

# Ethics in Information Technology, Fourth Edition

## Chapter 2

### Ethics for IT Workers and IT Users

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اصول اخلاقی در فناوری اطلاعات - ویرایش چهارم (جورج دبلیو رینالدز)

× درس اخلاق حرفه‌ای در فناوری اطلاعات

- مدرس : منصور روستازاده

× فصل دوم

- اصول اخلاقی کارکنان و کاربران فناوری اطلاعات

× هفته ششم

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## Government Licensing

- License is a government-issued permission to engage in an activity or operate a business
- Generally administered at the state level in the United States
- Often requires that recipient pass a test
- Some professionals must be licensed – doctors, lawyers, CPAs, medical and day care providers, engineers
- One goal: protect public safety

### مجوزدهی دولتی

- × لیسانس یک مجوز دولتی است جهت شرکت کردن در یک فعالیت یا راه اندازی یک کسب و کار
- × دولت در ایالات متحده بطور کلی در سطح دولت مدیریت می شود.
- × درخواست کننده مجوز اغلب مستلزم آن است که در یک آزمون قبول شود.
- × برخی حرفه ای ها باید مجوز داشته باشند :
- مانند پزشکان، وکلا، حسابداران رسمی، ارائه دهندگان خدمات پزشکی و مراقبتی و مهندسين
- × یکی از اهداف آن می تواند حفظ امنیت عمومی باشد.

## Government Licensing (cont'd.)

- Case for licensing IT workers
  - Encourages following highest standards of profession
  - Encourages practicing a code of ethics
  - Violators would be punished
- Without licensing, there are no requirements for heightened care and no concept of professional malpractice

### مجوز دهی دولتی (ادامه)

- × مورد حقوقی برای مجوزدهی کارکنان فناوری اطلاعات
  - تشویقی است برای پیروی از بالاترین استانداردهای حرفه ای
  - تشویقی است برای عمل به قوانین اخلاقی
  - متخلفین باید مجازات شوند.
- × بدون صدور مجوز، هیچ الزامی برای مراقبت های بالا و هیچ مفهومی از قصور حرفه ای وجود ندارد

## Government Licensing (cont'd.)

- Issues associated with government licensing of IT workers
  - There are few 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 workers

### مجوزدهی دولتی

- × مسائل مربوط به صدور مجوز دولتی کارکنان فناوری اطلاعات
  - چند برنامه صدور مجوز برای حرفه ای های فناوری اطلاعات وجود دارد.
  - هیچ بدنه اصلی از دانش که بطور جهانی پذیرفته شده باشد وجود ندارد.
  - بدنه اصلی دانش برای هر حرفه شامل مجموعه ای توافق شده ای از مهارتها و توانائیهاست که همه حرفه ای های دارای مجوز، باید داشته باشند.
  - هیچ استاندارد پذیرفته شده جهانی برای برنامه ریزان مجوزدهی کارکنان فناوری اطلاعات وجود ندارد.
  - روشن نیست که چه کسی باید کنترل محتوا و برگزاری امتحان های مجوز دهی را بر عهده داشته باشد.
  - امتحان های مجوز دهی چگونه طراحی می شوند؟
  - چه کسی مسئول طراحی و برگزاری امتحان خواهد بود؟
  - آیا فردی که در یک امتحان مجوزدهی استانی قبول می شود می تواند در استان یا کشور دیگری فعالیت کند؟
  - هیچ نهاد اجرائی برای رسمی کردن برنامه های آموزش های حرفه ای وجود ندارد.
  - هیچ نهاد اجرائی برای ارزیابی و حصول اطمینان از صلاحیت کارکنان فناوری اطلاعات وجود ندارد.

## IT Professional Malpractice

- Negligence: not doing something that a reasonable person would do, or doing something that a reasonable person would not do
- Duty of care: obligation to protect people against any unreasonable harm or risk
  - Reasonable person standard
  - Reasonable professional standard
- Professional malpractice: professionals who breach the duty of care are liable for injuries that their negligence causes

### قصور حرفه ای در فناوری اطلاعات

- × مسامحه: عدم انجام کاری که یک فرد منطقی انجام می دهد، یا انجام کاری که یک فرد منطقی انجام نمی دهد(سهل انگاری)
- × وظیفه ی مراقب بودن: تعهد به حفاظت از افراد در مقابل هرگونه آسیب یا خطرات نامعقول و غیر منطقی. (تعهد به ملاحظه کاری و دوری از سهل انگاری)
  - استاندارد فرد معقول
  - استاندارد حرفه ای معقول
- × قصور حرفه ای: حرفه ای هائی که از وظیفه مراقب بودن تخطی می کنندمسئول آسیب ها و خسارت هائی هستند که ناشی از سهل انگاری آنهاست.
- × تخطی از وظیفه ی مراقب بودن: عدم انجام کاری است که یک فرد منطقی در شرایط یکسان انجام می دهد.

