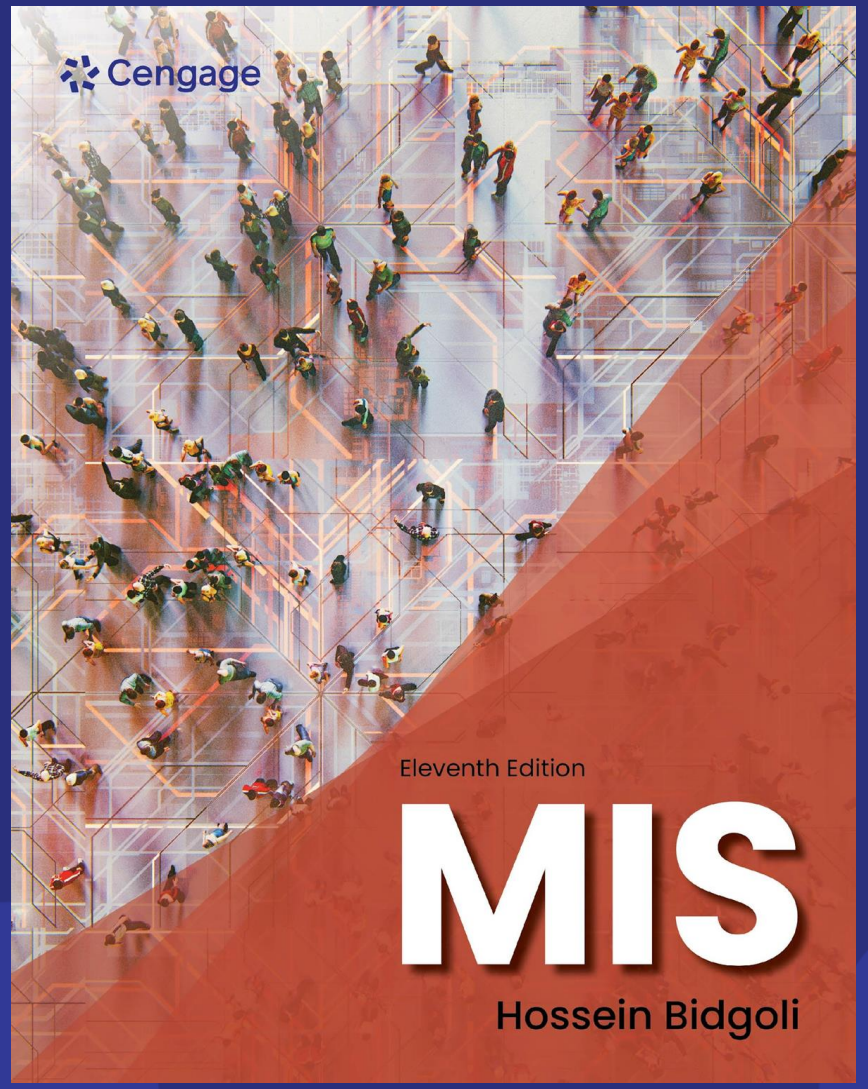

MIS, 11e

Module 4: Personal, Legal, Ethical, and Organizational Issues

Module Objectives

By the end of this module, you should be able to:

- 4.1 Discuss information privacy and methods for improving the privacy of information.
- 4.2 Explain the General Data Protection Regulation.
- 4.3 Explain the privacy issues of e-mail and data collection in a business setting.
- 4.4 Examine ethical issues and censorship in information technology.
- 4.5 Discuss the principles of intellectual property and issues related to the infringement of intellectual property.
- 4.6 Examine the impact of information technology on society: the digital divide, telecommuting, and health issues.
- 4.7 Describe green computing and the ways it can improve the quality of the environment.

Privacy Issues (1 of 3)

- **Ethical issues related to social media:**
  - **Fake News** – a story or hoax to misinform or deceive people.
    - Cheap fakes
    - Misinformation
    - Disinformation
  - **Deepfakes** – fake videos or audio recordings that look and sound just like the real thing.

Read the **Social Networking Sites and Privacy Issues Box** in the textbook.

- **Information about people is stored on various databases**

Discussion: Any data privacy concerns on this aspect?

