

## Course: Professional Issues in Information Technology

### Week 1: Introduction to Professional Issues

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#### Lecture learning outcomes

At the end of this lecture the learner will be able to:

- (i) Define a profession
- (ii) Describe the characteristics of a profession
- (iii) Explain the importance of ethics in the IT Profession.

#### 1.1 Definition of a profession

There is no single definition of the word profession and the meaning depends on who is using it and the context of use.<sup>1</sup> A profession comprises of a **group of people who follow a certain calling to serve humanity.**

People who belong to a certain profession achieve this after successfully **completing studies and acquiring** specialized knowledge in a certain subject matter. This process of knowledge acquisition demands for a **long intensive academic preparation.**

#### Common features of a profession

- Members of a given profession possess similar knowledge and skills in a certain subject area<sup>2</sup>
- They provide similar services to their clients
- They are committed to high ethical standards.

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<sup>1</sup> Professional Issues in Information Technology. Bott, F. British Computer Society, UK. (2005) page 11

<sup>2</sup> Professional Issues in Information Technology. Bott, F. British Computer Society, UK. (2005) page 22

### ***Who is a professional?***

A professional is any individual who offers some specific services to clients, i.e. someone offering something to someone<sup>3</sup>. In most cases the “**someone**” is the professional’s **client or customer** and the “**something**” is the professional’s **special expertise** being offered to the client or customer.

In many organizations, customers are referred to as **clients** and not directly as customers

### **1.2 Professions as occupational groups**

- A profession consists of **exclusive occupational groups who apply special expertise** to help human beings (clients) **solve specific human problems** as they also earn a living.

### ***Characteristics: of a profession...***

#### **1. Ethical**

- Ethics deals with what is considered to be right and wrong in a society.
- A profession includes a code of ethics to adhere to, which are put across by professional bodies or organizations<sup>4</sup>
- Ethics comes hand in hand with accountability since individuals, organizations, and societies should be held accountable to others for the consequences of their actions

#### **2. Informative**

- A profession needs to enlighten others outside the said profession e.g. clients
- A professional provides skilled services to clients and hence must be enlighten others (clients)<sup>5</sup>
- A profession is based on truth and loyalty. The parties involved must be committed to the terms and agreements therein

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<sup>3</sup> Professional Issues in Information Technology. Bott, F. British Computer Society, UK. (2005) page 22

<sup>4</sup> Professional Issues in Information Technology. Bott, F. British Computer Society, UK. (2005) page 25

<sup>5</sup> Professional Issues in Information Technology. Bott, F. British Computer Society, UK. (2005) page 28

### 3. *Competitive*

- A profession requires extended practical training and knowledge acquisition due to the changing demands
- For one to remain relevant in a profession, their skills must be up-to-date and not obsolete<sup>6</sup>
- This cannot be more emphasized in the IT careers since it assures members of a profession of a specified career in their work life without becoming redundant

#### **Some examples of professions include;**

- Law,
- Medicine,
- Teaching,
- Architecture,
- Engineering,
- Information Technology (IT) etc.

#### **Information Technology (IT)**

- Information Technology (IT) enables organizations use technology to optimize their operations (activities) through proper processes.
- This calls for having the right infrastructure (both hardware and software)
- IT profession has **ambiguity** over what an IT professional does due to the fact that IT is about the many aspects of computers and what they do especially when **tasks are automated**

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<sup>6</sup> Professional Issues in Information Technology. Bott, F. British Computer Society, UK. (2005) page 31

### **1.3 Information Technology Professionals**

- Information Technology professionals have a training in computer science, or Information Technology background
- Technology keeps evolving and this calls for IT professionals to engage in continuous training and completion of certification courses
- IT professional build, test, install, repair and maintain software within an organization
- They also manage the complex processes in the information life cycle.
- Due to **information explosion in the current world**, Information Technology Professionals are sometimes seen to be in an **imaginary** profession.
- Many people feel they can do anything related to computers once they learn the basic computer literacy
- IT professionals help clients retrieve and interpret information from records. The clients may not be in a position to understand the processes involved in data processing cycles
- Another important task professed by IT professionals is user support.
- Like in any other profession, information professionals also face some difficult and challenging issues in their careers.

