


1  **Adam Oliver**  
**Keynote Speaker**  
**(Notes to Slides)**


**‘More Is More’ :**  
**Embracing Complexity in Design Conference**  
**17<sup>th</sup> December 2005**  
**Venue: RCA SCR, London.**


This presentation is by Adam Oliver, BT’s Head of Innovation for Age & Disability and Corporate Social Responsibility, we hope you enjoy the talk

Adam acts as a bridge between the research underway in BT and the people in BT who sell the technology. Adam has worked for BT for 17 years and is based in BT Centre outside St Paul’s tube station, he can often be found in Starbucks in Paternoster Square sharing a coffee with someone and inspiring them with the future. He is keen to help people understand what BT is doing with accessible technology and how we aim to help dignified living

2 

3  This is our research facility Adastral Park in Ipswich, where some 4,000 people ensure we are ahead of the game and creating new products and solutions for our customers. We are number 1 in telecoms with £334m invested in R&D and number 7 in top UK companies

4  People think of us as a traditional phone company and we have a long history, but we do so much more than that. We are investing heavily in the future with our £10bn commitment to the 21<sup>st</sup> Century Network and being the world’s first Telco to move away from a traditional PSTN network to an IP based network.

5  But remember that people are diverse and we have a growing elderly population and products need to work for elderly people. Here we see the effect of sight loss, from top left











Tunnel vision

Macular loss

Retinopathy


Cataracts


Retinopathy is quite common with people who suffer from diabetes. What you can see is how challenging small buttons and print can be.


- 6  This is one of our lovely customers at a photo shoot for our Age and Disability catalogue
- 7  During the break she amused herself by playing and made this very colourful telephone
- 8  This is Simon and Mesar, Adam met them a few years ago and Mesar inspired me to look at text messaging as he said that as a visually impaired person he couldn't read text messages, Adam then lead research to look at text messaging for visually impaired people. This first started as a piece of software on a PDA to read out messages and then a networked based version which then became the BT Text service where you can send messages from your mobile to a landline.
- 9  This is an example of some of the text message coverage that we had, search on Google for "BT Adam Oliver" and you can find a lot more.
- 10 
- 11  Innovation can not happen over night and things will change in the future, both of those statements are true. Also, technology starts as being optional and then becomes compulsory. This is our Technology Timeline where Ian Pearson, our Futurologist predicts the future up to 2051. The slide is too small to see, but go online at <http://www.btplc.co.uk/Innovation/News/edition.htm> and get all the details.
- 12  This is Mesar last year
- 13  Using his brail keyboard
- 14  Working in the BT Labs on a force feedback system (this one is by Phantom) to look at a tactile user interface into Moon, which is an alternative to Brail. A tactile force feedback display enables you to move your finger around until the computer believes you have touched the object and then force is applied to stop movement. You can see on the screen some simple boxes that on this demonstration Mesar is lifting the blue box up with his finger. You can even feel the "weight" of the box and how they bounce up and down. The Moon interface is the world's only electronic interface to Moon as normally it's printed out on blown plastic. Mesar worked for us over 2 summers during his University study. He is in Bath University reading Mathematics and Computing. Try searching on Google for "Mesar Hameed"
- 15  We also need to consider other people, this is Paul Tobin a deaf BT engineer who's life was transformed with a BlackBerry as he could

then email people on the way to an exchange instead of being confronted by a telephone on the door to get access that was totally useless to him. Paul also uses the BT Text system to communicate. The point is that a simple access device can change the life of someone dramatically.

16 

17  This is Adam on the left here with a group of BT Modern Apprentices visiting one of our demonstration rooms in Adastral Park. You can also see Digital Flowers and Momento which is in the foreground. Digital Flowers displays information by the rising or falling of the flower stems as they can move and display lights at the end of the stems. Momento can recognise objects placed on the black circle and then bring up associated media on the screen just in front. So, if you put the Spiderman figure on the circle it plays a Spiderman clip. The system recognises the shape and weight of the object, new objects can be associated with new media.

