

Report 3(B)

Impact of ICT on an adult in employment, including the effect on working style

Introduction

I will be investigating Marcus Hamilton, an associate of my uncle, who is in the career of web design. As a web designer, Marcus creates and arranges the pages that make up a website. He often has to balance how a page looks versus how a web page functions, which can involve some compromises. One of his recent acknowledgements is website accessibility; this refers to creating web pages that are accessible to anyone, no matter what device they are using. Website accessibility also stresses the importance of making a website accessible to those with any kind of disability. Marcus works for a website design company called “Perfect Blue”, he usually works from home and so his work can sometimes invade his personal life as his employer expects lots more work to be done than in the time span of a normal 9am-5pm job.

Internet

Description of technology

The Internet is the worldwide, freely accessible network of interconnected computer networks that transmit data by packet switching using the standard Internet Protocol. It is a network of networks that consists of millions of smaller domestic, academic, business, and government networks, which together carry various information and services, such as electronic mail, online chat, file transfer, and the World Wide Web.

The World Wide Web is a system of interlinked, hypertext documents that runs over the Internet. With a web browser, a user can view Web pages that may contain text, images, and other multimedia and navigates between them using hyperlinks.

E-mail allows the user to send and receive messages which may include images, documents or video via a telephone signal. Additionally, web based messengers such as windows live messenger allow the user to communicate with contacts through the internet.

Advantages

- He can publish anything which he creates online.
- It is easy to use.
- Search engines that are fast and powerful for finding resources.
- Ability to link to him and contacts almost immediately.
- He can buy/download the latest software for web design.
- He can use email to transfer files without the need to leave his home.

Disadvantages

- Search engines that show results based on who pays them the most.
- Speed takes precedence over quality.
- Personal information being accessed by others.
- Malware such as adware or spyware become a nuisance and can be very harmful.
- Spam - receiving many unnecessary and useless emails.

Professional needs and effect on working style

Marcus needs to be able to transfer his completed work back and forth from home to work when his employer demands them and when he does not want to go to work. He can attach the files, which his employer needs, to an email and send them without having to go to work. He can also use Windows Live Messenger to send the files to his employer without going to work.

Marcus needs to be able to view his work when it is in progress as his customers would, he needs to do this to make improvements or fix bugs. To do this he uses a web browser and navigates to the website, he then tests the website by navigating around it, searching for errors or where improvements need to be made.

Since the internet is what his work depends upon, it is very good at meeting Marcus' professional needs. Marcus can choose his working hours and so can wrap his work around his social life, to a certain extent. Additionally, the same aspect of the internet can be interpreted as an obligation of if working at home that he is forced to complete his work at home, this is highly conflicting with his personal life.

Personal needs

Marcus needs to be able to be able to update his music collection with the new songs without having to buy a CD album with unwanted tracks on it. Marcus uses iTunes to buy and download songs from the iTunes Music Store and can easily update his collection.

Marcus needs to be able to withdraw and deposit from his bank account when it is difficult to get to the bank or when it is closed. He uses online banking to perform transactions, payments etc. over the Internet through a bank, credit union or building society's secure website. This allows him to do his banking outside of bank hours and from anywhere where Internet access is available. And he does not need any special software or hardware to do this.

The technology has drastically improved the personal fulfilment of Marcus' needs. He can easily update his music collection and can perform banking wherever there is internet. Marcus' needs are easily met with the internet but sometimes his professional life can reduce the time which he has to indulge in his personal amusements. As he may have to complete some work and so would not have necessary time to satisfy his personal needs. Also hackers may easily obtain his banking details and so could perform identity theft which is a huge risk.

Social

Marcus needs to communicate with his friends when they are otherwise unavailable or if it is expensive to use the telephone. Marcus can use Windows Live Messenger or email to freely communicate with his friends when the need arises. In Windows Live Messenger he can chat to friends in real-time and he can even have a video call with the aid of a webcam and a microphone. He can/may have to also communicate with his colleagues or his employer and provide progress information.

The internet has improved the way in which Marcus communicates with his friends and family and his general social needs very well. The recent development of video calls has proven to have become superior to voice only calls as it is almost as if the communicators were in the same room. However, the fact that Marcus' employer uses the same technology renders it quite irritating as his employer can contact him when he is not working and can make further demands when he is chatting with friends. To avoid conversing with his employer he can block him from Windows Live Messenger but this is not possible in email and his employer can almost contact him at any time.