Privacy Issues (2 of 3)

Three related concepts for **Web and network privacy**

- Acceptable use policy – Set of rules specifying legal and ethical use of a system and consequences of noncompliance
- Accountability – Issues involving both the user's and the organization's responsibilities and liabilities
- Nonrepudiation – Method for binding all the parties to a contract

Privacy Issues (3 of 3)

Guidelines to minimize invasion of privacy

- Use Web sites with privacy policies that are easy to find, read, and understand
- Limit access to personal information
- Ensure data's reliability and take precautions to prevent misuse of the data
- Ensure data collection has a stated purpose
- Must consent to use information for other reasons
- Must verify data accuracy and only collected what is needed.
- Records must be accurate, and users are able to edit or change
- Record-keeping systems should not be secret

General Data Protection Regulation

- Laws that protect European Union (EU) citizens' personal data

What about British Columbia of Canada?

Read:

- https://www.dataguidance.com/notes/british-columbia-data-protection-overview
- https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/the-personal-information-protection-and-electronic-documents-act-pipeda/r_o_p/prov-pipeda/

E-mail

Privacy Concerns

- Spam - unsolicited e-mail sent for advertising purposes
  - Sent in bulk using automated mailing software
  - Spammers sell their address lists
- Ease of access
  - Assume others will have access to your messages
  - Any e-mails sent on company-owned computers are the property of the organization

Data Collection on the Web (1 of 3)

- Online shopping in increasing because of convenience, choices, and lower prices.
- Some shoppers avoid online shopping because of
  - Online hackers
  - Selling of personal information to telemarketing firms
- Users' information can be combined with other information and technologies to produce new information

Data Collection on the Web (2 of 2)

Cookies - small text files with unique ID tags that are embedded in a Web browser and saved on the user's hard drive

- Used for welcoming new and returning users
- Used to remember information for ordering
- Helps Web sites customize pages for users
- A cookie manager can disable cookies, if needed.

Watch Video: https://www.youtube.com/watch?v=rdVPflECed8

Log files – a record of a user's actions on a Web site

- Generated by Web server software

Ethical Issues of Information Technologies

- Information technology offers opportunities for unethical behavior because its easy to collect and disseminate information
- Increase in cybercrime, cyber fraud, identity theft, and intellectual property theft
  - Nearly 15 million U.S. residents' identities stolen every year
  - One identity stolen every two seconds; average loss of $3,500.26
- Business identity theft: financial fraud, tax fraud, Web site defacement, and trademark ransom.

Discussion Activity 1-1

Review the following situation to determine where they fall within the ethical vs legal grid.

	Legal	Illegal
Ethical	I	II
Unethical	III	IV

1. You make two copies of a software package you just bought and sell one to a friend.
2. A supervisor fires a programmer who has intentionally spread viruses to the organization's network.

Discussion Activity 1-1 Debrief

1. You make two copies of a software package you just bought and sell one to a friend.

   Answer: Quadrant IV

   Explanation: It is illegal and unethical.

2. A supervisor fires a programmer who has intentionally spread viruses to the organization's network.

   Answer: Quadrant I

   Explanation: It is legal and ethical.

Digital citizenship – using information technology safely, ethically, and responsibly.

7 principles to good digital citizenship:

- Online etiquette
- Privacy protection
- Know how to stay safe online
- “Dos and don’ts” of information technology
- Protecting and respecting intellectual property
- Understanding one’s digital footprint
- Healthy usage patterns

Censorship

Two types of information on the Web:

- Public information - posted by an organization or public agency
  - Censored for public policy reasons (i.e., military secrets)
  - Censored if offensive to a political, religious, or cultural group
- Private information - posted by a person
  - Not censored because of constitutional freedom of expression

Restricting access to the Web

- Some Countries restrict or forbid their citizens' access to the Web
- Parents may restrict Web access for children using software
  - Examples: CyberPatrol, CYBERSitter, Net Nanny, and SafeSurf
  - Some Web browsers have built-in features to protect children

Intellectual Property (1 of 3)

Intellectual Property – a legal umbrella covering two categories of protections:

- Industrial Property: inventions, copyrights, trademarks, logos, industrial designs, etc.
- Copyright material: literary and artistic works

- Watch Video: https://www.youtube.com/watch?v=RQOJgEA5e1k&list=PL8dPuuaLjXtMwV2btpcij8S3YohW9gUGN&index=2

Intellectual Property (2 of 3)

Copyrights – protects tangible material and

Online materials (web pages and HTML code)

