

# **KAMPALA INTERNATIONAL UNIVERSITY**

**SCHOOL OF MATHEMATICS AND COMPUTING**

**STUDY GUIDE FOR CERTIFICATE OF COMPUTER SCIENCE**

## **NCIT213 FUNDAMENTALS OF COMPUTER ETHICS**

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## **Study Unit 2 Scenarios of computer misuse and their effects to society.**

### **Introduction**

This unit intends to provide students with overview of the scenarios of computer misuse and their effects to society.

### **Learning Outcomes of Study Unit 2**

Upon completion of this study unit, you should be able to.

1. Analyze the effects of a computer misuse.
2. Identify the effects of computer misuse.

## **Computer misuses**

### **Unethical Uses of Computers:**

Consumers and businesses across the globe are reliant on computers to aid product distribution, services and information all over the world. However, users of computers do not always follow the highest moral code. Unethical use of computers continues to grow, forcing businesses and government to establish protocols to protect information and security.

### **Media/software Piracy**

Digital media piracy is a prominent unethical practice undertaken with computers. Piracy is the illegal distribution of music, movies, books and other intellectual media. Because the internet is such a vast network, catching pirates is not always easy. Piracy is an illegal infringement on copyrights held by the owners of the media.

Businesses using information obtained through piracy may receive a cease-and-desist letter from the media owner at the very least. Fines and legal recourse may follow. A common example of media piracy occurs when a business uses a well-known song for an instructional or promotional YouTube video without obtaining the rights or providing proper attribution.

### **Ransom ware Attacks**

Thieves like to use the anonymity of the internet to attack businesses. By hacking into a company's main server, cyber attackers can hold a business hostage. The hacker encrypts the entire website, shutting the business down until the business owners pay the hackers a fee – the ransom – in what is called a denial-of-service attack. This type of cyberattack can happen to any business or organization anywhere in the world. Reducing susceptibility to this unethical computer use requires constant updates to server security platforms including protection from spyware, malware and viruses.

### **Identity Theft**

Along with protecting a business against ransomware, businesses must protect consumer information. Identity theft concerns consumers. Companies of all sizes are susceptible to data breaches. Major companies from leading industries have been hacked with consumer personal information stolen. Hackers obtain everything from names, dates of birth and Social Security information to addresses and other contact information that is used to create phony accounts. Not properly protecting private information is costly to businesses and can result in legal fines and private lawsuits.

### **Financial Theft**

Some hackers don't steal the information but instead hack systems to divert financial information input away from the company to steal money. For example, a hacker might redirect the donation system of a nonprofit organization and have the money sent to an offshore account controlled by the hacker. This unethical practice essentially tricks a website buyer into thinking a website transaction is complete when, in fact, the business never gets notice of the sale, and the money is lost offshore.

### **Intellectual Property Theft**

Piracy isn't the only type of intellectual property that is unethically distributed by computer use. Competitors use any number of methods to gain access to proprietary information that other

companies pay millions to develop. Theft often includes patented or patent-pending information. Intellectual property theft is often achieved by internal moles or contract workers who have access to a company's computer server. While security protocols with virus protection usually help prevent external theft, it is difficult to protect against internal infractions.

### **Pornography**

#### **Review questions:**

1. Explain the different scenarios of computer misuse under the following category.
  - a) Media/software piracy
  - b) Intellectual
  - c) property theft
  - d) Ransom ware attacks
  - e) Identity theft
  - f) Financial theft
  - g) Pornography
2. Explain the effects of computer misuse to users and the society.

## References and Additional Reading Materials

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