Introduction to

Ethics and Legal

Issues

# Ethical vs. Legal Issues

Q: What’s the difference between a legal issue and an ethical issue?

* How do you determine which it is?
* Should you care which it is?
* What percentage of your time would you guess that you will spend dealing with ethical or legal issues?

# Ethical vs. Legal Issues

* Legal Issues : Determination is made by others
* Ethical Issues: You determine your choice of action

The law doesn’t make it right

Being right doesn’t make it legal

# Ethical Issues

1. pertaining to or dealing with morals or the principles of morality; pertaining to right and wrong in conduct.
2. in accordance with the rules or standards for right conduct or practice, esp., the standards of a profession.

Examples:

Should companies collect and/or sell customer data?

Should IT specialists monitor and report employee computer use?

# Ethical Issues (2)

**Lets Consider our Views on Ethical Behavior**

* In every job situation, we are all eventually faced with an ethical dilemma
* How will you react? How will you determine what the “right” course of action is? What are you willing to risk to do the “right thing”?
* How far are you willing to bend? And when?

# Ethical Issues (3)

**Are Your Ethics Contextual?**

**Are they unchanging or contextual?**

* Peoples know that downloading music or software they don’t own is illegal, but do so anyway because they don’t believe that it hurts the owners of the IP (intellectual property)
* You have an expectation of privacy (lockers, email, etc) except if there is suspicion of wrong doing
* Never tell a lie….except if ……
* Somehow, legal doctrine must codify these complicated and contextual courses of action

# **Forms of ethics**

1. **Metaethics (what is good? etc)**
2. **Normative ethics (what should we do?)**
3. **Applied ethics (how do we apply ethics to work and lives?)**
4. **Moral psychology (the biological and psychological bases)**

**1. Descriptive ethics (what morals people follow)**

In the course, emphasis on 2 and 3.

The Types of Ethical Choices

* Choosing right from wrong
* Most of us know that stealing, lying, and cheating are wrong
* These three actions are taboos of a commonsense morality
* Choosing right from right
* Some ethical choices are harder when the situation is not as clear
* Lying may be wrong but if you visit a sick friend is it wrong to exaggerate how well they look?
* Some might lie about how the friend looks to achieve a perceived higher good
* The quick recovery or general welfare of the patient
* Is it wrong to steal food if one is starving?
* Is it wrong if one’s child is starving?

## Types of Ethical Choices (2)

* Is it wrong to keep coins found in a pay telephone?
* Does the money belong to the previous caller?
* To the phone company?
* To you?
* Does the amount found make a difference?
* Would you keep a small amount?
* Return a large amount?
* How would you give the coins back?
* Would you call the operator and feed the coins back into the machine?
* What if the operator wouldn’t take them?
* Are you then off the hook?
* Should you give them to charity?

## Types of Ethical Choices (3)

* These trivial examples illustrate the complexity of ethical choice
* The necessity to choose a course of action from two or more alternatives
* Each having a desirable result
* In an ethical choice then, an individual must often choose between two or more goods or the lesser of two evils

## Why Should we Care About Ethics

* So many ethical situations that we encounter each day that we should care
* Some unethical actions can violate law
* Others, though not illegal, can have drastic consequences for our careers and reputations
* We should care about ethics for our own self interest

## Framework for Ethics

What motivates us to view issues a certain way? Are we consistent in the way we approach ethical issues?

How do we resolve conflicts in approach?

Two basic camps:

1. consequence-based
2. rule-based

### Consequence-Based Ethics

Priority is given to choices that lead to a

“good” outcome (consequence)

The outcome outweighs the method -**Egoism**: the “right choice” benefits self

-**Utilitarianism:** the “right choice”

benefits the interests of others

### Rule-Based Ethics

Priority is given to following the rules without undue regard to the outcome

-Rules are often thought to codify principles like truthfulness, right to freedom, justice, etc.

-Stress fidelity to a sense of duty and principle (“never tell a lie”)

-Exist for the benefit of society and should be followed

### Example

**Scenario:**

Student copies answers on a final exam. As per policy, I confront student with evidence

**My perspective:** The right thing to do is to tell the truth regardless of the consequences

**The student’s perspective**: “If I confess now, will the penalty be less than if I roll the dice with the University disciplinary Counsel and am found guilty?”

