**Ethical Decision Making in Information Technology**

**(COMP 249-001 - Info Security, Privacy and Ethic)**

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# Why do IT professionals need a code of ethics?

## What is ethics?

Ethics may be considered as regulations which differentiate between right and wrong. It also aims to differentiate between acceptable and unacceptable behaviour.

## What is Code of Ethics?

 A code of ethics is a document that outlines a set of acceptable behaviors for a professional or social group

## Why do professionals in general create codes of ethics to govern their behaviour

* **Work Place**

Professionalism is the key work for all businesses in order to provide the best quality service to their customers which in turns increase profits, productivity among employees and market value in their respective sectors. To achieve this professionalism, it is necessary to create codes of ethics to govern employees and the codes covers trustworthiness, responsibility, punctuality, confidentiality, team player, competency and good reputation. In summary, ethics help:

* Attract customers to the firm’s products, which means boosting sales and profits
* Make employees want to stay with the business, reduce labour turnover and therefore increase productivity
* Attract more employees wanting to work for the business, reduce recruitment costs and enable the company to get the most talented employees
* Attract investors and keep the company’s share price high, thereby protecting the business from takeover.
* Risk Mitigation
* **Around their profession**

Professional ethics establishes a baseline for common decency, respect, fairness, and integrity in given business area and it is necessary for the following reasons:

* It ensures accountability as it provides guidelines and ways of identifying moral hazards and providing the appropriate avoidance or work-around strategies.
* Professional ethics represents a kind of collective, time-tested wisdom that is passed on to new individuals in the profession. Also with changing laws, technologies and mores, professional standards will work to keep the profession abreast of new ethical challenges and emerging responsibilities and best practices.
* professional ethics often get promulgated by professional organizations, they may play a role in enforcement and disciplinary action with respect to those who violate such standards.
* **How they relate to those they serve**
* to the public, as they build confidence in the profession’s trustworthiness
* clients, as they provide greater transparency and certainty about how their affairs will be handled
* members of the profession, as they provide a supporting framework for resisting pressure to act inappropriately, and for making acceptable decisions in what may be ‘grey areas’
* the profession as a whole, as they provide a common understanding of acceptable practice which builds collegiality and allows for fairer disciplinary procedures
* others dealing with the profession, as the profession will be seen as more reliable and easier to deal with.

## How do ethics apply to IT professionals?

Since technology can be used as a benefit or for destruction, ethics play a major role in determining the right use of technology. IT professional must have proper code of conduct, right attitude and good moral values and should not misuse the technology.

Nowadays, due to the rapid advancement in technology there has been a widespread misuse of technology. With the rise of Internet there has been unethical and unprofessional behaviour which have led to severe problems such as computer viruses, Spamming, cybercrimes and hacking. Everyone in the IT must be made aware of the consequences which result due to unethical behavior and this must be taught at the early stage such as teaching a student. Professionalism must be strictly followed from schools and institutions and should be practiced at an earlier stage.

## Areas where IT decision making could have ethical implications

**Security:** The main essence of security in IT is to maintain integrity and confidentiality of sensitive information and prevent access of such information by hackers. IT security helps ensure only authorized users access and make changes to sensitive information. So, it is necessary for an IT personnel to provide adequate processes and tools to prevent malicious threats and potential security breaches that can have a huge impact on your organization.

**Copyright Infringement**:  It is easy nowadays for people to access any information especially online.  For instance, there is increased development of music sharing networks, many original creators of these works are losing the credibility of their works, because users of IT can easily gain access and share that data with friends. Free music and file downloading sites are popping up on internet every day, lots of original work like music albums, books, are being downloaded for free. In this case, one legitimate user will purchase the book, software, web template or music album, and they will submit it to a free download site where others will simply just download that data for free. It is good news for the users because it saves them money, but it harms the original creator of these works. There is also a situation of Plagiarism; Plagiarism is where the work of others is copied, but the author presents it as his or her own work. This is a highly unethical practice

**MALICIOUS CODES:** Malicious code attacks include a number of types of computer programs that were created with the intention of causing data loss or damage. The three main types of malicious code attacks are viruses, Trojan horses, and worms. Clearly writing and spreading virus programs are unethical acts; they have very serious consequences, and cause systems to crash and organisations to cease operating for certain periods. One of the most concerning consequences of such actions is when viruses interrupt the smooth functioning of an organization.

