ITU Workshop

"Making Television Accessible – From idea to reality"

hosted and supported by Nippon Hōsō Kyōkai (NHK)

Media Accessibility R&D in Europe

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International
Telecommunication
Union

"Industrialisation of Access Services" -

- providing the widest coverage (programmes, channels, delivery platforms)

- at an affordable cost,

- under all practicable circumstances &

- with highest possible quality.

"Industrialisation of Access Services"

Tension between

- volume,

- accuracy,

- timing (for subtitles at least) &

- cost.

As volume/quota increases so does the user expectation.

Most important developments are focussed on the tools for authoring, on each step of the workflow and on every process of content generation.

In particular for subtitles

- integrating authoring of prepared and live subtitles,

    increased use of script data for live news &

- improving tools for grammatical and lexical checks.

Speaker-dependent voice recognition can now achieve high levels of accuracy (even in English) but speaker-independent VR lags significantly particularly when faced with a broad range of accent, dialect or vocabulary.

Other subtitling developments & challenges include :

- managing delay in live subtitles
(including mixed live and prepared),

- the EBU profile of Timed Text
(including a live streaming protocol based on XML),

- ensuring HTML5 supports subtitling,

- maintaining consistency between different service providers on all delivery platforms visible to the same community of users,

- advanced monitoring &

- adding value (& metadata) for content indexing etc..

As the diversity of delivery platforms increases there is further tension to resolve between

- considering authoring, delivery and display as an end-to-end system, each part with its own constraints and opportunities but each contributing to the user-experience

and

- the distinct and different life-cycles of each part of the chain.

To this end those making accessible content need to work on the principle of "Author Once, Delivery Many"

and   all systems designers need to ask themselves "What are the service requirements ? "

The UK Switchover Help Scheme

Since 2007 the BBC has been managing a scheme to ensure that older and disabled people are not left behind with a blank screen as the UK switches to digital television.

- UK Switchover commenced in 2008 and will be complete at the end of 2012.

- There are 15 regions (12 completed to date).

- We have contacted over 9 million people.

- We have completed over 1.25 Million installations.

switchover
help scheme

- We have sought actively to understand the needs of those eligible for our help, consulted with stakeholder organisations, listened to feedback, undertaken regular market research and always sought to help those hardest to reach.

- People who choose our help get a choice of easy-to-use DTV receiving equipment, installation and a demonstration, a new aerial or dish if necessary and free aftercare for 12 months.

So we have substantial direct experience of the importance of useability.

switchover
help scheme

Lessons learned

Engage the user-community but don't cherry-pick.

Take a wide range of input and apply reasonable pragmatism.

Support the widest practicable range of capabilities.

Emphasise requirements rather than solutions.

Lessons learned

Access services are no good if you can't find them …
so "useability" is a key feature of the end-to-end story.

• Have clear, short and uncluttered menus.

• Infrequently-used menu items or user functions need to be even easier to use than those you use everyday.

• There should be no unforeseen or unexplained surprises in the user-experience.

• Provide prompt and appropriate feedback so a user knows what he or she has done.

• Ensure that the presence (or absence) of assistive components – however delivered – is signalled simply, dynamically and accurately.

Lessons learned

- Provide easy-to-understand plain-language help in an appropriate format.

- Thoroughly test the user-equipment against a wide and representative range of real-world circumstances (i.e. not just test streams).

- For a CE manufacturer any "feature" which results in a significant number of post-sales calls (e.g. to a help-line) is costly both to revenue and reputation. Making an AV product thoroughly easy-to-use makes good business sense.

For some consumers of AV content – particularly the blind and partially-sighted and those with learning difficulties - the development of suitable talking functionality in consumer equipment is essential.

As speech synthesis has become more sophisticated it is now possible to purchase a number of DTV products incorporating text-to-speech. In the UK there are DTT set-top-boxes from Harvard, DTT DTRs from TVonics and more widely there are now iDTVs for DTT and DSAT from Panasonic. Each enunciates menus, user choices and programme information (now/next and programme guides). As the number of languages supported grows such features will gain wider support.

There is no doubt that the alternative methods of interacting with the home AV terminal which we have already seen in demonstration (eg. via gestures using Kinect) will find a place in the market as mainstream or for specialist assistive devices.

There has been work reported on developing a generic control interface to home equipment. This in principle would allow specialist assistive devices to be developed to meet a wider range of specific needs for AV users than traditional interfaces yet allow.

With thanks for your attention ………….