

MIS 211 – Computer Ethics
2nd Semester, AY 2024-2025

Ethical and Social Issues in Information Systems

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- Analyze the relationships among ethical, social, and political issues that are raised by information systems.
- Identify the main moral dimensions of an information society and specific principles of conduct that can be used to guide ethical decisions.

Does Location Tracking Threaten Privacy



- **Problem:** Utilizing new technology, implementing better security.
- **Solutions:** Adjust activities to allow location monitoring and deploy GPS tracking device to provide location monitoring.
- **GPS device and location tracking database** increases safety but also raises privacy concerns.
- Demonstrates IT's role in tracking systems that augment security.
- Illustrates digital technology as a double-edge sword that has many benefits but also presents ethical dilemmas.

A Model for Thinking About Ethical, Social, and Political Issues

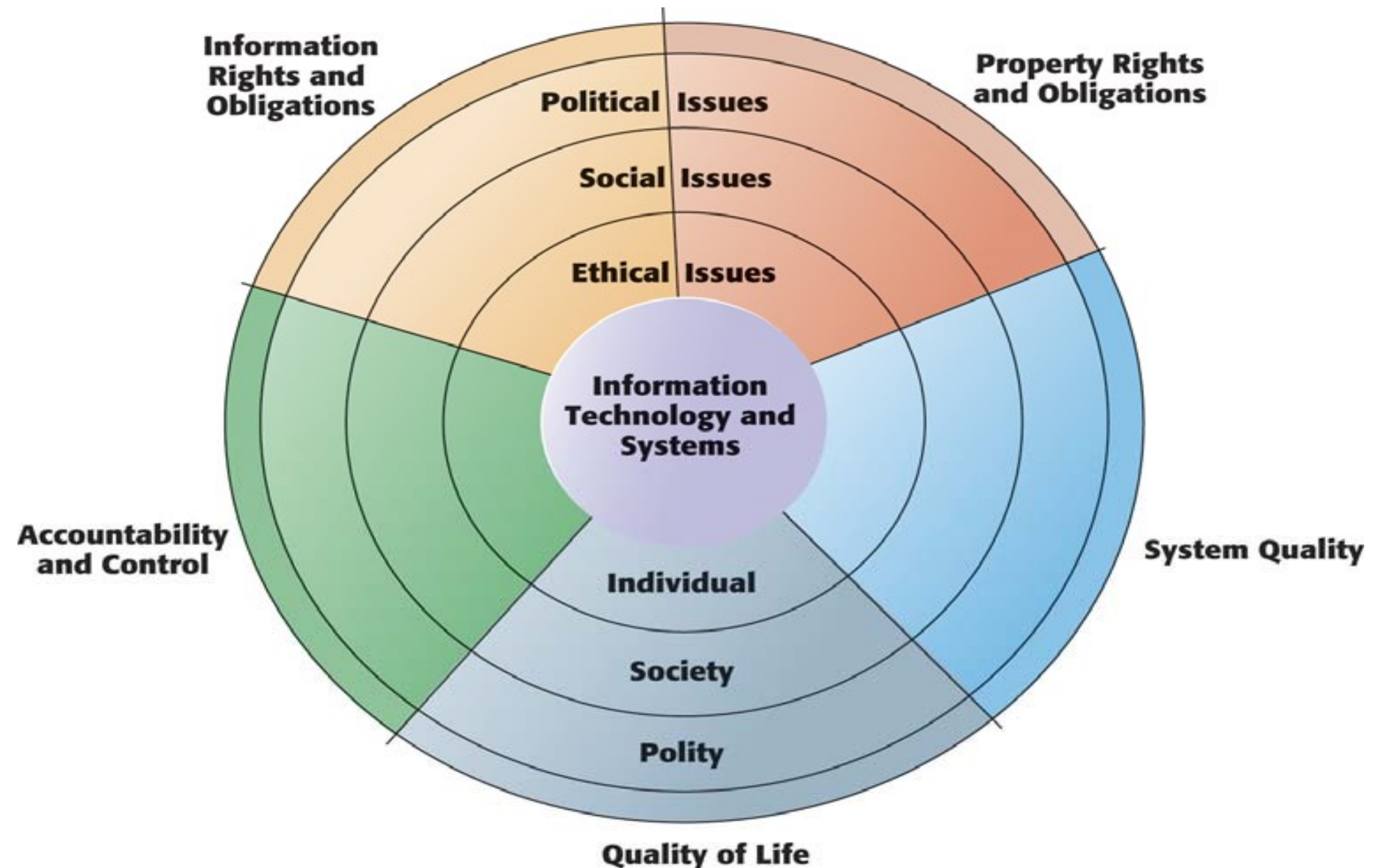


- Ethical, social, and political issues are interconnected
- Ripples from new information technology affect all parties in contact
- Old rules may not apply to new developments

The Relationship Among Ethical, Social, 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.