**Privacy:** Organisation should be responsible for any information collected from clients/customers

# Deontological vs. Teleological views of Ethics

**Deontological ethics** also known as “duty-based” ethics, it state right action consists in following our duty, irrespective of the consequences while **Teleological ethics** (also called [consequentialism](http://en.wikipedia.org/wiki/Consequentialism)) focus actual consequences of an action, as that which makes an action praiseworthy or blameworthy.

## Scenario Analysis

**Deontological and Teleological implications**

Using deontological ethics, the grocery store chain is duty-bound not to use customer data to track and warm people that they have purchased an unsafe product; as the main essence of the loyalty program database is to help the grocery store with their supply chain management and to help the grocery plan sales and promotions. Using it for any other purpose will result to invasion of privacy which is not unethical.

on the other hand, using teleological ethics, it will be morally right to inform the customers of their purchased of an unsafe product which is harmful to their health although it might be invasion of privacy but at the end, the action is praiseworthy.

**After these considerations what would you do?**

We will go with Teleological ethics, base on the fact that using the information is for a greater good in comparison to the invasion of privacy which most customers will appreciate.

Also, not informing the customers might leads to lawsuits between customers and *grocery store chain* as the harmful products were gotten from the store. The lawsuit might eventually lead to greater loss in comparison to not using the information.

# A Frame Work for ethical problem solving

Making good ethical decisions requires a understanding ethical issues and a practiced method for exploring the ethical aspects of a decision and weighing the considerations that should impact our choice of a course of action. Having a method for ethical decision making is essential and it involves the following steps:

**Recognizing an Ethical Issue:** Firstly, identify if there is any ethical issue in any given situation and if there are, identify specific ethical aspects of the issue at hand. There are some situations, what appears to be an ethical dispute but is really a dispute about facts or concepts.

**Consider the Parties Involved:** Another important aspect to reflect upon are the various individuals and groups who may be affected by your decision. Consider who might be harmed or who might benefit.

**Gather all the Relevant Information:** Before taking action, gather relevant information, and that all potential sources of information have been consulted.

**Formulate Actions and Consider Alternatives:** Evaluate your decision-making options by asking the following questions:

1. Which action will produce the most good and do the least harm? (The Utilitarian Approach)
2. Which action respects the rights of all who have a stake in the decision? (The Rights Approach)
3. Which action treats people equally or proportionately? (The Justice Approach)
4. Which action serves the community as a whole, not just some members?   
   (The Common Good Approach)
5. Which action leads me to act as the sort of person I should be? (The Virtue Approach)

**Make a Decision and Consider It:** After examining all of the potential actions, which best addresses the situation? How do I feel about my choice?

**Act:** Many ethical situations are uncomfortable because we can never have all of the information.  Even so, we must often take action.

**Reflect on the Outcome:** What were the results of my decision?  What were the intended and unintended consequences? Would I change anything now that I have seen the consequences?

After the consideration of the guideline for performing ethical decision making, the group did not change their mind about contacting the customers as the decision serves all parties (the store and customers) and not just a selfish act by the store to invade the privacy of the customers. But the following additional information was considered:

**The Ethical Issue:** The ethical issue in the scenario above is privacy; using customer information for another purpose different for the intended use.

**Parties Involved:**

* 1. The grocery store
  2. Customers
  3. Suppliers

**Relevant Information:**

1. Reasons for the contamination
2. Number of customers that purchased the product
3. The ethical implication and the cost
4. Possible legal consequences

**Actions and Consider Alternatives:**

1. Do not use customer information and let the damage occur
2. Do not use customer information but seeks alternatives of reaching the customers such as announcing in social media, TV or radio stations and putting the information on our website
3. Use the customer information and contact them individually.