Computer graphics (printed or saved on a storage device)

Trademarks – protects product names and identifying marks (i.e., logos)

Trade secrets – protects ideas, information, and innovations

Patents – protects new processes

- Generates revenue through licensing
- Attracts funding for further research and development
- Keeps competitors from entering certain market segments

Intellectual Property (3 of 3)

- **Cybersquatting** (aka domain squatting)
  - Registering, selling, or using a domain name to profit from someone else's trademark
- **Typosquatting** (aka URL hijacking)
  - Relies on typographical errors made by Web users
    - Typing *goggle.com* instead of *google.com*

Social Divisions and the Digital Divide

- Digital divide: information-rich vs the information-poor
  - Many people still cannot afford computers
  - “Red-lining” – companies prioritize fiber-optic high-speed Internet within high-income communities.
  - Schools help with loaner programs providing portable computers to students

Knowledge Check Activity 4-2

Which of the following is an example of a patent?

a. Online video promotion

b. Nike brand

c. McDonald’s logo

d. Bluetooth

Knowledge Check Activity 4-2: Answer

Which of the following is an example of a patent?

Answer: Bluetooth

Patents protect new processes like an invention. Bluetooth was invented in 1994 by Jaap Haartsen. Bluetooth technology connects nearby electronic devices using low-power, ultra-high-frequency waves.

The Impact of Information Technology in the Workplace

- Increased consumers' purchasing power
  - Results in a stronger economy by reducing production costs
- Information technologies directly affect the nature of jobs
  - Telecommuting (or virtual work) allows people to work from home
  - "Job deskilling" – skilled labor is eliminated with high technology
  - "Job upgrading" – i.e., clerical work use word processing software
  - One skilled person can now do multiple jobs
  - **Any other examples?**

Read the Employee Monitoring box. How do you feel about it?

Information Technology and Health Issues (1 of 4)

- Increasing popularity of touchscreens
  - May result in stress-related injuries of the hands, arms, back, and eyes
  - Text neck: neck pain and damage caused from looking down frequently
- Major negative impacts:
  - Teen tendinitis
  - Stress
  - Sleep loss
  - Accidents
  - Increased anxiety
  - Cyberbullying
  - Risk of cancer

Information Technology and Health Issues (2 of 4)

- Health problems related to computer equipment
  - Vision problems
  - Musculoskeletal problems
  - Skin problems
  - Reproductive problems
  - Stress-related problems (headaches, depression)

Information Technology and Health Issues (3 of 4)

- Health/emotional well-being of children
  - Feel “hidden sadness” when parents spend too much time on smartphones
  - Children do not receive time or attention
- Five types of Internet addiction:
  - Cybersexual
  - Web compulsions
  - Cyber-relationships
  - -Gaming
  - -Information seeking

Information Technology and Health Issues (4 of 4)

- Distracted walking - walking while using a smartphone
  - 11,000 injuries a year in U.S. alone
  - 259 selfie deaths in a six-year period
- Recommendations to overcoming these technology addictions:
  - Admit there is a problem
  - Limit / schedule your usage
  - Socialize more
  - Change communication patterns

Green Computing

Green Computing – involves the design, manufacture, use, and disposal of information technology devices

- Promotes a sustainable environment; help to combat global warming
- Requires the cooperation of private and public sectors

Implementation approaches:

-Green design

-Green manufacturing

-Green use

-Green disposal

Ways to achieve green computing:

- Design products that last longer and are modular in design
- Design search engines and computing routines that are fast and energy-efficient
- Replace underutilized small servers with one large server; virtualization
- Use devices that consume less energy and are biodegradable
- Allow certain employees to work from home
- Conduct meetings over computer networks
- Use video conferencing and electronic meeting systems.
- Use a virtual world
- Use cloud computing
- Turn off idle PCs; recycle computer materials

Green Computing (3 of 3)

Ways to achieve green computing (continued):

Self Assessment

How much personal information do you feel is publicly available as a result of your Internet presence? Is it good or bad?

In what ways can you help improve your personal health as you use or work with information technology ?

How can you personally contribute to the effort of green computing in your everyday life?

Summary

Now that the lesson has ended, you should be able to:

- 4.1 Discuss information privacy and methods for improving the privacy of information.
- 4.2 Explain the General Data Protection Regulation.
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