Unit 29, Assignment 1

Why Install or Upgrade?

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Describing the Terms

Problems with existing systems Software can become outdated with operating system upgrades and may become incompatible with your system, causing instability, crashes and slow performance. Upgrading the software to the latest version or patch can help resolve those issues as it was built to be compatible with the latest version of your system.

Additional functionality Software upgrades often include new functionality and features to make the software more capable and feature-rich. For example, Microsoft Word might update adding new text effects and formatting to help make documents look more professional and advanced. Adding new functionality helps keep existing users interested and attract new users with new features added.

New hardware requiring new or upgraded software When upgrading a system, such as installing a new CPU or GPU, you will often need to install new or upgraded drivers to ensure compatibility with your operating system and to allow the device to function as expected and so it can reach its peak performance.

Software bug fixes Software isn't perfect and there are often times when functionality isn't working as expected. This is known as a bug. Developers often only know of the bug after the software version has been released. Developers aim to the fix the bug as soon as possible to restore functionality. Upgrading to the latest version and checking the patch logs for the version can help show if the issue you have encountered has been fixed.

The Risks of Installing or Upgrading Software

Risk #1: Loss of service

Description   Loss of service is when a service of software system becomes partially or entirely unavailable due to an upgrade. For example, the college's VLE would go completely offline during an operating system upgrade on the web server it is running on.

Likelihood of it happening   The likelihood depends on what software is being installed or upgraded. For example, during an operating system upgrade a loss of service would be inevitable. Meanwhile, installing new software to the system would cause little to no disruption, unless a system restart is required to complete the upgrade.

Ways to minimize the risk   To minimize the risk, software updates on critical systems should be done outside working hours when any downtime will not impact the users of the service. The upgrade should also be planned and users should be notified of the downtime to allow them to plan around the downtime to prevent any disruption.

Risk #2: Incompatibility issues

Description   Incompatibility issues can be caused when software is installed that is incompatible with other installed software or the operating system. For example, installing a Windows XP application on Windows 10 would create compatibility issues as the application was designed to run on an older operating system.

Likelihood of it happening   The likelihood depends on the due diligence of the person installing the software. If the installer has done research into new software and the already installed software to ensure compatibility, there is a low likelihood of any issues. It can also depend on the source of the new software, if it comes from a solo developer there may not be any documentation of compatibility issues with other software, compared to if the software came from a company such as Microsoft there would be lots of documentation around it.

Ways to minimize the risk   Ensure you have done research into the software and pre-existing software to ensure there will be no compatibility issues. You should also ensure you are downloading the most up-to-date version of the software to further prevent any operating system level compatibility issues.

Risk #3: Knock on costs

Description   Knock on costs are when you have to spend extra money to be able to use the software you have downloaded. For example, you may have to pay a one-time licence fee or your system may not meet the requirements and you'd have to upgrade.

Likelihood of it happening   The likelihood depends on the software you are wanting to use, more often than not a professional suite of applications, such as Adobe's Creative Cloud, require a monthly subscription to use. Open source software, on the other hand, typically doesn't require any extra costs unless you don't meet the hardware requirements.

Ways to minimize the risk   To ensure you aren't hit y any unexpected costs, ensure research is done into the software to make sure it doesn't paywall any features or services you require before investing time into downloading it and setting it up. Also check the system requirements before downloading any software to ensure your device will be compatible with it without needing to purchase new equipment.

Risk #4: Loss of revenue

Description   After installing new software, there could be chance a trojan was installed or the software is not compatible with the system it was installed in. This could lead to disruption as staff would not be able to complete their work as the software they use is faulty, leading to a loss of revenue as no work is able to take place.

Likelihood of it happening   As long as the installer of the software performs their due diligence, there is a low likelihood of any issues with the software. If the software is downloaded from a trust source and compatible has been checked, there will be no issues.

Ways to minimize the risk   Test the software in an isolated environment before installing it on all the machines that need it. This can ensure the software is safe and compatible with your system and network.