Five Moral Dimensions of the Information Age



- Information rights and obligations
- Property rights and obligations
- Accountability and control
- System quality
- Quality of life

Key Technology Trends That Raise Ethical Issues

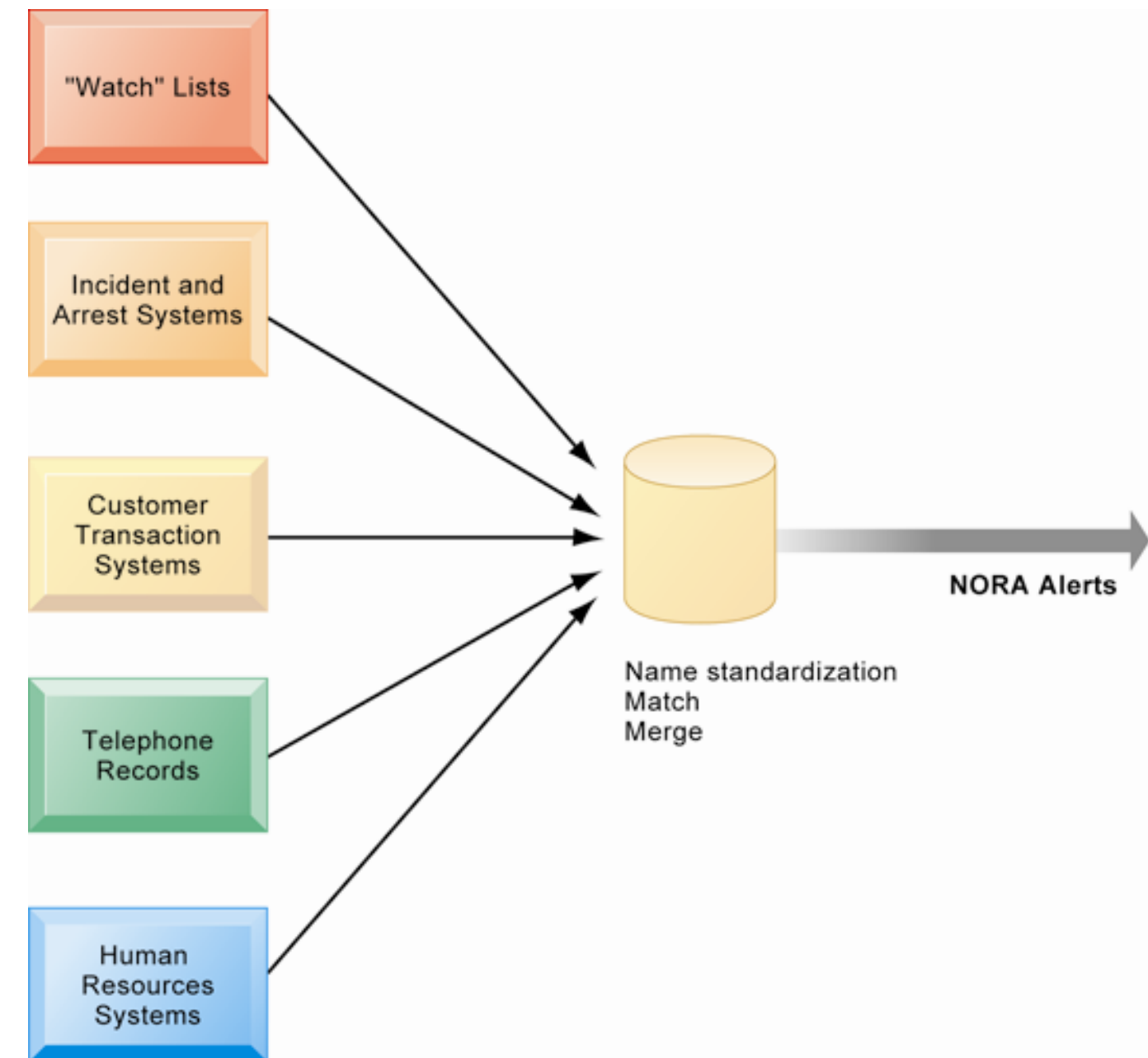


- Doubling of computer power
- Rapidly declining data storage costs
- Advances in data analysis techniques
- Networking advances and the Internet
- Profiling
- Nonobvious relationship awareness (NORA)

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.



The Moral Dimensions of Information Systems



- Information rights: privacy and freedom in the Internet age
 - Privacy:
 - Claim of individuals to be left alone, free from surveillance or interference from other individuals, organizations, or state; claim to be able to control information about yourself
 - In the Philippines, privacy protected by:
 - The 1987 Constitution (unreasonable search and seizure, freedom of speech)
 - The Civil Code of the Philippines
 - Fourth Amendment Additional federal statutes (e.g., Privacy Act of 1974)

Do you believe that there are sufficient
protections for privacy in law?