18  This is another group visit, this is from Scope the charity for Cerebral Palsy. Natalie is the lady in the wheelchair and she is using the force feedback display and Stephen Furner is on the right who Mesar worked under when he was in the Labs. You will notice that Natalie is a Rohan Keating fan, that is something that Scope have to cope with as she plays his music all the time! Natalie has been fitted with a laptop computer and we are working with Scope to link her to the Internet for the first time and be able to control her own communications rather than just relying on others.

19  This is Natalie giving a speech during the visit. She had typed it out on her computer by moving her right leg left and right to select individual characters. She then commanded the computer to read out the speech using the text to speech on the computer. If you want to see an inspirational speaker, see someone who has taken days to type it out.

This is Natalie's speech she gave

Hello my name is Natalie Sides. I was born with a disability. I could not talk to people. I met a speech therapist called Helen when I was ten months old.

When I was two I went to special school called George Hastwell in Barrow where I live, there they gave me an Orac which is a grid of words that spoke when I scanned the symbol using a head switch. Helen gave me a spelling chart which I used by focusing my eye on each letter to spell a word, It was very hard. When I was five I went to a mainstream school, because they found out that I was really bright.

At the age of six they realized I could use my leg to switch, so they asked me about trying to drive a power wheelchair with a special control box; it is great to drive myself about because it gives me my independence.

When I was eleven, I got a Cameleon, this is a type of communication aid, but it brakes

down a lot which makes me really angry.  
I feel like someone has gagged me when it has go away to be fixed.

I made a film called Gagged for a film competition. It was about me being gagged when my Cameleon brakes down and I was nominated for best actor. We went to Blackpool to celebrate our success. Here it is <Natalie then showed a video>.

I was on TV show called 'How They Do That' and I met Eamon Homes. He was a really nice guy. They filmed me doing lots of things at home and at school. When I first got a Cameleon I used the Talking Screen for Windows. They found out I could read, so when I was eleven, I went to a school called Walney Comprehensive and I did two GCSE exams. I got a C in food technology and a D in science when I left.

I then went to Star College in Cheltham, but I was not happy there and decided to leave; Now I am at Beaumont. In my forth year. At first I felt really scared until I met a young lady called Ali who was my Keyworker. She has helped me to get over the past and make lots of new friends.

I went to 'One Voice' conference in Leicester with Mrs. Fix It who is Linn and all my friends for the weekend. One voice is a charity that supports people who uses communication aids. It was a great weekend. I listened to stories. I went to a 'Communication Matters' conference in Leicester for few days. I saw some my old friends and I have had a look at some programs to make my Cameleon easier and quicker to use, but there were problems getting the Cameleon to work. After a lot of talking about what I wanted to be able to do, Kate and Rohan made me the wheel top.

The wheel top is not just a communication aid that I can use to talk but it has also allowed me to play my own CD's, for the first time in my life.


At present I am a part of a Voc Ops group called Activ8. We do a newsletter every half term. I am good on a computer and I can work on my own and it's great. I can E-mail people that something I wanted to do for years. I want a computer, when I leave, with controls I can use. I want to buy a house. I hope to soon have wireless computer access to the internet through the WheelTop. So I can be independent and I don't have to ask some one to plug my switch into a different computer.


We still need to do some more things to make the WheelTop better.

I used to have a voice called Betty and it was much clearer than this one. So we have to doe some work to find a better voice. I want a camera built into it like on a mobile phone. I'd like to be able to have environmental controls built in to it so I can turn the TV on and watch DVD's and videos.


I'd like a mobile phone card so I can send and receive texts, and chat to people.

Thank you for listening, and I hope you will do what you can to help us.

20  But we have an aging population and we need to consider usage by people as they get older and loose their full ability to access information and services. Inclusive design is key.

21  This is a lady who is a trialist of the BT Telecare service which enables her to live at home in familiar surroundings and not be in a

care home. She leads a dignified life and has the peace of mind that if anything goes wrong the Telecare system will detect a change in her normal pattern of behaviour and once she has been unable to cancel an alert will contact a carer on her behalf.

22  Many thanks for taking time in your life to be part of this presentation by Adam. Please let him have any feedback or comments on how this will help you act differently when considering innovation. Let's make a better world

23 