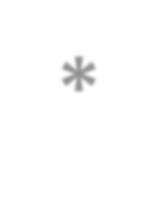
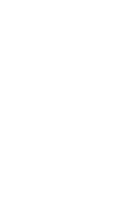
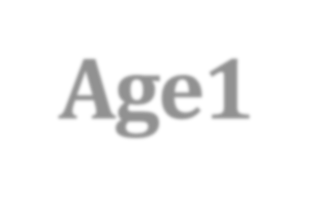
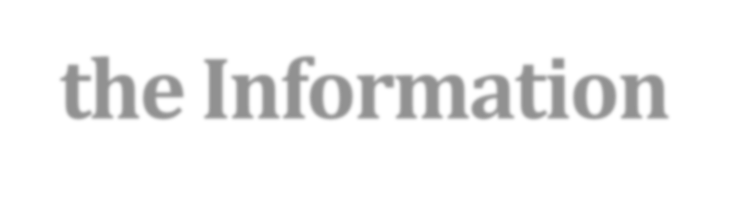
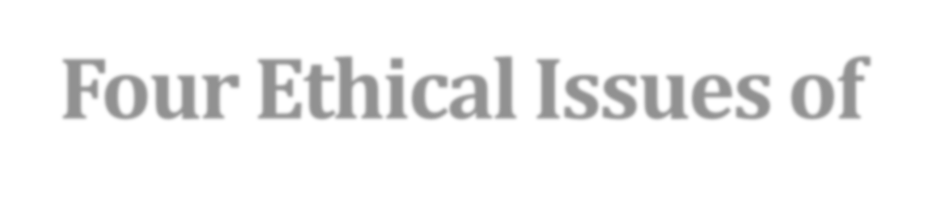
#### Privacy Issues

Many ethical issues (and legal issues) in security seem to be in the domain of the individual’s right to privacy verses the greater good of a larger entity (a company, society, etc.)

Examples: tracking employee computer use, managing customer profiles, tracking travel with a national ID card, location tracking [to spam cell phone with text message advertisements], ….

A key concept in sorting this out is a person’s expectation of privacy

##### Four Ethical Issues of the Information Age1



**\*Privacy** - right of individual to control personal information

**\*Accuracy** – who is responsible for the authenticity, fidelity, and accuracy of information?

**\*Property** – Who owns the information? Who controls access? (e.g. buying the IP verses access to the IP)

**\*Accessibility** – what information does an organization have the right to collect? Under what safeguards?

### Legal Issues

**We need to know this because: ?**

-Emerging legal requirements for C.I.A. of data

-Requirements for due process

-Liability for not exercising “best practice” security**?**

#### What would we expect to see in “information protection” legislation

**Components:**

-Statement of what we are trying to protect

(what type of data)

-Attributes that need protection (C.I.A)

-Changes to business practices

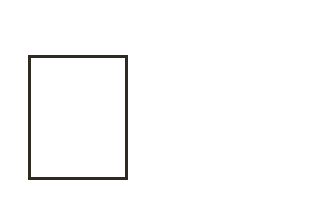
-Assigning accountability for protection

-Penalty for failure

-Specific areas that technology should address (e.g. authentication, storage, transmission)

**Examples:**

1. Health Data Security

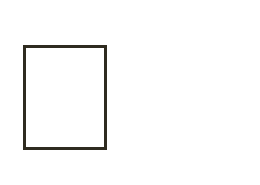
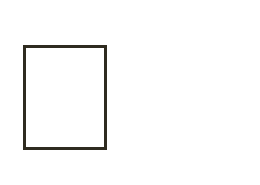
 “All organizations that handle patient-identifiable health care information – regardless of size – should adopt the set of technical and organizational policies, practices, and procedures described below to protect such information.” 1- Organizational Practices:

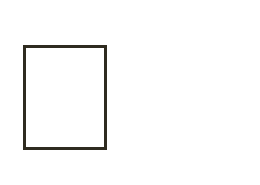
* Security and confidentiality policies
* Information security officers
* Education and training programs
* Sanctions

2- Technical Practices and procedures

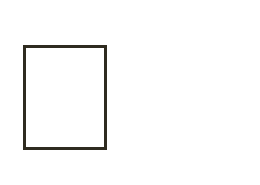
* Individual authentication of users
* Access controls
* Audit trails
* Physical security and disaster recovery
* Protection of remote access points
* Protection of external electronic communications
* Software discipline
* System assessment

##### HIPAA - Health Insurance Portability and Accountability Act

 Focus: Addresses confidentiality of personal medical data through standards for administrative, physical, and technical security How does this apply to IT professionals?

