ICT Level 2 – Software Part 2 – Productivity Applications and Installing and Upgrading Software

1 of 18 – Welcome

Welcome to this session on productivity applications and installing and upgrading software.

By the end of this session you will:

* Understand what is meant by productivity applications
* Know how software is installed, and why it is upgraded
* Know a number of important factors that can impact software installations, or upgrades

2 of 18 – Introduction to productivity applications

**What are productivity applications?**

Productivity applications is the name given to a group of **software** (remember software refers to programs that can be installed on a computer) **designed to improve any day-to-day tasks** that a person might perform on their PC.

They are particularly **useful for managing documents, graphs, and spreadsheets**. Because of this, productivity applications are often used by businesses to make their day-to-day running easier for employees.

Productivity applications are also branching out to other users too, as this software is now available for **mobile devices** – covering things such as email management and the ability to take notes on your device.

3 of 18 – Examples of productivity applications

When it comes to software for your computer, there are a number of productivity applications that are readily available, such as:

* **Home office programs** – this includes things like word processors and spreadsheet applications that might be used for text documents, or even financial management
* **Multimedia programs** – these are programs that can combine sounds and images to make videos
* **Computer aided design (CAD) software** – this can be used to design the individual components of a larger project – this might be something needed for manufacturing a car, or even something for a building project
* **Web-authoring programs** – these are developed to help users design and monitor webpages

4 of 18 – Software applications and their jobs

Generally speaking, each software application is designed for a specific purpose. The table below shows a variety of software and their purpose:

|  |  |
| --- | --- |
| What is the software? | What is it used for? |
| Word processor | Text documents: letters, essays, etc |
| Database | Record keeping: staff, stock, etc |
| Presentation | Designing presentation slides |
| Multimedia | Used to create videos or animations |
| Graphics | Designing, creating and editing images |
| CAD software | Also used for drawings and designs |

5 of 18 – Software installation

As we can see from the previous sections, there are many different types of software programs that are available for computer users now, all with the **purpose of making basic tasks more accessible**. When this software has been purchased it then has to be installed onto your computer.

**Remember:** installation is when new software is added to a computer system – typically by inserting a disc into the computer’s optical drive.

Once the software has been properly introduced to your computer it can then be used. But keep in mind that software often **requires updates**, or **upgrades**, at several points in its life cycle.

**Operating systems work in a similar way** after they have been installed as they typically require regular updates, or upgrades, too.

6 of 18 – What are some of the factors to consider?

Before installing new software, a user has to consider how this new installation will interact not only with the programs that already exist on the computer system, but also how it will interact with the hardware overall.

The main areas that a computer user must look into before performing an installation or upgrade are:

* The **hardware**, and capabilities of the hardware, of the computer system
* How **accessible** the new software is
* How **expensive** the new software is
* The **speed** of the software
* How **secure** the new software is

We will look at these in more detail in the sections that follow.

7 of 18 – The hardware of a computer system

The **hardware in a computer needs to be ready and able to store new software** – otherwise any installation attempts will fail, and potentially harm the computer system in the process.

The overall specification of a computer system should be considered, but particular attention should be paid to the **central processing unit**, the amount of free **RAM** and/or **disk space** that is available, and the **video** **system** of the computer.

It may be that these individual components are not ready for new software, either because they are outdated, they do not have the free space, or they do not have the capabilities to function alongside an updated system.

These concerns can be tied into the **speed** of the new software, too. If the computer’s hardware cannot run newer and faster software, then productivity will fall – and so will user experience.

8 of 18 – Is the new software accessible?

In an earlier session we discussed how new software introduces new features – for example, **touch screen** **technology** or **voice activation software**.

Before installing a new piece of software, a computer user needs to be certain that the software will provide the features that the user is expecting, and that the user needs.

**Firstly:** Does the software provide the right features?

**Secondly:** Are these features accessible on the computer system in use?

Otherwise the purchase and installation of this software will be both timely and costly for no reason.

9 of 18 – How expensive is the new software?

This is an important question to ask if the new software is being introduced to a **business environment**.

While the software itself **might seem inexpensive**, it then has to be bought and licensed for an entire network of computers – which may be more costly than originally expected.

It is likely that there will be an **installation cost** for software being introduced on such a large scale, and this will be even **more expensive if a specialist is required**.

There are also the hidden costs of **maintenance** – to keep the software up and running – and any **support** required, alongside the cost of **staff** **training** so employees know how to use the new software effectively and appropriately.

10 of 18 – How secure is the new software?

How **secure** the new software is, is an important question regardless of where the software is being used (be it for personal or business uses).

