

Ethics in Information Technology, Second Edition

Chapter 2 *Ethics for IT Professionals and IT Users*

Objectives

- What key characteristics distinguish a professional from other kinds of workers, and what is the role of an IT professional?
- What relationships must an IT professional manage, and what key ethical issues can arise in each?
- How do codes of ethics, professional organizations, certification, and licensing affect the ethical behavior of IT professionals?

Objectives (continued)

- What are the key tenets of four different codes of ethics that provide guidance for IT professionals?
- What are the common ethical issues that face IT users?
- What approaches can support the ethical practices of IT users?

IT Professionals

- Profession is a calling that requires
 - Specialized knowledge
 - Long and intensive academic preparation

Are IT Workers Professionals?

- Partial list of IT specialists
 - Programmers
 - Systems analysts
 - Software engineers
 - Database administrators
 - Local area network (LAN) administrators
 - Chief information officers (CIOs)

Are IT Workers Professionals? (continued)

- Legal perspective
 - IT workers are not recognized as professionals
 - Not licensed
 - IT workers are not liable for malpractice

Professional Relationships That Must Be Managed

- IT professionals have many different relationships with:
 - Employers
 - Clients
 - Suppliers
 - Other professionals
 - IT users
 - Society at large

Relationships Between IT Professionals and Employers

- IT professionals must set an example and enforce policies regarding the ethical use of IT
- Software piracy is the act of illegally making copies of software or enabling others to access software to which they are not entitled
- Software piracy is an area in which IT professionals can be tempted to violate laws and policies
- The Business Software Alliance (BSA) is a trade group that represents the world's largest software and hardware manufacturers
 - Its mission is to stop the unauthorized copying of software produced by its members

Members of Business Software Alliance (as of July 2005)

TABLE 2-2 Members of Business Software Alliance (as of July 2005)

Adobe	Apple	Autodesk
Avid	Bentley Systems	Borland
Cadence	Cisco Systems	CNC Software/Mastercam
Dell	Entrust	HP (Hewlett-Packard)
IBM	Intel	Internet Security Systems
Macromedia	McAfee, Inc.	Microsoft
PTC	RSA Security	SAP
SolidWorks	Sybase	Symantec
The Mathworks	UGS Corp.	VERITAS Software

Relationships Between IT Professionals and Employers (continued)

- Trade secret
 - Information used in business
 - Generally unknown to the public
 - Company has taken strong measures to keep confidential
- Whistle-blowing
 - Attracts attention to a negligent, illegal, unethical, abusive, or dangerous act that threatens the public interest

Relationships Between IT Professionals and Clients

- IT professional provides
 - Hardware, software, or services at a certain cost and within a given time frame
- Client provides
 - Compensation
 - Access to key contacts
 - Work space
- Relationship is usually documented in contractual terms

Relationships Between IT Professionals and Clients (continued)

- Ethical problems arise if a company recommends its own products and services to remedy problems they have detected
 - A company is unable to provide full and accurate reporting of a project's status

Legal Overview: Fraud, Misrepresentation, and Breach of Contract

- Fraud
 - Crime of obtaining goods, services, or property through deception or trickery
 - Fraud is proven in court
- Breach of contract
 - One party fails to meet the terms of a contract

Legal Overview: Fraud, Misrepresentation, and Breach of Contract (continued)

- IT projects are joint efforts in which vendors and customers work together
 - Difficult to assign blame

Relationships Between IT Professionals and Suppliers

- Develop good relationships with suppliers
 - Deal fairly with them
 - Do not make unreasonable demands
- Bribery
 - Providing money, property, or favors to someone in business or government to obtain a business advantage
 - U.S. Foreign Corrupt Practices Act (FCPA) makes it a crime to bribe a foreign official, a foreign political party official, or a candidate for foreign political office

Relationships Between IT Professionals and Suppliers (continued)

- Bribery
 - At what point does a gift become a bribe?
 - No gift should be hidden
 - Perceptions of donor and recipient can differ

Distinguishing Between a Bribe and a Gift

TABLE 2-3 Distinguishing between a bribe and a gift

Bribes	Gifts
Are made in secret, as they are neither legally nor morally acceptable	Are made openly and publicly as a gesture of friendship or goodwill
Are often made indirectly through a third party	Are made directly from donor to recipient
Encourage an obligation for the recipient to act favorably toward the donor	Come with no expectation of a future favor for the donor

Relationships Between IT Professionals and Other Professionals

- Professionals owe each other adherence to a profession's code of conduct
- Ethical problems between members of the IT profession
 - Résumé inflation
 - Inappropriate sharing of corporate information

Relationships Between IT Professionals and IT Users

- IT user is a person for whom a hardware or software product is designed
- IT professionals' duty
 - Understand users' needs and capabilities
 - Deliver products and services that best meet those needs
 - Establish an environment that supports ethical behavior by users