Digital Camera

Description of Technology

A digital camera is an electronic device used to capture and store photographs electronically instead of using photographic film like conventional cameras. Modern compact digital cameras are usually multifunctional, with some devices capable of recording sound and/or video as well as photographs.

Advantages

- The digital camera allows flexibility, instant images and picture possibilities that did not exist earlier.
- Since there is essentially no film cost, the digital camera allows you to shoot fancifully over and over until you get it right. The cost never enters into your thinking.
- The real-time visual image which shows you almost exactly what you are getting is a photographer's dream. You see the picture in color on an LCD screen before you take it and also immediately after you take it. You can shoot for ten minutes, review what you just shot, then shoot for another ten minutes.
- Also you can turn the lens around 180 degrees so that you can take self-portraits and see accurately what you will get at the same time, this was impossible before.
- If you want to exhibit your work you can simply put your pictures directly on the internet which is the greatest gallery imaginable for a photographer. The gallery is accessible to anyone in the world who has an Internet connection, 24 hours a day at very little cost.
- The digital camera is much less expensive to maintain, more spontaneous, easier to work with and easier to exhibit than conventional cameras.

Disadvantages

- Even the best digital camera can't record images with the detail you get from a film camera. Digital recording devices can't match the resolution, sharpness, tonal range and colour reproduction capabilities of film.
- Digital cameras take anywhere from two to 30 seconds to store each image. This makes them unsuitable for action photography or any situation in which you need to shoot quickly.

Professional needs and effect on working style

Marcus needs to be able to get inspirational snapshots easily when out so that he can quickly find insight for a new website design. These photos need to be easily transferrable to his pc where he can edit and optimize them to fit the pictures' purpose. Marcus uses his digital camera to take photos of the things which he thinks that he would find useful for his work. He can easily transfer the picture files onto his computer via the USB cable provided with the camera.

Marcus' possession of a digital camera has greatly affected his working style. This is because even when he is enjoying his personal/social life away from home he must always involuntarily carry his digital camera to find and store new ideas for websites as if his ideas become derivative, Perfect Blue's customers may not be satisfied, possibly rendering him unemployed.

Marcus' digital camera is very good at meeting his professional needs; however, unwanted associating effects of the device have caused him to lose freedom in his personal/social life as he is obligated to work all the time. The main weakness in this technology is that when Marcus wants to take still, high quality photos continuously he cannot do so due to the processing time of each picture. Therefore, his digital camera would be a lot better if there was a shorter or ultimately no processing time for images.

Personal

In his personal life, Marcus needs to be able to record his personal memories such as: birthday parties or other celebrations or anything which he would like not to forget about for the rest of his life. He also needs to record priceless moments on video such as his daughter's first steps. Marcus uses his digital camera to take still photos or video of events which he deems worthy to remember, he can easily store these on the camera's memory unit or can also transfer them to his pc. Possessing the pictures would also be worry-free as he would be without the fear of the pictures fading or losing their original quality due to a digital backup being stored.

Marcus' needs are effortlessly met with his digital cameras he is able record unique moments in his life for years to come merely by pressing a button. When he hosts celebrations he can always be relied upon to take the photos due to his simple and yet sophisticated piece of technology. However, sometimes he may take a flawed image such as if the lighting was not correct the picture may emerge to be of low quality, and so a once in a lifetime event can be failed to be recorded accurately. To avoid this, Marcus

would need a camera that could automatically adjust itself, whatever the lighting conditions, to achieve the maximum quality.

Social

When Marcus travels to a friend's/relative's house for a celebration, he may need to capture the moments for he and his friends to see in the future. Marcus uses his digital camera when at celebrations to take photos and record videos of moments involving his friends. These moments are those which he thinks that he and they would find amusing and can easily obtain the image to use as a conversation starter or to reminisce later in life.

Marcus' digital camera is very good at meeting his personal needs. He finds that his often use of it to digitally store moments with friends is highly versatile and effortless, he does not always have to operate the system due to its simple interface and so even those new to the system can use it if he is not capable in using it himself. However, the inability to sustain quality when taking pictures of moving objects is something that his digital camera has not addressed and so would be much better if the quality was sustained.

Application software

Description of technology

Software enables a computer to perform specific tasks, as opposed to the physical components of the system (hardware). This includes application software such as a word processor, which enables a user to perform a task, and system software such as an operating system, which enables other software to run properly, by interfacing with hardware and with other software or custom software made to user specifications.

