

The impact of ICT on an adult in employment

Seku Sisulu is an ICT teacher at Preston Manor High School. His job includes teaching ICT to the year groups 7 to 10 observing a syllabus given by the school's chosen exam board. He uses ICT technologies to assist him at school, while travelling and also at home. Due to his requirement to prepare future lessons at home, he would need to utilize his personal computer and either email or use a data key to access his files at school. He uses his palm handheld computer to do various things at work and at home; e.g. take the register, make to-do's or uses it as an address book.

He also uses email and his mobile phone to keep in contact with his colleagues and his boss at work.

~~How do the technologies he noted above meet the adult's needs?~~

Mobile Computing – Palm Handheld Computer/PDA (Personal Digital Assistant)

Seku Sisulu uses his Dell Axim X30 PDA to assist him at home as well as at work. For instance, he can keep track of things using the PDA's "to-do" application which would remind him of things he had to do at various points throughout the day.

Personal

Seku Sisulu tends to forget his wedding anniversary; and other things at work, e.g. an important staff meeting slipping his mind. You can quite easily understand why he needs an efficient system in reminding him of such events.



This is why he needs his PDA. His PDA proves to be far more efficient, organised, not to mention portable than a "pin-up" note board at home/work which he can't carry around with him. He can have an alarm to remind him of important dates several days prior, or on the day. Another advantage for using a PDA as an organising system is that he would not have to worry about carrying a pen with him – the stylus, which is included with the PDA, serves as the perfect tool for working with the touch-screen interface; and, of course, does not need ink.

Work-Related

Mr Sisulu needs to take attendance in the morning and afternoon at school, to keep register of presences, absences, and lates. He finds the

normal “pen and paper” register frustrating, especially when most of his pupils arrive late and he has already accidentally marked them present/absent – he would have to use tippex to correct his mistakes, making the legal document messy.

Therefore, at work, Seku Sisulu uses his PD▲ to call the register and keep a record of the presence of pupils in each of his classes. There are a number of benefits which the PD▲ holds over the conventional register book; one of which is the effortless access of each class – rather than flicking through pages in a register book, Seku Sisulu only has to look through a categorised list of classes, and click on the desirable one. ▲ Additionally, he is removed of the inconvenience of switching to a different-coloured pen to mark an absence; one simple click and the job is done. ▲ At the end of the day/week, he can then transfer the records via USB (the most common method), the schools WLAN using the PD▲’s integrated Wi-Fi port, or Bluetooth to his computer (if available) where he can store the data in the appropriate area in the school network.

Social

Seku Sisulu has a passion for watching movies, and he also needs to watch episodes of Eastenders that he misses.

His friend, who also has a similar PD▲, has a movie that Mr Sisulu really wants but can't find anywhere in the market. So, what Seku does, is pair both PD▲'s via Bluetooth and send the movies, or connect the PD▲'s via USB/FireWire cable and conduct a high-speed transfer. He does the same with the Eastenders episodes; his friend gets the video file and transfers it to Mr Sisulus PD▲ so he can watch it at his leisure.

Nonetheless, although using a PD▲ has proved to be much more efficient, portable, and requires little effort; there are some difficulties and aggravations which would perturb Seku Sisulu.

One of these problems is battery life. The total run-time of the battery overall would decrease as time progresses, and important alarms/reminders and documents would sometimes be lost when the battery is flat. To purchase another battery for such a device would be costly, ranging from £35 - £80 depending on how powerful the battery is.

▲ Another drawback is text input. Seeing that the stylus is only input method for the PD▲, making notes even a line or two long would create much hassle with an on-screen keyboard. This is very hard to get comfortable with, and can often cause frustration. Of course, nowadays we have a hand-writing recognition system in most PDAs, but also, this causes much irritation because of frequent misrecognition

and the requirement of taking the time to “teach” the recognition system your handwriting style. Even if Seku Sisulu does get comfortable with hand-writing recognition, he would not be able to reach the input speed of which a keyboard provides; plainly, carrying around a standard foldable keyboard would be more of a nuisance and it would be more logical to buy a laptop instead. All in all, it sometimes seems as though PDAs are the perfect portable reference device, but they're not ideally suited for taking lots of notes or performing a lot of text input.

The Internet – Email

Seku Sisulu uses email for various things in his work-related life; to send files to work (e.g. for lessons prepared while at home), to contact his colleagues and boss (e.g. sick leave, formal letters, work-related discussion). This saves him any reason for leaving the house and posting a letter, or printing out documents needed for lessons - sparing him the trouble of spending money on print cartridges and paper, which are quite costly. Email



also has its hindrances; the POP3 (Post Office Protocol 3) server is susceptible of crashing, and sending/receiving of mail could be halted for any length of time. This would be troublesome if an email had to be sent abruptly. Another very common nuisance is spam; the sending of advertisements/general unwanted email from different companies and/or groups to one's inbox. Most email services have a spam filter system which enables the user to change the setting to low, medium or high. The repeated problem with this is that as spam usually gets through the medium and low setting; this causes much the frustration of selecting the junk mail from his inbox and being careful not to delete his important emails. The only way to rectify this is to change the setting to High. The high setting creates a frequent problem – as well as blocking unwanted emails, it tends to categorise wanted emails as spam too – this could mean important emails not being read in time.

Work-Related

Seku Sisulu needs email for work purposes. He needs to check the coursework for all his students; the problem is, printing out all of them, stapling them, filing them and taking them home is not a great way to conduct such a task, especially as it is time taking, ink and paper wasting, and frustrating.

▲As a much better alternative, Seku Sisulu uses email to send the coursework from school to his email address which he can then access at home, and check the coursework at his leisure. Thanks to the convenience of email, he doesn't have to waste money, paper and ink on printing out all the students' coursework and taking it home by hand. ▲As a teacher, Mr. Sisulu must handle confidential data from students, which means if the files are mishandled (if he carries them by hand), legal action can be taken against him, so instead of carrying it around he uses email to transfer the data without worry.