Relationships Between IT Professionals and Society

- Actions of an IT professional can affect society

The Ethical Behavior of IT Professionals

- Corporations are taking actions to ensure good business ethics among employees

Professional Codes of Ethics

- A professional code of ethics states the principles and core values that are essential to the work of a particular occupational group
- Main parts:
 - Outlines what the professional organization aspires to become
 - Lists rules and principles by which members of the organization are expected to abide

Professional Codes of Ethics (continued)

- Benefits for individual, profession, and society
 - Improves ethical decision making
 - Promotes high standards of practice and ethical behavior
 - Enhances trust and respect from the general public
 - Provides an evaluation benchmark

Professional Organizations

- No universal code of ethics for IT professionals
- No single, formal organization of IT professionals has emerged as preeminent
- Most prominent organizations include:
 - Association for Computing Machinery (ACM)
 - Association of Information Technology Professionals (AITP)
 - Computer Society of the Institute of Electrical and Electronics Engineers (IEEE-CS)
 - Project Management Institute (PMI)

Certification

- Indicates a professional possesses a particular set of skills, knowledge, or abilities in the opinion of a certifying organization
- Can also apply to products
- Generally voluntary
- Carries no requirement to adhere to a code of ethics

Certification (continued)

- Vendor certifications
 - Some certifications substantially improve IT workers' salaries and career prospects
 - Relevant for narrowly defined roles
 - Or certain aspects of broader roles
 - Require passing a written exam
 - Workers are commonly recertified as newer technologies become available

Certification (continued)

- Industry association certifications
 - Require a certain level of experience and a broader perspective than vendor certifications
 - Lag in developing tests that cover new technologies

Government Licensing

- Generally administered at the state level in the United States
- Case for licensing IT professionals
 - Encourage IT professionals to follow the highest standards of the profession
 - Practice a code of ethics
 - Violators would be punished

Government Licensing (continued)

- Issues associated with government licensing of IT professionals
 - There are few international or national licensing programs for IT professionals
 - No universally accepted core body of knowledge
 - Unclear who should manage content and administration of licensing exams
 - No administrative body to accredit professional education programs
 - No administrative body to assess and ensure competence of individual professionals

IT Professional Malpractice

- Negligence has been defined as not doing something that a reasonable man would do, or doing something that a reasonable man would not do
- Duty of care refers to the obligation to protect people against any unreasonable harm or risk
- Courts consistently reject attempts to sue individual parties for computer-related malpractice

IT Users

- Employees' ethical use of IT is an area of growing concern

Common Ethical Issues for IT Users

- Software piracy
- Inappropriate use of computing resources
- Inappropriate sharing of information
 - Private data
 - Confidential information

Supporting the Ethical Practices of IT Users

- Policies that protect against abuses:
 - Establish boundaries of acceptable and unacceptable behavior
 - Enable management to punish violators
- Policy components include:
 - Defining and limiting the appropriate use of IT resources
 - Establishing guidelines for use of company software
 - Structuring information systems to protect data and information
 - Installing and maintaining a corporate firewall

Manager's Checklist of Items to Consider when Establishing an IT Usage Policy

TABLE 2-4 Manager's checklist of items to consider when establishing an IT usage policy

Questions	Yes	No
Is there a statement that explains the need for an IT usage policy?	___	___
Does the policy provide a clear set of guiding principles for ethical decision making?	___	___
Is it clear how the policy applies to the following types of workers?		
Employees	___	___
Part-time workers	___	___
Temps	___	___
Contractors	___	___
Does the policy address the following issues?		
Protection of the data privacy rights of employees, customers, suppliers, and others	___	___
Limits and control of access to proprietary company data and information	___	___
The use of unauthorized or pirated software	___	___
Employee monitoring, including e-mail, wiretapping and eavesdropping on phone conversations, computer monitoring, and surveillance by video	___	___
Respect of the intellectual rights of others, including trade secrets, copyrights, patents, and trademarks	___	___
Inappropriate use of IT resources, such as Web surfing, e-mailing, and other use of computers for purposes other than business	___	___
The need to protect the security of IT resources through adherence to good security practices, such as not sharing user IDs and passwords, use of "hard-to-guess" passwords, and frequent changing of passwords	___	___
The use of the computer to intimidate, harass, or insult others through abusive language in e-mails and by other means	___	___
Are disciplinary actions defined for IT-related abuses?	___	___
Is there a process for communicating the policy to employees?	___	___
Is there a plan to provide effective, ongoing training relative to the policy?	___	___
Has a corporate firewall been implemented?	___	___
Is the corporate firewall maintained?	___	___

Summary

- A professional from a legal standpoint
 - Has passed the state licensing requirements
 - Has earned the right to practice there
- IT professionals have many different relationships
 - Each with its own set of ethical issues and potential problems
- Professional code of ethics
 - States the principles and core values essential to the work of an occupational group

Summary (continued)

- Licensing and certification of IT professionals
 - Many people feel that certification will increase the reliability and effectiveness of information systems
 - Raises many issues
- IT-related professional organizations have developed a code of ethics
- IT usage policy defines appropriate and inappropriate IT user behavior