Risk of the Technology

- Computer
- Internet
- WWW

- Easier
- Cheaper
- Faster

1. Collecting information
2. Searching
3. Analyzing
4. Storing
5. Accessing
6. Distributing

Risk of the Technology

- **But when the information is about our**
  - Activities
  - Opinions
  - Personal characteristics
  - The same capabilities threaten our *privacy*.

Risk of the Technology

- Thousands of databases both *government and private* containing personal information about us
- *Conversations disappeared* when people finished speaking
- Personal communications were normally read by only the *sender and recipient*

Risk of the Technology

- *Now a days: We*
- Communicate by e-mail with each other
- Electronic group discussions

All these activities/works are recorded and can be copied, stored, distributed and read by others even years later

Risk of the Technology

- We browse:
- Library
- Bookstores
- But on the web:
- A record can be kept of ever page we visit

Anonymity

Books, magazines, journals and newspapers

Invisible Information Gathering

- *Invisible information gathering* describes collection of personal information about someone without the person's knowledge
- Ethical issue is:
  - If someone is not aware that the information is being collected or
  - How it will be used, he or she has no opportunity to consent or withhold for its collection of use

Invisible Information Gathering

- Examples:
- Satellite surveillance
- Automatic identification of a person's telephone number when he or she calls an 800 or 900 number
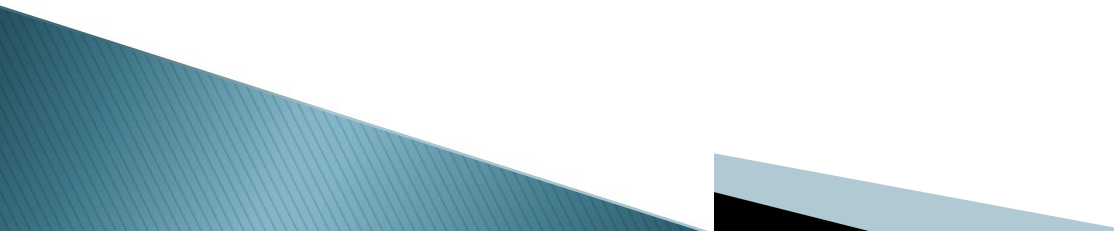- Webs Information

Invisible Information Gathering

- *Internet Service Provider (ISP):*
- Manages the collection between a *user* and the *sites* he or she is visiting
- Thus *ISP knows every site* we visit

Examples:

- Yahoo collects: Four terabytes of log data daily: For
  1) Customer needs, 2) Allocating resources
  3) Improving services, 3) Advertisement

Invisible Information Gathering

- ISP and Web sites logs are used:
  - Tracking and
  - Collecting evidence about criminals
- They include:
  - Details of our online activities
  - Where did we work? (In which machine?)
  - What did we do?
  - How long we stayed at a particular page?

Cookies

- Cookies are files a Web site stores on each visitor's computer
- It includes information about visitor's activities
- It has many benefits like:
- A web site content information about "shopping cart" of a visitor in a cookie
- On subsequent visit, the site retrieves information from the cookie

Cookies

- A site avoids having to ask a user to type the same information each time he or she visits.
- Another example:
- A web site named "you tube". This type of web site contains information about a persons choice in a cookie.
- For as subsequent visit this site recommend visitors according to their choice

Secondary Use of Information

☐ The ease of:

- Copying
- Storing
- Collecting
- Distributing
- Analyzing

Use of Computers and Computer networks	**Increase of *secondary use* of personal information**

Secondary Use of Information

- It is difficult for individuals to control their personal information if it is collected by one:
  - Business
  - Organization

for	▪ **Sharing with other** ▪ **Sold to others**

Secondary Use of Information

- Government agencies: For examples:
- Sales of Customer information:
  - To marketers
  - To other businesses
  - Use of information in various databases to deny someone a job
  - Use of numerous databases by the *Internet Revenue Service* to find people with high incomes

Secondary Use of Information

- Use of a supermarket's customer database to show alcohol purchases by a man

- *Computer matching* means combining and comparing information from different databases by using a personal social security number to match records

Secondary Use of Information

- Businesses use the technique to form customers' dossiers
- Government uses database for detecting fraud and enforcing law
- *Computer profiling* means using data in computer files to determine characteristics of people most likely to engage in certain behavior

Secondary Use of Information

- Businesses use profiling to find people who are likely customers for specific products and services.
- A few dozen federal agencies use computer profiling to identify people to watch– people who have committed no crime but might have a "propensity" to do so.
- Computer profiling and matching are the examples of secondary use of information.