

Computer Ethics

CHAPTER 1

INTRODUCTION

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Outline

Introduction

Ethics

Ethical Issues

Organization Ethics

Computer Ethics

Information Technology Ethics



Introduction

In the past two decades alone, we have witnessed the emergence of exciting new technologies, including smart-phones, digital photography, Self-driven cars, GPS, Internet-based music and video streaming, Social Media, Drones, Robotics ...etc.

Introduction

New technologies are adopted to solve problems, but they often **create problems, too**.

That doesn't mean we should never adopt a new technology, but it does give us a good reason why we should be weighing the benefits and potential harms associated with the use of new devices.

This course will help understanding **ethical issues related to the use of information technology**.

Introduction

Adopting a technology can change our views, too.

For example:

More than 90 percent of mobile phone users report that having a mobile phone makes them **feel safer**,

But once people get used to carrying a mobile phone, losing the phone may make them feel more in danger than they ever did before they began carrying one.

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Ethics

The standards that determine whether an action is *good* or *bad* are called **ethics**.

Ethics

Ethics is the field of study in philosophy that is concerned with judgments about what **human behavior** is "good" or "bad" in any given situation.

Ethics

Example:

The Ethics Committee decided that the company's practice of dumping wastewater from cooling the electronic parts into local rivers was not good for the environment and society.

Ethics

Why we need to study Ethics?

Some Chooses are clear

- Most of us know that stealing, lying, and cheating are wrong
- These three actions are commonsense ethics.

Others are Not

- 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?
- Is it wrong to steal food if one is starving?

Ethics: Example

Are free email services a good tool / facility ?

YES

- It provides quick and free communication to users

NO

- Email service providers can access the content of user emails.
- Contents of email can be seen by hackers.
- Spam email floods user email accounts and may cause a user to miss important email and sending spam is not illegal.

Example

The ATM Machine

Can find it anytime

Can find it anywhere

Fast

Cheap

Also,

Impact on employment

unfriendliness and customer service

Crime

Privacy

Errors and dependability

So, are ATM's a good or a bad



Ethics

What is ethical? Sociologist replies the base of ethics are:

- 1) Ethics has to do with what my feelings tell me is right or wrong.
- 2) Ethics has to do with my religious beliefs.
- 3) Being ethical is doing what the law requires.
- 4) Ethics consists of the standards of behavior our society accepts

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Ethical issues

Ethical issues in Information Technology is a situation where a **ethical conflict** arises and must be addressed.

Ethical issues occur when a given decision, scenario or activity creates a conflict with a society's (religion) moral principles.

Examples of computer ethical issues are:

Ethical issues

Example 1:

Piracy is one of the biggest problems with digital products. Many Websites are used to distribute copyrighted materials such as audio, video, software, etc.

Copyright violation refers to the unauthorized use of copyrighted materials.

Ethical issues

Example 2:

Is it ethical for a business to collect data about a person and then sell that information to another business?

Many organizations collect data for their own purposes, but they also realize that your data has value to others.

As a result, selling data has become an income stream for many organizations.

This is called privacy invasion.

Ethical issues

Example 3:

Company monitor their employees while working in their e-mail and Internet access at work, as employers struggle to balance their need to manage important company assets and work time with employees' desire for privacy and self direction.

Ethical issues

Example 4:

AI systems are getting really good at creating fake images, videos, conversations, and all manner of content. We already have trouble believing everything we hear, see, and read.

What happens when you can no longer tell if an image is real or AI-generated or if you're talking to a bot or a real person?

<https://www.bbc.com/arabic/media-40629848>

Ethical issues

أكدت دار الإفتاء أن اختراق شبكات -الواي فاي-، يعني: أن الشخص يقوم من خلال بعض البرامج باكتشاف الرقم السري، الذي من شأنه أن يمنع الآخرين من الانتفاع بهذه الشبكة ذات القدر المعلوم والذي دفع صاحبه ثمنه لينتفع به، وقد وضع له هذا الرقم السري، ليمنع الآخرين من الانتفاع به إلا بإذنه.

ولا شك أن هذه الشبكات التي يُدفع لها اشتراك شهريّ تعتبر أموالاً؛ فاختراق كل هذه الموانع والحواجز المغنوية التي وضعها صاحب الشبكة يُعتبر اعتداءً على **ممتلكات الناس وأموالهم** بغير وجه حق، ومن ثمّ فإن اختراق شبكات -الواي فاي-، أمرٌ محرم شرعاً، ومثل ذلك في الحرمة الإعانة على ذلك؛ لقول النبي ﷺ: «ألا وإن المسلم أخو المسلم لا يحل له دمه ولا شيء من ماله إلا بطيب نفسه» (رواه الدار قطني والحاكم).

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Organization Ethics

Information Technology have made many businesses successful today.

Some companies such as Google, Facebook, EBay, etc. would not exist without information technology.

However, **improper use of information technology** can create problems for the organization and employees.

Organization Ethics

Organization ethics a form of applied ethics or professional ethics that examines ethical principles that arise in an organizational environment. .

The following explain some of the actions organization can take to **improve their ethics**.

Organization Ethics

1) Employing an Ethics Officer

- Provides an organization with vision and leadership in the area of ethics.
- Ideally, the corporate ethics officer should be a well-respected, senior-level manager who reports directly to the CEO.

Organization Ethics

2) Establishing a Code of Ethics

A code of ethics is a statement that highlights an organization's key ethical issues and identifies the every values and principles that are important to the organization and its decision making.

Organization Ethics

3) Requiring Employees to Take Ethics Training

One approach is through a comprehensive ethics education program that encourages employees to act responsibly and ethically.

Such programs are often presented in small workshop formats in which employees apply the organization's code of ethics to hypothetical but realistic case studies.

Organization Ethics

4) Including Ethical Criteria in Employee evaluation

Managers must ensure that employees are meeting ethical criteria for promotion.

Also, managers can look for job candidates to ensure they don't hire employees with poor work ethic. Securing job references from former employees is one option.

Organization Ethics

5) Lead by Example

If managers want their staff to behave ethically then they must understand that it starts with *them*.

Employees generally follow the examples set forth for them by management.

If managers hold themselves to a high standard of ethical behavior then they have credibility when they expect the same thing from their employees.