Can you control the use of their personal information on the Internet?

- Professional codes of conduct
 - Promulgated by associations of professionals
 - Examples: ACM, IEEE, AAAI
 - Promises by professions to regulate themselves in the general interest of society

- Real-world ethical dilemmas
 - One set of interests pitted against another
 - Example: right of company to maximize productivity of workers versus workers right to use Internet for short personal tasks

Relevant IT Laws in the Philippines



- R.A. 8792 E-Commerce Act of 2000
- R.A. 10173 – Data Privacy Act of 2012
- R.A. 10175 – Cybercrime Prevention Act

Property Rights: Intellectual Property



- Intellectual property: intangible property of any kind created by individuals or corporations
- Three main ways that intellectual property is protected:
 - **Trade secret:** intellectual work or product belonging to business, not in the public domain
 - **Copyright:** legal protection extended to the owner of the rights in an original work. “Original work” refers to intellectual creation in the literary, scientific and artistic domain
 - **Patents:** grants creator of invention an exclusive monopoly on ideas behind invention for 20 years

The Moral Dimensions of Information Systems



- Challenges to intellectual property rights
 - Digital media different from physical media (e.g., books)
 - Ease of replication
 - Ease of transmission (networks, Internet)
 - Difficulty in classifying software
 - Compactness
 - Difficulties in establishing uniqueness

- Accountability, liability, control
 - Computer-related liability problems
 - If software fails, who is responsible?
 - If seen as part of machine that injures or harms, software producer and operator may be liable.
 - If seen as similar to book, difficult to hold author/publisher responsible.
 - What should liability be if software seen as service? Would this be similar to telephone systems not being liable for transmitted messages?

The Moral Dimensions of Information Systems



- System quality: Data quality and system errors
 - What is an acceptable, technologically feasible level of system quality?
 - Flawless software is economically unfeasible.
 - Three principal sources of poor system performance:
 - Software bugs, errors
 - Hardware or facility failures
 - Poor input data quality (most common source of business system failure)

- Computer crime and abuse
 - Computer crime: commission of illegal acts through use of computer or against a computer system—computer may be object or instrument of crime
 - Computer abuse: unethical acts, not illegal
 - Spam: high costs for businesses in dealing with spam
- Employment:
 - Reengineering work resulting in lost jobs
- Equity and access—the digital divide:
 - Certain ethnic and income groups in the United States less likely to have computers or Internet access

- **Scenario 1 Google in China:** “ Don’t be evil”

Google(created in 1998 by Serge Brin and Larry Page) is the most popular search engine and is famous for its motto “ Don’t be evil”

However, Google was criticized for filtering particular content in some countries

France: Google filters out anti-Semitic websites to comply with national laws against hate speech

- ❑ The most important controversy was about Google's entry into China where Google accepted, upon the government's request to filter all references to Taiwan, Tibet...
- ❑ As a response, Google said that "don't be evil" also requires "don't be illegal" → respect the laws of the country of operation

Did Google do anything wrong?

Is there an ethical difference between filtering hate speech in France and filtering political speech in China?

Scenario 3: Turnitin Dot Com

- A professor at a university decides to run the papers presented by his students through a plagiarism detection system Turnitin.com to compare the papers to the content of the Web and to a database collected by the company

Did he do anything wrong?

How will widespread use of plagiarism detection system affect university environment?

Anonymity on the internet? Not accurate:

- ❑ Monitoring of communications on the internet by service providers
- ❑ Possibility to trace communications by parties that whether have a legal right or the technology to access the information

2 distinctive identity conditions in internet communication

- ❑ Mediation: Internet is mediated through a vast sociotechnical system
- ❑ Variability of the range of available identity conditions

A person's physical appearance, voice and facial expressions could be used to identify a person in the offline world but not on the internet

So, difference between online and offline identity conditions

- A significant aspect of Internet communication
- Electronic information is easy to copy without:
 - Any loss of quality or value in the reproduction
 - No evidence that electronic information was copied
dangerous implications for property rights and crimes

Instrumentation of friendship in IT-configured societies through social networking sites

- Can true friendships be formed online?

A study has indicated that friendships cannot be created online but existing offline ones can be maintained online

- Write a paper that examines an ethical issue raised in a news article with respect to the design or usage of a computer technology. See course site for the details.
- Due Date: February 1, 2025

Next Meeting (February 1, 2025)



- Professional Ethics and Responsibilities
- Intellectual Property
- Governing IT Laws in the Philippines

Thank you!

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