 If you have systems with patient data, and you either

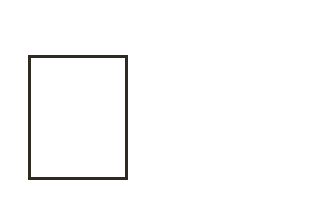
1. transmit that data or
2. allows access to systems that store the data, then you need to be HIPAA compliant

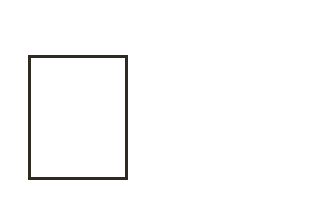
 If you transmit protected health information, you are accountable for: Integrity controls; message authentication; alarm; audit trail; entity authentication; and event reporting. If you communicate with others via a network: access controls; encryption.

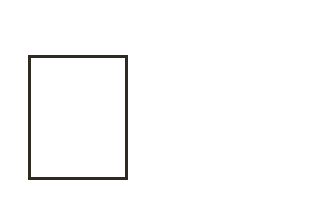
**HIPAA Security Examples**

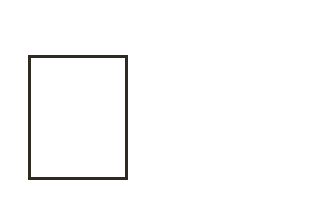
* Data Integrity: not altered during transmission: e.g., TLS (transport level security), etc. Regardless of access method (web, shares, etc.)
* Message Authentication: validate sender's identity e.g., signature, hash, public key, symmetric key
* Alarms: notification of a potential security event, e.g., failed logins,
* Audit trails: monitor all access to health information, must be kept around for 6 years or more,
* Entity authentication: could be as simple as passwords & unique user ID
* Error reporting: error and audit logs may need to be kept for a period of time

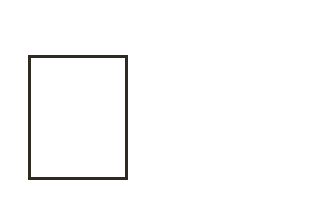
##### 1- Administrative Safeguards

 Security management processes: risk analysis, risk management, sanction policy, information systems activity review

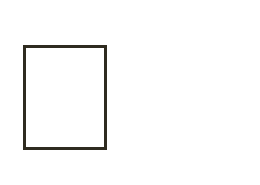
 Assigned security responsibility: identified person accountable for security

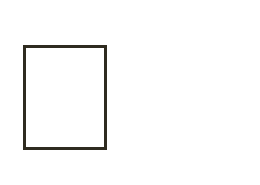
 Workforce security: processes for clearance, authorization, and termination

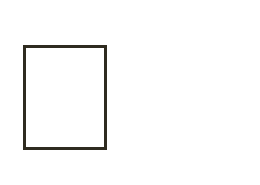
 Incident procedures: response and reporting

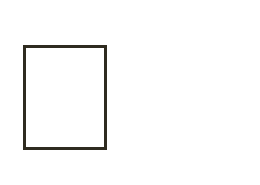
 Contingency plan: backup, disaster recovery, testing

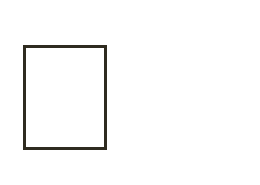
**2- Physical Safeguards**

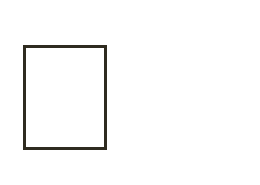
 Facility Access controls: contingency operations, facility security plan

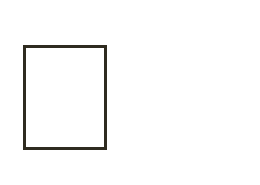
 Workstation use

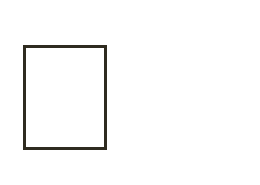
 Workstation security

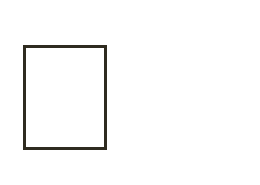
 Device and media controls: disposal, media re-use, backup **3- Technical safeguards**:

 Access control: unique user ids, automatic logoff, encryption, emergency access

 Audit controls

 Integrity: mechanism to authenticate electronic protected health information

 Entity authentication

 Transmission security: integrity controls., encryption

**Hierarchy of Regulations in Kenya**

**Assignment One**

## Computer Ethics and Regular Ethics

* Is computer ethics different from regular ethics?
* Is there an ethical difference in browsing someone else’s computer file and browsing their desk drawer?