Risk #5: Staff difficulties

Description   When installing new software, staff will need to be trained how to use the software. Without the proper training, staff may have trouble navigating and using the software. When software is upgraded, you should ensure no significant functionality or interface changes are present. If there are, staff should be informed of the changes how to go about doing their daily tasks with the new system.

Likelihood of it happening   There is a high likelihood of staff not knowing how to use the software when new software has been installed. Unless a staff member has had previous experience with the software, they would not know how to use the software. When software has been upgraded, there is a minimal risk of staff difficulties as there is a low chance any significant changes to functionality or the UI has been made. The only exception is if there has been a major revision to the software.

Ways to minimize the risk   To ensure there is a low risk of staff difficulties, the installer should check to see if there are significant changes to pre-existing software that could disrupt daily operations. If so, the installer should inform staff of the changes and how to complete their tasks going forward. With new software, training should be provided to all staff before the software goes into production to ensure that they are able to use the software correctly.

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Upgrading to Microsoft Office
The Advantages

There are many advantages when upgrading to Microsoft's Office suite:

- ▶ Access files from anywhere - with OneDrive you can work on your files from any computer with an internet connection.
- ▶ Seamless collaboration - the Office productivity applications (Word, PowerPoint, etc) allow you to invite other users to view and edit your document which allows multiple people to edit and collaborate at the same time.
- ▶ Regular updates - Microsoft Office is constantly being updated with new features and security patches ensuring user's files and data are safe.
- ▶ Seamless integration - all Office apps work seamlessly with each other, such as being able to view and edit files in Outlook emails and presenting a PowerPoint in Teams without needing to upload it or share your screen.

Upgrading to Microsoft Office

The Disadvantages

Whilst Office is an amazing suite of tools, there are a few potentially major disadvantages:

- ▶ Entirely cloud-based - all data on OneDrive is stored in the cloud making an internet connection required to use. If your location has a poor internet connection it may take a while to access, save and collaborate on files.

- ▶ Security - by uploading your files and data to OneDrive you are trusting that Microsoft will keep your data safe and protected from cyber criminals.

- ▶ Cost - Microsoft Office can be very costly with plans as expensive as £16.60 per month per user.

- ▶ Compatibility - the newest features of Office are only compatible on the latest versions of Windows potentially requiring computers to be upgraded and re-licensed so that Office can be used.

Upgrading to Microsoft Office

Justification to Upgrade

Justification to Upgrade

Whilst the cost of upgrading to Office will be high, I believe it is an important upgrade to help encourage students to collaborate together and reduces the headache of transferring files to and from computers via a USB drive.

With Microsoft Office, students will be able to share and collaborate together on a variety of different productivity tools. From making presentations in PowerPoint to creating posters in Publisher, students will be able to unlock the creativity in their work and complete assignments and tasks to high degree of quality without a steep learning curve from learning how to use new software thanks to Office's simplistic and beginner-friendly design. Students will be able to work together on the same document at the same time without the risk overwriting each other's work. This can be done from anywhere.

Justification to Upgrade

With OneDrive, students will be able to access their work from anywhere with an internet connection: their home, the school or a library. This helps eliminate the risk of loosing their documents when transferring them by a portable storage medium. Having data stored digitally also removes the need to print out the work as the teaching staff can view it on their computer, helping reduce the impact printing has on the environment.

Using OneDrive also removes the need for in-house storage for each student, which eliminates the need for an expensive storage server with high electricity usage as all data will be stored in the cloud. With the most basic Office plans, each student can get up to 1 TB of personal storage. Further costs are removed as no backups have to be performed of the student's data.

Justification to Upgrade - Conclusion

To conclude, Office provides a seamless and simple experience allowing students and staff to easily share documents and files without the risk of loosing a document after printing or transferring to a USB. Office comes with a broad suite of productivity applications, with something for any task students may need to complete.

With the security, data safety, seamless integration and the elimination of paying for an in-house storage system with backups I urge the governors to consider Microsoft Office to reduce costs, the impact on the environment and allow students to unlock their collaborative creativity with each other. Office will help them learn valuable life skills for the workplace and help build their confidence with these applications that are frequently used in the workplace.