**Make a Decision and Consider It:**

The grocery store should use the customer information, although it might affect the company’s reputation, but the action produces the most good and do the least harm.

# CIPS code of ethics

This Code establishes guidelines and deals with matters subject to judgment, difficult to state absolutely and which must be judged in light of professional standards in effect at a given time.

## **CIPS imperatives**

### 1. **Protect the Public Interest and Privacy of Information**

CIPS members supposed to carry out their responsibilities with due diligence in regards to the general public in the following ways:

* + Report to the relevant authority problems that might result in serious damage
  + Work in accordance with legitimate rights of 3rd parties, and conduct all activities with due regard for ownership, property rights and privacy.
  + Treat all employer/client business information as confidential, respect copyrights, trade secrets, privacy and terms of license agreements.
  + Give credit where it is due on all reports, papers and ownership of code and designs.
  + Understand and comply with obligations imposed on them under applicable privacy legislation, including The Personal Information Protection and Electronic Documents Act (PIPEDA), and any amendments to or successor legislation.
  + Not discriminate in any manner based on issues such as race, religion, sex, sexual orientation, age, disability, national origin, or social class. Behave as directed regarding any other issue protected by legislation. Exemplify the values of equality, tolerance, and respect for others.

### 2. **Avoid Conflicts of Interest**

Members have the following obligations in regards to Conflicts of Interest:

* + Maintain objective integrity and independence in professional judgment.
  + Not place personal interests or those of colleagues above interests of employers/clients, nor place any interests above those of the public.
  + Make efforts to notify all parties involved and to make full disclosure to the relevant authority if any conflict might be seen to occur by an independent 3rd party.
  + Not enter into reciprocal relationships with third parties who stand to gain as a result of their work.

In a situation of conflict cause by hierarchy of interests, Serving the greater good should be the priority.

### 3. Contribute to the IT Profession

CIPS members have an obligation to take responsibility for results in the following capacities:

* + Achieve and maintain professional competency in their area(s) of practice, as described in the CIPS Common Body of Knowledge.
  + Demonstrate knowledge required to undertake work, be compliant with relevant legislation and accepted standards of practice.
  + Tell the truth and avoid misrepresentation.
  + Balance quality and cost in a very transparent way.
  + Follow policies and client’s code of business conduct, and any contract requirements.

### 4. **Take Professional Responsibility**

CIPS members have an obligation to act in a manner that upholds the reputation of CIPS and the IT profession in general, in relationships with anyone with whom they work; this include making efforts to counter misinformation that could bring the IT profession or CIPS into disregard. All IT professionals are also supposed to support professional development for current and new CIPS members.

## Overview of the CIPS process for decision making

Members should take the following steps when making ethical decisions and resolving ethical dilemmas:

* + Identify the key ethical issues in the situation and what ethical imperatives it relates to
  + Determine what standards of conduct are of major importance to the situation and implement possible actions by:
    - Generating alternatives and examining the risks and benefits of each alternatives
    - Securing additional information
    - Consulting with colleagues, the CIPS Registrar, or with other appropriate sources
    - Examining the probable outcomes of various courses of action
  + Take a moment to reflect on all possible course of actions
  + Determine action plan
  + Take action

In addition, any CIPS member may request interpretation, clarification or amplification of any part of the Code of Ethics (weather general in nature or real situation) this request should be submitted (in confidence) in writing to the Registrar’s Office of CIPS.

After considering the CIPS methodology, it will be necessary to consider the following steps in addition to the guideline for performing ethical decision making discussed earlier. These steps include:

1. Identifying the CIPS ethical imperatives the issue relates to.
2. In considering alternatives, examine the risk and benefits of each of them
3. Consultations with various parities such as colleagues, CIPS Register, or with other appropriate sources.

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