign Intelligence Surveillance Act (FISA) established oversight rules for the NSA
- Secret access to communications records

Communication (cont.)

Encryption Policy:

- Government ban on export of strong encryption software in the 1990s (removed in 2000)
- Pretty Good Privacy (PGP)

Communication Discussion Questions

- What types of communication exist today that did not exist in 1968 when wiretapping was finally approved for law-enforcement agencies?
- What type of electronic communications do you use on a regular basis?