

Unit 3 - ICT and Society

This report covers 5 technologies that a person with special particular needs would use in everyday life. The person that I have chosen to write about is a man called David Jones who lives in Mynydd Isa and is visually impaired.

These are the three technologies that he uses on a daily basis and I have chosen to write about.

1. The LookOUT screen reader, this is a powerful, easy to use screen reader that makes the computer talk.
2. Magnus, this is a tool that magnifies everything on the screen up to sixteen times.
3. Scan2Text, This is a tool that extracts the words from letters or books and puts them on to Microsoft Word.
4. Visually Impaired Amplified Telephone, This is a telephone that David can easily use on a daily Basis.
5. Internet Shopping, This is shopping that David does on the Internet so he doesn't have to get up and leave the house.

Software

The LookOUT screen reader

This is a programme that gives a voice to David's computer, he now can hear what he types and can hear everything that comes up on his screen. He likes this because he doesn't have to strain to look at his screen.

He also likes this because:

- He can alter the speed of the voice.
- He can alter the pitch and volume of the voice.
- He can change the voice to male or female.
- He can have a novice verbose mode.
- He also likes the onscreen navigational musical tones.
- He can sit back and listen to the voice and relax.
- As the voice goes on the next line a different musical note happens to tell him he has gone down a line.
- He likes how the musical note changes up and down when he moves the curser around left and right or up and down.



He has had the LookOUT screen reader for a while now so he knows how to use it properly so he can do these things as well:

- He can format and attribute information
- He has the ability to use tables correctly and effectively
- He now has first class Internet access because he can listen to what is on the web page.
- He can use onscreen markers for easy navigation.

- He can use visual scripting for complex situations.

These are the system requirements that he needs to use the LookOUT screen reader.

- A modern multimedia PC or laptop (At least 350MHz and 64 MB RAM).
- Any sound card and a low-end video card.
- Windows XP, 98, ME, 2000 or NT with service pack 6

Advantages

- David can now easily find his way around the computer without having to strain to look closely.
- He can sit back, relax and listen to the voice that is easy to understand.
- He can change the voice to male or female or a different pitch or volume.
- He knows when the reader goes to the next line because of musical notes.
- He knows where about he is on the screen when he moves the curser also because of musical notes.

Disadvantages

- David has to have a good quality modern computer, which can cost a lot of money.
- The programme costs a lot of money, it costs £105 for the full version.
- He found it hard to use at first and took a lot of getting used to.

Evaluation

I think that the LookOUT screen reader technology has made David's life easier and it fulfils his needs because he can now know what the writing says on his computer screen because it is read out for him. It also fulfils his needs because he can

easily find his way around his computer because of the musical notes to tell him where he is on the screen with the curser and what line he is on. It also fulfils his needs because he has good hearing. This means he doesn't have to use his visually impaired eyes as much to strain and look at the screen.

David uses this programme for personal use so he can listen to the computer read everything on his screen.

Magnus

Magnus is a programme that magnifies everything on David's computer up to sixteen times so he can see things a little more easily. He likes Magnus because he doesn't have to strain and get as close to the screen as he would if the writing was normal sized.

He also likes Magnus because:

- He doesn't have to have the writing magnified sixteen times; he can have it magnified by any number between two and sixteen.
- He likes it because it can magnify anything that appears on his screen.
- He also likes the option of having split screens and lens options.
- He likes to use the font smoothing that comes with the programme.
- David likes how the colours automatically change to make the writing easier to read e.g. white print on a black background. (Colour inversion)
- He likes the pause key, which temporally stops the magnifier.

Times 2

Times 4



These are the system requirements he needs to use the Magnus programme on his computer.

- Windows 98, Me, XP, or 2000; also NT4 with SP6, but with this system there can be problems for network users.

Advantages

- David can now use the LookOUT screen reader along with the magnus programme and follow what the computer is saying.
- He doesn't have to strain and get close to the computer to read everything.
- He can choose when he wants to stop zooming in because he doesn't want to get too close.
- He can put on the font smoothing tool to make everything easier to read.
- He now has the option of having split screens and lens options.
- He can use the colour inversion.