Social

Seku Sisulu needs to watch the news on television and catch up with world stories and technology news; but he doesn't have time to watch it most of the time due to his work.

To compensate for this, he catches up on technology issues and news from the BBC website. He subscribes to their daily technology newsletter via email, which summarises the daily tech news and gives him links to the main stories daily; he could catch up wherever he is, at work or at home or while on the move on his PDA▲ since he is always using a personal computer of some sort.

Personal

Seku's family live abroad and, due to his work and lack of expenses, he hasn't been able to see them in a long time. He needs to keep in touch with them frequently. Using the phone to contact them is not only expensive; there is the aggravation of nobody picking up the phone sometimes. ▲Also, since the time zones differ, he has to call his family at a specific period during the day.

Email contradicts these problems; he uses it to send his family videos, pictures and update them on news whenever he pleases and they will still receive them regardless of what time it is. ▲Also, he can check when they usually check their mail, so he knows what time they are awake and not busy; so he can instant message or phone them with the knowledge of them being there to reply.

The Internet (Broadband ADSL connection) – General

The fast ▲ADSL internet connection allows Seku Sisulu to access information from all



over the world. The broadband connection proves to be much faster, time-saving, and convenient since you are able to use the phone regardless of whether the internet is connected or not. I will describe more features as I state and evaluate his daily needs.

Personal

Seku Sisulu needs the internet to shop, check email, bank; and for leisure, play online games and chat using an instant messaging service. He uses email frequently, and also has recently purchased a Playstation online from the leading auctioning website, eBay.

He uses his 2mb broadband ADSL broadband to fulfil these needs.

Although many people do not feel safe conducting transactions over the internet for fear of lapses in security and hackers gaining access to their personal/bank details; Seku Sisulu feels he knows how to shop safely over the web, and prefers it to going out and browsing needlessly through stores and waiting in the queue to pay. The internet allows him to compare prices of virtually any item with a price checking service such as the one at Kelkoo.co.uk, or Pricerunner.co.uk.

A drawback to online shopping is the delivery charge – this would seem unfair when you buy something like a rare book for £5.00 and have to pay an extra £5.00 to cover for postage + packaging. Seku Sisulu also uses online banking as an easier alternative to queuing up to be served.

Social

Seku Sisulu likes to play games; particularly FPS (First Person Shooter) games. These games need to be played online through the game's official worldwide network. Mr Sisulu likes a challenge; this would give him the perfect opportunity for playing with opponents of a different calibre.

He uses the internet to connect with other gamers around the world when playing an online multiplayer game such as Doom 3. Thanks to a much wider availability of high-speed broadband at cheap prices, a large number of people are able to play multiplayer online games comfortably without server time-outs and little lag.

Work-Related

Seku Sisulu needs easier and more efficient methods of teaching via tips and information from teaching websites on the internet. He can find out easier ways to make pupils understand topics which tend to be more difficult for some.

The internet helps him greatly in this aspect, and he can constantly learn new ways of teaching his students. He uses the internet to watch videos and listen to audio tips and tricks on new teaching techniques.

The constantly growing list of new techniques of teaching some topics that are difficult for some are easily accessible by Mr Sisulu on the internet; and his job would be made much, much easier.

On the whole, the internet has proved to be very convenient for Seku Sisulu and has influenced his life considerably. It renders it needless for him to step out of the house to shop, transfer money, or make contact with friends/relatives/colleagues. In turn, this gives him much more time and a lighter schedule when it comes to preparing lessons at home. It also provides leisurely activities for him such as online gaming and collaboration with people around the world.

Mobile Communications – Mobile Phone

Seku Sisulu uses his Nokia 6630 Smartphone mainly to keep contact with family/work colleagues while on the move. Since he lives quite distant from work, his family would be able to call him at anytime when he is needed; this is considerably more convenient and time-saving than finding and stopping for a payphone. He also uses his mobile as an alarm clock to wake him in the morning.

The phone has brilliant features such as a video-calling system, voice dialing, text messaging (SMS – Short Messaging Service), multimedia messaging (MMS – Multimedia Messaging Service) and Wi-Fi compatibility which enables him to wirelessly connect his phone to a WLAN (Wireless Local Area Network) and access the internet.



Work Related

Mr Sisulu lives quite far from work, and uses his car to get there every morning. In case Seku Sisulu is late for school (stuck in traffic, car wouldn't start, etc.) he needs to be able to inform the school of his absence while being unable to use his house phone.

His mobile phone aids him critically in these situations, where if he is hindered from reaching school he is able to arrange a supply teacher to take his class and also to set cover work to compensate for the snag in his teaching schedule.

Social

In the holidays, Seku Sisulu likes to invite friends and relatives over for dinner. However, they need assistance in locating his residence, and they do not possess a SatNav. Therefore, Seku needs to direct them himself.

Mr Sisulu uses his mobile phone to give them directions. He can also use it to make sure they come on time and that they're alright. This would be better than them having to stop and check on the atlas. Using his mobile phone would be better than using his landline because it would cost less.

Personal

Seku also has a wife and son. He would very much need to be in contact with them, just as much as they would need to be with him, especially in case of emergencies. He needs to contact his family at home when he is on his way from work, and his wife would need to let him know if she is going out somewhere; shopping, for instance.

His mobile phone lets him do this, and he can contact them anywhere and anytime to make sure everything is fine. Sometimes, he may feel that calling his wife when he knows she's driving isn't a good idea. On these occasions he would use SMS or MMS to send messages; MMS would be more appropriate and appealing on occasions such as anniversaries or birthdays.