Social Implications ‘sub-scenario’

Information and Communication Technology (ICT) is not just about hardware and software issues. ICT also impacts on a wide range of issues such as social, legal, ethical, security and environmental issues.

1. Sibu received the following email, which was supposedly sent by an official at Empire Bank. Examine the email carefully and answer the questions below.

**From:** Empire Bank [mailto:john@empirebank.co.za]  
**Sent:** 17 May 02:38 PM  
**To:** Sibu\_100@gmail.com  
**Subject:** Empire Bank Verification - Sibu\_100@gmail.com

 Dear valued Empire Bank Member,  
  
This email was sent by the Empire Bank server to verify your email address. You must compleete this process by clucking on the link below and entering in the smal window your Empire Bank and Password.

This is done for your protection - because some of our members no longer have access to their email addresses and we must verify it. To verify your email address and acess your bank account, click on the link below:  
  
Click here to update your data

1.1 What general name is given to this kind of scam?

1.1 >>

1.2 There is a hyperlink at the bottom of the email.

1.2.1 Briefly explain what a hyperlink is.

1.2.1 >>

1.2.2 Should Sibu click on the link? Motivate your answer by explaining what would happen if she did.

1.2.2 >>

1.3 What is the generic or general name given to techniques that rely on convincing people to give out information or to grant access by pretending to be someone who has the right to access this information?

1.3 >>

1.4 What is the name given to the process where an email header is changed so that the email appears to be from a different origin (or person)?

1.4 >>

1.5 It is better to type the URL of a site, such as the URL of your e-banking site, into your browser, rather than clicking on a link. Would this help if your computer has been affected by a pharming ‘attack’?

Motivate your answer by briefly explaining what pharming is.

1.5 >>

1.6. Mary has seen many warnings about ransomware. Explain what ransomware is.

1.6 >>

2. One of the trust members wants to make sure that Mary is taking all the necessary precautions when doing e-banking for the trust. He downloaded a document regarding safe online banking from their bank’s website.

2.1 Banks offer their online banking clients peace of mind by providing a number of security measures designed to make online banking as safe as possible.

Give two of these measures, besides the use of encryption (https).

2.1 >>

2.2 One of the major things highlighted by the bank was the danger of doing one’s e-banking in a public place like a cyber café, because of the dangers of *spyware* and *keyloggers* in particular.

2.2.1 What is spyware? Explain your answer by referring to a keylogger and how it functions.

2.2.1 >>

2.2.2 Give two reasons why anti-spyware has to be regularly updated by briefly explaining how anti-spyware works.

2.2.2 >>

3. Vuyani uses a computer that is not connected to the internet. He is puzzled, as he seems to have a *virus* on the computer despite the fact that he has antivirus software installed and he is not connected to the internet. He is also sure that he did not accidentally install any malware such as a Trojan on the computer.

3.1 Briefly explain what a computer virus is by referring to two of its general aims in your answer.

3.1 >>

3.2 What is a Trojan?

3.2 >>

3.3 Give three typical symptoms of a computer virus.

3.3 >>

3.4 Give two possible reasons why Vuyani might still have a computer virus despite the precautions he seems to have taken.

3.4 >>

4. One of the trust members suggested that an *acceptable usage policy* be drawn up for the use of the computers at the centre, and that a poster highlighting the key issues of *netiquette* be created.

4.1 What does ‘netiquette’ refer to in broad terms?

4.1 >>

4.2 Give four netiquette ‘rules’ associated with email that could be included on the poster.

4.2 >>

4.3 Give three items that ought to be included in an acceptable usage policy for the computers at the centre, besides any issues related to netiquette.

4.3 >>

5. A number of the younger members of the local community make use of social networking sites such as Facebook and it appears that very few of them know how to set their privacy settings.

Why is it so important to set your privacy settings when using a social networking site such as Facebook?

5. >>

6. A potential new donor has contacted the trust with the aim of sponsorship. They want to know that the trust is committed to green computing before they consider becoming a sponsor.

6.1 Briefly describe what *green computing* refers to in general.

6.1 >>

6.2 One of the ways the trust can save money and contribute to green computing is to reduce their amount of paper used for printing.

Give two ways in which this can be achieved.

6.2 >>

6.3 Another way in which the trust can contribute to green computing is to reduce their power usage.

Give two practical ways in which they can achieve this goal.

6.3 >>

7. One of the key benefits to course members, after they have upgraded their ICT skills, is that they will be in a better position to pursue careers that involve *telecommuting*.

Briefly explain the concept of *telecommuting*.

7. >>

8. One of the computers is equipped with a *braille* keyboard, and another with a *large* *trackball* instead of a ‘normal’ mouse.

What disabilities would a person be suffering from, if they made use of a *braille* keyboard or a *large trackball*, respectively?

8. >>

9. A UPS must be installed on the server.

9.1 What is the function of a UPS?

9.1 >>

9.2 Why it is more important to install a UPS on a server, than on a client computer?

9.2 >>

10. The Trust promotes Kickstarter – an online platform used by people to fund their creative business ideas.

10.1 Give two advantages of using a platform such as Kickstarter to fund a business idea.

10.1 >>

10.2 Give one typical benefit that a person could expect to receive, by contributing (or ‘pledging’) to a business idea that turns out to be successful.

10.2 >>

11. Give one reason why it might not be a good idea to allow the computers to participate in a *grid computing* project – even though there is a fast Internet connection.

11. >>