Disadvantages

- David has to pay a lot of money to have a top of the range computer to use the Magnus programme.
- He has to pay for the programme as it is very expensive costing £105.

Evaluation

The Magnus programme fulfils David's needs because he can now follow the writing on his computer screen while the LookOUT screen readers voice reads the writing that apperars on the screen. He can do this now because he never used to be able to see the writing he could only listen to the LookOUT screen readers voice, but because he now now see the writing a little better because it is zoomed in he can follow it and enjoy it a little more. The Magnus programme also fulfils David's needs because font used on the screen is made smooth so it is also easier for him to read.

Davis uses the magnus programme to surf the internet in his free time.

Now he has the magnus programme he can now lead a more normal life like a normal person.

The only problems he has with the Magnus programme is that it is very expensive and he needs a good computer to run it, he doesn't earn much money so he struggles to pay for everything. He uses The Magnus programme for personal use so he can read everything that comes up on his screen.

Scan2Text

Scan2Text is a programme that copies the words from letters or books for example and puts them on to Microsoft Word. David likes Scan2Text because he can copy his letters to Microsoft Word and read them using Magnus and the LookOUT screen reader.

He also likes Scan2Text because:

- It can copy the writing in to Microsoft Word in over fifty different languages; he uses this because he has a pen pall that writes to him in French so he changes to writing to English using Scan2Text.
- Because it works well in all windows environments.



Advantages

- Combines well with two of the other technologies that he uses. (Magnus and LookOUT screen reader)
- David can read all his letters or listen to the computer read them if he is struggling.
- David can translate words into over 50 different languages.
- It works well in all windows environments.

Disadvantages

- He needs a good computer to work the programme.
- The programme is expensive costing £60.
- He has to already have his own scanner; the scanner is not included in the £60.
- He has to buy the other two programmes (Magnus and LookOUT screen reader) to be able to read the text from the computer.

Evaluation

The Scan2Text programme fulfils David's needs because he can now read all the letters that he gets through the post by putting them on to the scanner and getting the writing up in Microsoft Word, it also fulfils his needs because he can listen to the LookOUT screen reader and follow the words with the Magnus programme. Another reason the Scan2Text programme fulfils David's needs is because it translates in to over fifty different languages, he enjoys this because he has a French pen pal that writes to him in French and he can easily translate the letter.

He also needs Scan2Text so he can read his letters so he doesn't miss paying any of his bills, missing any hospital appointments or missing great deals through the post.

David's life is now made easier because he can now lead a more normal life and communicate better.

Without these technologies David would have to rely on other people all of the time or he could end up not paying his bills or answering his letters.

The only problems that David has with this technology are the price to buy the scanner and the programme.

The Scan2Text programme is used for social use because he can now read all his letters and socialise with other people.

Communication

Visually Impaired Amplified Telephone

This is a telephone that David can easily use. Before David got this phone he struggled to make phone calls to the right numbers. He likes this phone because of the large numbers on the buttons; this means that he calls the wrong numbers a lot less often.

He also likes the Visually Impaired Amplified Telephone because:

- Of the twelve programmable memory dial buttons, which he stores the numbers he calls most often.
- Of the bright light that automatically turns on when the phone is ringing.



Advantages

- The phone has a five-year guarantee so if it breaks he can send it back and get the large sum of money he paid for it, back again.
- The brail, which is on each of the large buttons which he, can easily understand.
- The fact that it has a speakerphone, which he can turn on so he doesn't have to hold the phone. (This doesn't help his disability though)
- The three emergencies buttons that ring the emergency services if he is in trouble.

- The phone is big and easy to find.

Disadvantages

- David often forgets the people he has saved the speed dial numbers as and therefore end up ringing the wrong people costing him more money.
- The phone was very expensive, costing £99.99. David does not earn much money because he finds it hard to get work because of his disability, so he can only just afford to pay for this.
- David has not fully learned how to read brail yet and he sometimes gets numbers mixed up and rings the wrong house, this also costs him more money.
- Because the phone is so big it is an advantage because it is easy to find but is also a disadvantage as it takes up a lot of room.