Users need to consider how – or perhaps, if – this new software will have an **effect over pre-existing firewalls and malware-detectors**. All of these security measures will need to be equipped to handle the new software, too – which may mean running updates, or upgrades, to older software.

Whether it is a company or a lone user, the security risks of a new software need to be carefully **assessed** before introducing it to a computer system, as it could eventually pose a threat to your data and personal information if it is not properly assessed in advance.

11 of 18 – Risks of upgrading

Installing new software is not the only thing that computer users need to consider carefully, as **upgrading or updating a piece of software can be a risky business**, too. Below are some of the most common things people should be wary of before updating:

**Viruses**

A virus, or another form of malware, can be concealed inside an upgrade or update by a third party. To avoid contracting a virus this way, it is always best to research upgrades before installing them onto a computer system. In a business setting, where there is even more data to be protected, it is common practice for business owners to run the upgrade on a closed system first, to assess any problems or threats before it is introduced to the wider network.

**Incompatibility**

Software upgrades are sometimes dependent on other pieces of software, or even other hardware, being of a certain standard. It may be that other programs need to be updated before this new program can be introduced, which means more work – and potentially more risk – for a user.

**Negative changes**

Users should also consider the full range of changes that are being made to their software via an upgrade and be sure that they actually want them. Operating systems make for a good example of this as they typically change a whole host of features when they are upgraded. A user needs to be sure that they want the full features of an upgrade, and that these new features do not damage or limit the older ones.

**Loss of service**

This is another example that would be a bigger problem for a business. Software upgrades – and installations – will close down the system while it runs through various processes, and this could be problematic to the day-to-day running of a company. For individual users, this would also mean losing access to the computer system while the update takes place.

12 of 18 – Question 1

Indicate whether the following statements are true or false.

Productivity applications are designed to improve day-to-day computer tasks.

True

False

The correct answer is: True

They are particularly useful for computers but are not yet available for mobile devices.

True

False

The correct answer is: False

They provide good tools for creating and editing pictures and images.

True

False

The correct answer is: True

These applications are recommended for individual users but are not useful to businesses.

True

False

The correct answer is: False

13 of 18 – Question 2

Software installation is when a user installs new software – meaning, a new program – onto their computer system. What are some of the factors that should be considered before doing this?

Choose all that apply:

1. Existing hardware
2. How soon the software will be outdated
3. How expensive the new software is
4. Possible security changes
5. If the software is off-the-shelf

The correct answers are A, C and D, existing hardware, how expensive the new software is and possible security changes.

14 of 18 – Question 3

Using the following choice of words; **licencing fees**, **hidden costs**, **install**, **specialist**, **training**, **security** and **loss of service**; fill in the blanks for the paragraph below:

When a business is looking to **blank** new software to their computer network, they need to be aware of the **blank** that might be involved. Not only does software carry a **blank** risk, but it can also lead to **blank** – meaning the company cannot run for a certain period of time. The software may need to be installed by a **blank**, which will be more expensive, too. Business owners should also consider the cost of **blank** their staff to properly use the new software, alongside **blank** for installing the software to an entire network of computers.

The correct paragraph should read:

When a business is looking to **install** new software to their computer network, they need to be aware of the **hidden costs** that might be involved. Not only does software carry a **security** risk, but it can also lead to **loss of service** – meaning the company cannot run for a certain period of time. The software may need to be installed by a **specialist**, which will be more expensive, too. Business owners should also consider the cost of **training** their staff to properly use the new software, alongside **licencing fees** for installing the software to an entire network of computers.

15 of 18 – Question 4

What are some of the negative changes associated with upgrading software?

Choose all that apply:

1. The system may become too accessible
2. Unexpected features might be added
3. Familiar features may be removed
4. The operating system runs more smoothly
5. The software might make the system too secure

The correct answers are B and C, unexpected features might be added, and familiar features may be removed.

16 of 18 – Question 5

Are there any security issues associated with software installation, or software upgrades?

1. Yes, new or upgraded software can introduce viruses, or contain bugs or glitches that can affect a computer system
2. No, because the software is new and recently tested, it does not carry a security risk to a computer system

The correct answer is A, yes, new or upgraded software can introduce viruses, or contain bugs or glitches that can affect a computer system.

17 of 18 – End

Well done. You have completed this session on productivity applications and installing and upgrading software.

In this session we have covered:

* What is meant by productivity applications
* How software is installed, and why it is upgraded
* A number of important factors that can impact software installations, or upgrades

If you have any questions about any of these topics, make a note and speak to your tutor for more help.