

Assistive technology or mainstreaming of ICT? Yes, please!

AAATE 2009

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Introduction to subject

- Information and communication technology (ICT) is everywhere in modern society.
- Access to and mastery of ICT - vital for the ability to be fully integrated citizens
- ICT needs to be accessible for all irrespective of individual characteristics and abilities

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Introduction cont.

...but accessible through universal design?

- ...or through individual adaptation including use of assistive technology?

Project

- This dilemma inspired the Delta Centre to initiate a project
- Many objectives – amongst others:
 - To investigate how accessible ICT is for persons with disabilities...
 - ...and to find out how well ICT works with assistive technology (AT)...
 - Universal design (mainstreaming) or AT?

Methods

1. Literature review of relevant material documenting the state of accessibility to ICT in Norway.
2. Interview study - professionals and representatives for user organisations/NGOs
3. Accessibility evaluation of 12 popular Web 2.0 orientated services

Interview study

- Input from approximately 30 professionals and representatives for NGOs/user organisations.
- In-depth interviews and focus groups.
- Very, comprehensive material – present only some of the findings...

Barriers and challenges to ICT usage

- Barriers and challenges in virtually every area of life – and with most technologies
- Varying from minor annoyance to total exclusion
- Affects – work, education, communication & socialising, leisure activities – ultimately quality of life.
- ICT and assistive technology do often not work well together

Why do barriers and challenges occur?

- Technology - rapid development, market driven and immature
- Non-inclusive design of ICT - procurers and developers lack knowledge and awareness
- The distribution and management of AT

Why do barriers and challenges occur? II

- (So far) a lack of legislation regulating accessibility to ICT
- Lacking coordination of ICT and AT policy
- Reasons pertaining to the end user – skills and motivation

Universal design or assistive technology?

- Despite increased focus on universal design – there will still be a need for assistive technology in the foreseeable future
- Why:
 - Increase in elderly population
 - Universal design not adequate for all – very complex requirements
 - High cost of integrating AT in mainstream solutions
 - More accessible technology may lead to more potential AT-users using technology
 - ...and not always advantageous to do so from a user perspective – may lead to poor solution for all!

Accessibility evaluation of 12 popular Web 2.0 orientated services

- Expert evaluation conducted by MediaLT
- Criteria:
 - Principles of universal design
 - Internationally recognized accessibility guidelines – WCAG 1/2
 - Interoperability with AT.
- Input from the public based on their experiences
- Perform concrete tasks

Accessibility evaluation of 12 popular web services

Website	Description	Test score	Overall score
http://www.yr.no	Online weather service	24	5
http://www.nav.no	Labour and Welfare Administration website	26	4
http://www.skandiabanken.no	Online banking	22	4
http://www.oslo.kommune.no	Oslo municipality website	20	4
http://www.nrk.no	The Norwegian Broadcasting Corporation	17	3
http://www.finn.no	Online market place	15	3
http://www.vgb.no	Blogging service	16	2
http://www.facebook.com	Social Internet community	13	2
http://www.moteplassen.com	Dating service	12	1
http://www.filmweb.no	Film and movie service	11	1
http://www.norwegian.no	Norwegian airline company	11	1
http://www.nettby.no	Social Internet community	10	1

Web accessibility evaluation - conclusion

- Services are difficult and sometimes impossible to use.
- Universal design and accessibility has been given inadequate attention.
- Includes poor interoperability with assistive technology.

Summing up...

- Despite the fact that ICT has given people with disabilities many new opportunities, there are a number of serious accessibility issues denying many people equal usage of ICT in Norway.
- This has an adverse effect on many life areas
- Universal design of ICT may accommodate some of these issues, but will not make AT superfluous in the foreseeable future – if ever.

Any changes on the horizon?

- In Norway – new anti-discrimination legislation.
- New ICT offered to the public shall be “universally designed” from 1. July 2011.
- Existing ICT from 1. January 2021.
- Note! Does not include all ICT – only main solution.
- Individual adaptation and AT for certain areas



Thank you!

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