#### **Truth and Loyalty**

- A profession is based on truth and loyalty.
- The parties involved must be committed to the terms and agreements therein<sup>7</sup>
- Profess means declaration of a vow.
- This means there is a covenant /agreement or a declaration of a vow to be faithful for something or to someone.

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<sup>7</sup> Professional Issues in Information Technology. Bott, F. British Computer Society, UK. (2005) page 28

## **1.4 Information Professionals**

- An information professional is an individual who preserves, organizes, and distributes information to those who need it.
- Information professionals retrieve recorded knowledge.
- Traditionally, their work dealt with print materials, but these skills are now used with electronic, visual, audio, and digital materials.

### **To Hire or Outsource Professionals?**

- Some organizations hire in-house Information Technology teams, others outsource IT professionals for specific tasks when need arises mainly to save on cost and to receive quality service(s)
- Outsourcing is a contractual arrangement whereby an organization engages a third party to handle a certain business function on their behalf within a specified time frame<sup>8</sup>.

## **1.5 Types of Information Professionals**

Information professionals work in a variety of public, private, non-profit, and academic institutions. They include: -

- Information Systems Auditor
- Network Administrators
- Researchers
- Database and Data administrators. (physical and logical stages respectively)
- System Analysts
- User Support
- Record Managers

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<sup>8</sup> Professional Issues in Information Technology. Bott, F. British Computer Society, UK. (2005) page 124

### **1.5.1. Information Systems Auditor**

- This is an IT professional who performs a detailed evaluation and internal audit of computer information systems
- They evaluate risks and document the processes involved in day-to-day activities of an information system

### **1.5.2. Database administrators**

- These are professionals who are in charge of databases in an organization
- They create, add, remove or modify database records

### **1.5.3. Network administrators**

- These IT professionals install and maintain computer networks to ensure networks are secure and running smoothly
- Skills needed for this profession include hands on networking skills, hardware maintenance and programming skills

### **1.5.4. System analysts**

- These professionals bring together business and IT sectors for optimal business performance
- They ensure systems are operating smoothly and effectively

### **1.5.5. User Support**

- When a computer hardware device or network connection develops an issue, a computer user support specialist provides a solution to the users

### **1.5.6. Record Managers**

- These are IT professionals who oversee record creation and preservation in an organization
- They develop new record management systems, while also evaluating and maintaining the existing systems

### **What does it take to succeed in the Information Technology profession?**

- i. Good communication skills to work well with people and teams
- ii. Patience, understanding and empathy with the clients who are not as skillful as one is
- iii. Commitment, keen interest, passion and devotion to the profession
- iv. Honesty and integrity - IT solutions are expensive and this requires a detailed breakdown of individual items or services with their cost to clients

### **Other Professions include**

- Engineers
- Historians/ archivists
- Accountant.
- Psychiatrist
- Consultants.
- Journalists etc.

### **Review Question**

The introduction of new Information Technology (IT) has a ripple effect, raising new ethical, social and political issues that must be dealt with on the individual, social and political levels.

Discuss the moral dimensions to these issues

### **Content Covered in Week 1: Introduction to Professional Issues**

- (i) We have defined what a profession is,
- (ii) We have introduced the importance of ethics in the IT profession,
- (iii) We have described the characteristics of a profession,
- (iv) We have looked at various Information Technology professional career paths

## References

1. Professional Issues in Information Technology. Bott, F. *British Computer Society, UK.* (2005)
2. Ethics in Information Technology, 4th ed. Reynolds, G. *Course Technology, Boston, USA.* (2011)
3. Computers in Society: Privacy, Ethics and the Internet. George, J.F. *Pearson Prentice Hall, New Jersey.* (2004)
4. Cyber-ethics: Morality and Law in Cyberspace, 5th ed., Spinello, R.A. *Jones & Bartlett, Burlington, Mass., USA.* (2013)
5. Contemporary Issues in Ethics and Information Technology. *Schultz, R.A. IRM Press, USA.* (2005)