ILLINOIS TECH | College of Computing

ITMM 485 / 585
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Legal and Ethical Issues in Information Technology

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Ch5: PRIVACY AND CYBERSPACE
P1: What is Privacy? How does Cybertech impact Privacy?

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Chapter Learning Objectives:

Upon completion of this lesson the students should be able to:

- Describe and discuss privacy issues driven by data merging, matching and mining
- Explain privacy concerns arising from use of search engines, social media, and online public records
- Describe and discuss the use of Privacy Enhancement Tools
- Recall U.S. and European Union privacy laws and describe their application and use

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Module Learning Objectives:

Upon completion of this lesson the students should be able to:

- Define Privacy and the three common views of Privacy
- Discuss and elaborate on the role of cybertechnology on Privacy.

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Privacy and Cybertechnology

- **Privacy issues involving cybertechnology affect all of us, regardless of whether we have ever owned or even used a networked computer/device.**
- **Consider the amount of personal information about us that can be acquired from our commercial transactions in a bank or in a (physical) store.**

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Privacy and Cybertechnology (Continued)

- **Also, consider that closed circuit television cameras (CCTVs) located in public places and in shopping malls record many of your daily movements as you casually stroll through those environments.**
- **Current Web-based applications such as Google Street View (a feature of Google Earth and Google Maps) make use of satellite cameras and global positioning system (GPS) software that enable users to zoom in on your house or place of employment and potentially record information about you.**

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Privacy and Cybertechnology…

- Even if you use the Internet solely for recreational purposes, your privacy is threatened.
- Personal data, including data about our Web-browsing interests, can now easily be acquired by organizations whose need for this information is not always clear.
- A user's personal data acquired via his/her online activities can be sold to third parties.

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Privacy and Cybertechnology (Continued)

- Privacy concerns now affect many aspects of our day-to-day lives – from commerce to healthcare to work.
- So, we have categories such as:
- consumer privacy,
- medical/healthcare privacy,
- employee/workplace privacy.

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Privacy and Cybertechnology (Continued)

- Are any privacy issues unique to cybertechnology?
- Privacy concerns have been exacerbated by cybertechnology in at least four ways, i.e., by the:

1. *amount* of personal information that can now be collected;
2. *speed* at which personal information can now be transferred and exchanged;
3. *duration* of time in which personal information can now be retained;
4. *kind* of personal information (such as transactional information) that can be acquired.

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What is Personal Privacy

- **Privacy is a concept that is difficult to define.**
  - We sometimes speak of an individual's privacy as something that can be:
    - lost,
    - diminished,
    - intruded upon,
    - invaded,
    - violated,
    - breached.

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What is Privacy (continued)?

- Privacy is sometimes viewed in terms of something that can be *diminished* (i.e., as a repository of personal information that can be eroded gradually) or *lost* altogether.
- Privacy is sometimes also construed in terms of the metaphor of a (spatial) zone that can be *intruded* upon or *invaded*.
- Privacy is also sometimes analyzed in terms of concerns affecting the confidentiality of information, which can be *breached* or *violated*.

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Classic Theories of Privacy

- Traditional (or classic) privacy theories have tended to view privacy in connection with notions such as:
- non-intrusion (into one's space),
- non-interference (with one's decisions),
- having control over/restricting access to one's personal information.

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Non-intrusion Theories of Privacy

- Non-intrusion theories view privacy as either:
- being let alone,
- being free from government intrusion (into one's physical space).
- This view is also sometimes referred to as *accessibility privacy* (DeCew, 1997).

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Non-intrusion Theories of Privacy (Continued)

- The rationale for non-intrusion theories can be found in both:
- the Fourth Amendment to the U.S. Constitution (i.e., search and seizure re one's papers, affects, and so forth);
- a seminal article, titled "The Right to Privacy," by Warren and Brandeis in the *Harvard Law Review* (1890).

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Non-interference Theories of Privacy

- Non-interference theories view privacy in terms of freedom from interference in making decisions.
- This perspective emerged in the 1960s, following the *Griswold v. Connecticut* (U.S. Supreme Court) case in 1965.
- This view of privacy is also sometimes referred to as *decisional privacy*.

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The Control and Limited Access Theories of Informational Privacy

- *Informational privacy* is concerned with protecting personal information in computer databases.
- Most people wish to have some *control* over their personal information.
- In some cases, "privacy zones" have been set up either to restrict or limit *access* to one's personal data.

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Table 5-1: Three Views of Privacy

Accessibility Privacy	Privacy is defined in terms of one's physically "being let alone," or freedom from intrusion into one's physical space.
Decisional Privacy	Privacy is defined in terms of freedom from interference in one's choices and decisions.
Informational Privacy	Privacy is defined as control over the flow of one's personal information, including the transfer and exchange of that information.

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A Comprehensive Account of Privacy

- Moor (2004) has articulated a privacy theory that incorporates key elements of the three classic theories:

a) accessibility privacy (non-intrusion),
b) decisional privacy (non-interference),
c) informational privacy (controlling/restricting access to one's personal information).

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Moor's Comprehensive Theory of Privacy

- **According to Moor:**

  "an individual has privacy in a *situation* if in that particular situation the individual is *protected from intrusion, interference, and information access* by others." [italics added]

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Moor's Theory of Privacy (continued)

- **A key element in Moor's definition is his notion of a *situation*, which can apply to a range of contexts or "zones."**
- **For Moor, a situation can be an "activity," a "relationship," or the "storage and access of information" in a computer or on the Internet.**

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Moor's Privacy Theory (continued)

- **Moor also distinguishes between "naturally private" and "normatively private" situations required for having:**

a) **natural privacy (in a descriptive sense);**

b) **a right to privacy (in a normative sense).**

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Applying Moor's Natural vs. Normative Privacy Distinction

- **Using Moor's natural/normative privacy distinction, we can further differentiate between a:**
- ***loss of privacy*,**
- ***violation of privacy*.**

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Descriptively Private vs. Normatively Private Situations

- **Review Scenario 5-2 (in the textbook), where Tom walks into the computer lab (when no one else is around) and sees Mary in the lab.**
- **In this natural/descriptively private situation, Mary's privacy is lost but not violated.**
- **Review Scenario 5-3, where Tom peeps through the keyhole of Mary's apartment door and sees Mary typing at her computer.**
- **In this normatively private situation, Mary's privacy is not only lost but is also violated.**

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Nissenabum's Theory of Privacy as "Contextual Integrity"

- **"Privacy as contextual integrity" framework requires that the processes used in gathering and disseminating information are**

a) **"appropriate to a particular context"**

b) **comply with norms that govern the flow of personal information in a given context.**

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Nissenbaum's Theory (Continued)

- **Nissenbaum (2004a, 2010) refers to these two types of informational norms as:**
- **norms of appropriateness,**
- **norms of distribution.**

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Nissenbaum's Theory (Continued)

- ***Norms of appropriateness*** **determine whether a given type of personal information is either appropriate or inappropriate to divulge within a particular** ***context*****.**
- ***Norms of distribution*** **restrict or limit the flow of information within and across** ***contexts*****.**
- **When either norm is "breached," a violation of privacy occurs.**
- **Conversely, the** ***contextual integrity*** **of the flow of personal information is maintained when both kinds of norms are "respected"**

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Nissenbaum's Theory (Continued)

- **Like Moor's privacy model, Nissenbaum's theory demonstrates why we must always focus on the** ***context in which information flows, not the nature of the information itself*****, in determining whether normative protection is needed.**
- **Review Scenario 5-4 (in the textbook) on Professor Robert's seminar, which illustrates the notion of "contextual integrity."**

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