No!

* What we have are ethical situations where computers are involved.
* Computers allow people to perform unethical actions faster than ever before
* Or perform actions that were too difficult or impossible using manual methods

## Identifying Ethical Issues

* A characteristic common to computer ethics is the difficulty of identifying ethical issues
* Many who perform unethical practices with computers don’t see the ethical implications
* When caught, their first reaction is:
* “I didn’t know I did anything wrong. I only looked at the file, I didn’t take it.”
* If they copy a file they say:
* “I didn’t do anything wrong. The file is still there for the owner.

I just made a copy.”

## Identifying Ethical Issues (2)

* Hackers often say,
* “I was just testing to see how secure the system was. I was going to report the weakness to management. I was performing a valuable service.”
* One goal of this course is to increase sensitivity to ethical issues involving computers
* Computer ethics should have a strong link to policy or strategy
* When an ethical problem is identified, a policy or strategy should be developed to prevent the problem from recurring

## Relationship between Ethics and Law

• The relationship between ethics and law leads to four possible states

|  |  |  |
| --- | --- | --- |
|  | Legal | Not Legal |
| Ethical Not Ethical | I III | I I  IV |

## Some Examples of the Four Categories

1. Ethical and Legal
   1. Buying a spreadsheet program and using it to do accounting for clients
   2. Firing an individual who does not perform according to expectations or who fails to follow certain contractual obligations
   3. Increasing the price of goods when the demand for those goods increases
2. Ethical but not Legal

I. Copying copyrighted software to use only as a backup, even when the copyright agreement specifically prohibits copying for that purpose

## Examples Continued

1. Not Ethical but Legal
   * Revealing data that was expected to remain confidential – for example, gossiping by data entry operators, about the salary data they are processing
   * Using a pirated version of a software product in a foreign country that has no software copyright laws
2. Not Ethical and Not Legal

I. Pirating copyrighted software

II.Planting viruses in someone else’s computer system

•When law does not provide an answer, as in categories II and IV, it becomes necessary to consider the ethical situation by using informal or formal guidelines.

## Practical Approaches to Ethical Decision Making

* Making ethical decisions is not a science
* People do it differently
* In ethical decision making the individual must decide what the answer depends on
* What the facts are
* What harm might be done by each alternative
* Which course of action results in the least harm
* Some ways to do this are to use laws, guidelines, and ethical principles

## Using Law to make Ethical Decisions

* When a law tells us not to do something it implies that a recognized authority has decided that the action the law prescribes is of benefit to society
* What are some laws you like?
* What are some good laws?
* Often, an ethical principle was used prior to a law’s construction
* Remember that ethical principles are ideas of behavior that are commonly acceptable to society
* So, law is often grounded in ethical principles, a good starting point for ethical decision making

## Using Formal Guidelines

* When you have an ethical situation ask yourself:
* Is the act consistent with corporate policy?
* Either explicitly or implicitly, corporations often tell their employees how to act.
* The policy may be a rule stating that no gifts are to be accepted from vendors, or it may just be a motto, such as: “The customer is always right.”
* Does the act violate corporate or professional codes of conduct or ethics?
* Often companies and professional organizations adopt such codes.
* Some are quite specific and can be helpful in directing the activities of the members.
* Even if you do not belong to a professional society or your organization does not have a computer ethics code, it may be worthwhile to adopt a code as your personal guide.

Using Formal Guidelines Cont.

* Does the act violate the GoldenRule?
* That is, are you treating others the way you would wish them to treat you?
* Does the act serve the majority rather than a minority?
* Does it serve yourself only?
* Generally, an outcome that benefits the majority, or serves the common good, is more desirable than one that benefits a few or even one.
* Look at the ACM and IEEE code of Ethics

## Using Informal Guidelines to Make Ethical Decisions

* Informal guidelines help us to quickly evaluate a situation in an attempt to resolve an ethical dilemma
* Informal guidelines help us to arrive at a general direction for an ethical action