Generally, there are three types of software. System software helps run the computer hardware and computer system. It includes operating systems, device drivers, diagnostic tools, servers, windowing systems, utilities and others. Programming software typically provides tools to assist a programmer in writing computer programs and software using different programming languages in a more convenient way. Application software allows users to accomplish one or more specific (non-computer related) tasks. Typical applications include industrial automation, business software, educational software, medical software, databases, and computer games. Businesses are probably the biggest users of application software, but almost every field of human activity now uses some form of application software. It is used to automate all sorts of functions.

Advantages

- Using word processing software allows anyone to create well structured documents for any purpose professionally and the ability to save and therefore edit them at any desired time.
- By using a media player one can play any form of media including music and video in various formats, each with differing qualities.
- With help of a file compressor, one can store files at a much lower size and can restore them easily and efficiently when wanted.

- The ability to create CDs/DVDs with files on them which can be played or run anywhere with the appropriate hardware.
- When using image manipulation software one can create highly varying effects from a single image, some can be unthinkable when thought of being done by hand.

Disadvantages

- Installation of some software may come with unwanted spyware or adware which could be potentially very harmful to the user.
- The immense selection of some genres of applications can distress some users and they can be drawn to less appropriate software.

Professional

Marcus needs an easy way to design and create his web pages efficiently. He needs to be able to perform scripting To do this Marcus uses Adobe Creative Suite Premium, with this he can do professional web design and maintenance, XML editing, scripting, full site management, advanced cascading style sheets, link his site to a database, edit images professionally, colour coding when editing XHTML. Marcus also needs to make documents such as a fax, letter, memoranda or agenda easily without having to adapt it to the purpose (professional fax or elegant letter) manually. Marcus can use Microsoft Word to produce any type of document imaginable for any possible circumstance without much effort. He can use the general templates to quickly make professional letters without much input. When Marcus gathers resources for his website designs, he needs to be able to adapt them to each specific circumstance and so cannot merely rely on a general image relating to his theme to be sufficient. To overcome this, Marcus uses Adobe Photoshop to create unique and specifically created images for his set themes, in this way he can create totally exceptional images which his company's customers would greatly appreciate.

Application software has definitely influenced the way which Marcus conducts himself when doing work. He is now provided with a ready access to any tool necessary for his career and is therefore heavily reliant upon it. As application software readies him for any possible situation within his professional career, it meets his professional needs perfectly. However, a limitless amount of tools does not come cheap, top application software can easily exceed £300. It would be better of the price of certain software decreased so that Marcus could adapt more easily.

Personal

When he wants to relax and unwind, Marcus needs a way to entertain himself efficiently. He needs to be deeply enjoyed so that the stress of his day to day life can be relieved for a while. Marcus uses gaming applications to do this; he can play from many genres of game, each of which satisfies his desire for stress relief differently. When Marcus finds gaming applications to demanding and/or is too weary play challenging games, he needs to be able to listen to some of his calming music or perhaps watch a calming movie. With the help of Windows Media Player, Marcus can listen to any one track of his music collection or watch a DVD movie without difficulty and at any time.

Application software is quite good at meeting Marcus' personal needs. He is able to chill out whenever he desires with a few options of how he does it, he can play games, watch videos or listen to music. However, his favourite classical music which he possesses in records cannot be played and so he sometimes resorts to using his record player for playing his oldies. He could however, find his beloved songs in a digital audio format but it may be too much work when he just wants to lie down and rest.

Social

Marcus needs to be able to compile, edit and burn videos or music to CDs/DVDs when friends visit to provide some form of entertainment. To do this Marcus Windows Movie Maker, adding humorous sounds and videos to a compilation. Then he uses Nero Burning Rom to burn the compiled videos or music to a DVD or CD which he can transfer and load easily.

Even though it is not its clear purpose, application software does quite well in meeting Marcus' needs for socialising. He often brings his media created by Nero Burning Rom to gatherings of friends. However, since application software cannot be used directly without a computer, it does not do much else to meet his needs.

In conclusion, I have come to believe that ICT has drastically changed how adults conduct themselves in their personal, social and professional lives and that without the methods created by ICT they would be clueless as to how they would do what they do today without the aid of ICT. ICT has been a huge impact on working style.