Age:	44
Location:	Brussels, Belgium
Marital status:	Married
Education:	Master degree
Job:	Full-time at Flemish Institute for Inequalities and Disabilites.

meet Benoit Dupré...

Benoit (44) lives with his wife Hilde (45) and two children Maaike (14) and Samuel (12) iBrussels. He has been working as a counsellor at the Flemish Institute for Inequalities and Disabilities. Benoit is mainly involved in drawing up governmental policies regarding people suffering from impairments. He is also involved in making adapted prints of schoolbooks for people with reading difficulties and creating audiobooks for people with cognitive difficulties.

According to Benoit, a fundamental attitude change is needed for technological development related to assistive technologies. The focus should be on first allowing people to accept their disability and then introduce them to specific technologies that could help them in their day to day life.

Mobile Issues

Although accessible mobile phones are available on the market, Benoit feels the need for more adoption by the large players. The price of the current models is very high and on top of that, the specific assistive software to access the phone requires more investments. There seems to be little pressure on manufacturers to keep accessibility as a priority in new devices designed for the young and trendy.

Some key issues identified by Benoit include:

- On-screen status messages or indications like battery level, alarm on/off or signal strength are typically only available through visual icons; there is no textual menu option to check or link this to.

- Blind people using Braille as an interface are obliged to carry a Bluetooth Braille display with them, making the device considerably less mobile.

- Difficulties in using the keypad: small keys, keypad too dense, flat/unraised keys, etc. Activating functions by pressing more than one key at the same time or complicated key sequences.

- PIN-codes; for some users with cognitive impairments it is difficult to remember number combinations. That is one of the reasons why they have pre-paid cellphones.

- Complex instruction manuals with too much info. Quick user guides would be more useful.

When considering mobile technologies, Benoit wishes for:

- Integrated support for 3rd party applications (cfr. iPhone app store).

- Integrated hardware support; e.g. an interface that allows the use of a switch input.

- The phone as an interface towards other devices/appliances; e.g. control home automation. These appliances are often very hard for blind people to locate and use properly.

- Payment in stores by using mobile phone (NFC technology).

- More shortcuts to features or speeddials and any-key-answer making the phone easier to use.

This persona was created by the Centre of User Experience Research of KU Leuven (www.kuleuven.be/cuo) for the ÆGIS project, which is supported with the financial contribution of the European Commission (www.aegis-project.eu - open Accessibility Everywhere: Groundwork, Infrastructure, Standards).

Desktop Issues

Benoit is glad to see that OSs are starting to integrate accessibility as a standard feature so that users can use these out-of-the-box. He is also interested in open source software, but thinks there is a clear lack of a support community specifically towards impaired users. If there were more ways to support people with a disability in the use of open source software, he might advise that type of software to the users.

Benoit believes cloud computing could mean a lot in the context of adapting a system to a specific user's needs. A user would only have to set preferences onece and could use any type of computing system anywhere, in any context by logging in with a personalised userID and the computer system would boot up with all specific preferences applied. An alternative could be to load ATs on a flash drive and carry around. Benoit has read that Sun's Sunray might be a step towards this utopia.

In this light, he is also optimistic about the possibilites RIAs have to offer. After creating a personal profile on the internet, the impact could go beyond that and extend to desktops, mobile phones, information kiosks and interactive television services. This evolution might enable these devices to be more customizable which would improve their usability.

Another issue for Benoit was that systems should be able to recover from crashes without the user noticing. The last thing a user wants to feel is that he/she is doing something wrong, which happens too often in existing systems.

General Thoughts

Benoit often talks about "Empowerment in a digital world". Besides the generational gap, another problem arising is that several disabled people are not able to afford the correct devices to communicate and/or operate in a digital world. The danger exists that these people are getting even more socially excluded instead of enabled to participate. If services, like banking business, are supposed to be used more independently, accessible solutions like symbol and speech support must be implemented in addition to text-based information.

The main problem with the advancing pace of technology is that the assistive software always takes a couple of months or even years to be adapted to a certain platform or device. Disabled users generally have low incomes and, unless equipment and support is provided by charities or governmental institutions, often get left behind. Bringing down the cost of software and hardware (by using more mainstream products) and standardising alternative interfaces are now priorities.

Before talking about advanced features for impaired users, the basic interaction of mobile and desktop devices has to be right. Next, because everyone's disability can be so different, customizability is highly important. Also for this reason, end users and stakeholders should be more involved in the development of assistive technologies development in order to make applications more user friendly and better adapted to specific contexts.

last month...

On his last project, Benoit had to report on the integration of assistive technologies in the national education system. He was baffled to notice there is still a problem with the acceptance of computers in classroom environments. Both teachers and co-students react to someone using a computer as 'making things easier'. This is an attitude that is not motivating for the teacher, the user or the developer to create better software to use in a classroom setting. Here also, a profound mentality change needs to take place.