## IT Users

- Employees' ethical use of IT is an area of growing concern because of increased access to:
  - Personal computers
  - Corporate information systems and data
  - The Internet

### کاربران فناوری اطلاعات

- × استفاده کارمندان از فناوری اطلاعات یک سطح نگرانی فزاینده ای به دلایل افزایش دسترسی کارمندان به مواردی مانند موارد زیر بوجود آورده است:
- کامپیوترهای شخصی
  - داده ها و سیستمهای اطلاعاتی شرکت
  - اینترنت

## Common Ethical Issues for IT Users

- Software piracy
- Inappropriate use of computing resources
  - Erodes productivity and wastes time
  - Could lead to lawsuits
- Inappropriate sharing of information, including:
  - Every organization stores vast amounts of private or confidential data
    - Private data (employees and customers)
    - Confidential information (company and operations)

## Supporting the Ethical Practices of IT Users

- Policies that protect against abuses:
  - Set forth general rights and responsibilities of users
  - Create boundaries of acceptable behavior
  - Enable management to punish violators
- Policy components include:
  - Establishing guidelines for use of company software
  - Defining appropriate use of IT resources
  - Structuring information systems to protect data and information
  - Installing and maintaining a corporate firewall



## Supporting the Ethical Practices of IT Users (cont'd.)

TABLE 2-5 Manager's checklist for establishing an IT usage policy

Question	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? <ul style="list-style-type: none"><li>• Employees</li><li>• Part-time workers</li><li>• Temps</li><li>• Contractors</li></ul>		

Does the policy address the following issues?

- Protection of the data privacy rights of employees, customers, suppliers, and others
- Control of access to proprietary company data and information
- Use of unauthorized or pirated software
- Employee monitoring, including email, 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, personal emailing, 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, using “hard-to-guess” passwords, and frequently changing passwords
- The use of the computer to intimidate, harass, or insult others through abusive language in emails 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?

Source Line: Course Technology/Cengage Learning.

## Compliance

- To be in accordance with established policies, guidelines, specifications, and legislation
  - Sarbanes-Oxley – established requirements for internal controls
  - HIPAA – ensures security and privacy of employee healthcare data
  - Failure to be in conformance can lead to criminal or civil penalties and also lawsuits

## Compliance (cont'd.)

- Major challenge to comply with multiple government and industry regulations that are sometimes in conflict
- To meet this challenge:
  - Implement software to track and record compliance actions
  - Hire management consultants for advice and training
  - Create Chief Compliance Officer position

## Compliance (cont'd.)

- Audit committee is subset of the board of directors, with oversight for the following activities:
  - Quality and integrity of accounting and reporting practices and controls
  - Compliance with legal and regulatory requirements
  - Qualifications, independence, and performance of organization's independent auditor
  - Performance of company's internal audit team

## Compliance (cont'd.)

- Internal audit committee responsibilities:
  - Determine that internal systems and controls are adequate and effective
  - Verify existence of company assets and maintain proper safeguards over their protection
  - Measure the organization's compliance with its own policies and procedures
  - Insure that institutional policies and procedures, appropriate laws, and good practices are followed
  - Evaluate adequacy and reliability of information available for management decision making

## Summary

- Professionals
  - Require advanced training and experience
  - Must exercise discretion and judgment in their work
  - Their work cannot be standardized
- From a legal standpoint, a professional:
  - Has passed the state licensing requirements
  - Has earned the right to practice in a state(s)
- IT professionals have many different relationships
  - Each with its own ethical issues and potential problems

## Summary (cont'd.)

- Professional code of ethics
  - States the principles and core values essential to the work of an occupational group
  - Serves as a guideline for ethical decision making
  - Promotes high standards of practice and behavior
  - Enhances trust and respect from the general public
  - Provides an evaluation benchmark
- Licensing and certification of IT professionals
  - Would increase the reliability and effectiveness of information systems
  - Raises many issues



## Summary (cont'd.)

- IT-related professional organizations have developed their code of ethics that:
  - Outlines what the organization aspires to become
  - Lists rules and principles for members
  - Includes a commitment to continuing education for those who practice the profession
- Audit committee and internal audit team have a major role in ensuring that both the IT organization and IT users are in compliance with guidelines and various legal and regulatory practices