Evaluation

The Visually Impaired Amplified Telephone fulfils David's needs because he can now ring people with a lot more ease than using a normal telephone. He can use the brail and the large numbers to make sure he dials the rights numbers. One of the problems he had with a normal telephone was that he kept entering the wrong number, this now does not happen as often because of those features.

The main problem with David's new phone is the cost. It is very expensive, it costs £99.99 to buy and because David earns very little he can only just afford the phone.

David' life is now made a lot better because he can communicate a lot easier and can lead a more normal life and try to forget about his disability.

Overall David finds the phone a good buy and very useful, he would recommend it to anyone who is visually impaired. The Visually Impaired Amplified Telephone is used mainly for social use as David can now communicate with his family and friends.

Internet

Internet Shopping

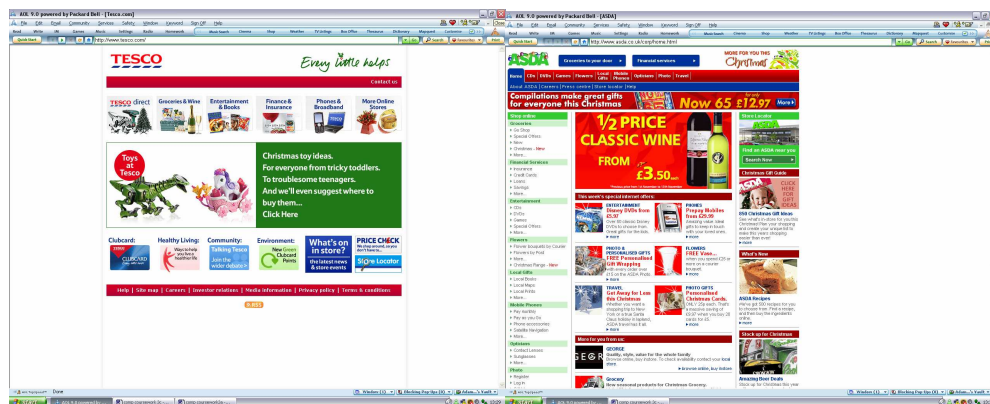
I will be writing about how David uses Internet shopping to his advantages and disadvantages. He finds it easy to use and a lot faster; it takes him a lot of time and effort to go out to the supermarkets and he finds the Internet shopping very useful. He likes Internet shopping because it is very easy to use.

He also likes Internet shopping because:

- He doesn't have to get up and get ready to go out, which he doesn't like.
- Because it is a lot faster than going to the supermarket.

Advantages

- David doesn't have to get up and find himself a lift to the supermarket, which is quite a long drive to get to.
- He can get the shopping delivered to his house for free when he spends more than £50.
- He finds it easy to use, and he can compare prices on different web sites to get the cheapest groceries.
- He can use the software that he has bought to find his way around his computer easily and look on the web sites.
- He hates trying to walk around busy supermarkets, with Internet shopping he doesn't have to do this.



Disadvantages

- He has to spend over £50 in the shop to get the shopping delivered free; he often doesn't spend this much on groceries because he lives alone.
- To be able to use the Internet he has to pay a lot of money every month to keep it running, and he earns very little money so it is hard for him to afford the Internet.
- It costs David a lot of money to pay for the software to be able to use his computer.

Evaluation

Internet shopping fulfils David's need because he can now save himself a lot of time and effort because he doesn't have to go out to the supermarket any more. It also fulfils his needs because he can easily use it and it goes with his all of his computer software.

The only problem that I can find with the Internet shopping is the again the price to use it. He has to pay for the Internet, which he can only just afford and he also has to pay for the software so he can use his computer.

David's life is made a lot easier now he can use Internet shopping, he used to have to struggle around the supermarkets with he did not like.

David said that he thinks that Internet shopping is a great technology and it is so easy to use and it saves a lot of time and effort.

Internet shopping is used for personal use only, it is so David can get his shopping a lot easier and save a lot of his time.