2. Introduction to media and accessibility

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Check list

Target Groups

Stakeholders

Access Options

Proposed Approach

Business Models

Costs

Incentives, Sanctions

Work Flows & Resources
Check list

- Target Groups
- Stakeholders
- Access Options
- Proposed Approach
- Business Models
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- Work Flows & Resources
- Incentives, Sanctions

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Check list

- Target Groups
- Stakeholders
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- Proposed Approach
- Business Models
- Costs
- Incentives, Sanctions
- Work Flows & Resources
Content

What does this tutorial cover?

- **Four strategic options to promote media accessibility**
  - Three strategies for content accessibility
  - One strategy for business processes
Outcomes
What will I be able to do?

At the end of this session, you should be able to answer questions such as:

- What can be done to improve TV accessibility?
- How can an understanding of the value chain and the stakeholders help optimise media accessibility?
- What can we do to make media other than TV accessible?
Accessibility actions
4 Strategies

1. **Usability**: Do something to make content as intelligible as possible
2. **Access services**: Offer captioning, audio description, sign language
3. **Intelligent devices**: Make devices truly assistive
4. **System of systems**: Address platform issues end to end (e2e) from source to user
#1. Improve TV usability
Example 1: pictures we can’t see
#1. Improve TV usability
Example 2: audio we cannot understand

If we can do it for football
we can do it for other programs, too.
#1. Improve TV usability
Example 3: emergency alerts some do not get

We can learn from others who have more experience than we do.
#2. Offer Access Services
We all have different needs

**Viewers born deaf or with hearing impairment**

**Signing and captioning**

**Viewers who are blind or have visual impairments**

**Audio description (AD) or spoken captions/subtitles**

- BLUE SKY AND SUN SHINING ON A FIELD OF YELLOW FLOWERS...

**Young viewers of foreign language programs**

**Dubbing or voice-overs (lectoring)**

**Viewers of programs with people who speak fast or unclearly**

**Same language captions**

- So extra care is needed in that part of the country.

**Subtitles for young viewers whose parents are deaf**

**Subtitles for persons who are deaf or hard of hearing (SDH)**

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#2. Offer Access Services
Understand those different needs

Audio Description and Audio Subtitling: Who Needs It?

AD user personas

Audio Description (AD) and Audio Subtitling (AS) provide access to audiovisual media to people who may otherwise be excluded. What is striking about the audience for these services is its sheer diversity. To illustrate this, here are 12 ‘personas’. None of these people are real. They are composite characters, based on research interviews with actual users of AD and AS in the UK. They are representative of the potential audience across EU member states.

Louise Fryer, Dec 2011.
Department of Psychology
Goldsmiths
University of London
New Cross
London
SE14 6NW
#2. Offer Access Services
Make sure people can find and use them.
#3. Assistive technologies

British text-to-speech will create talking TVs

Can even speak Gaelic and Welsh

By Asavin Wattanajantra

Wed Jun 09 2010, 16:15

LOSING A REMOTE CONTROL to change channels might soon be less of a problem with the development of British technology that enables your TV to talk to you.

Ocean Blue Software has developed low cost text-to-speech technology called 'Talk TV', which is being built into set top boxes from Korean company Arion Technology and branded by retailers from August.

Aimed particularly at blind or partially-sighted owners, it can use speech technology to tell them what's on and when it's on. The speed and verbosity of the voice can be adapted, while a different kind of remote control will be provided.

The development has already won design awards, and has been developed with the support of the Royal Institute for the Blind.

The technology has been developed with digital chip company ST Microelectronics, and the next stage of development looks to be that owners will be able to talk back to their TVs using commands such as 'channel up', 'channel down' and 'volume up', 'volume down'.

Talk TV will be available in different languages and dialects. It is slated to support Scottish Gaelic and Welsh in the UK, but it remains to be seen how the technology will cope with the notorious Geordie accent. μ
#3. Assistive technologies
Subtitles to signing
#3. Assistive technologies
Text to signing in Japan

Source: Dr. Takayuki ITO, NHK
#3. Assistive technologies
“Clean audio” from SR in Sweden

Du lyssnar på P3

Ljudnivå för tal
Mindre  Mer

Ljudbehandling
Välj

Lätt hörselnedsättning
Mindre  Mer
#3. Assistive technologies

**Kodat stereoljud + sidoinformation**

**Kodare**

Produktion på Sveriges Radio skapar trekanaligt ljud med tal i center-kanalen och resten i höger och vänster kanal.

**Sveriges Radio**

**Hörbarhetsapp**

Avkodning till tre kanaler med hjälp av medföljande sidoinformation

Ljudbehandling

Nedmixning

**Vanlig app**

Avkodning till stereoljud utan hjälp av medföljande sidoinformation

Stereoljud till t.ex. hörlurar

Stereoljud till t.ex. hörlurar

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#4 System of systems
...only as strong as the weakest link
#4 System of systems

A value chain for TV

<table>
<thead>
<tr>
<th>Production</th>
<th>TV channel</th>
<th>TV service</th>
<th>Contribution</th>
<th>Transmission</th>
<th>Reception</th>
<th>Use</th>
<th>Viewer</th>
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<td>Production of TV programme</td>
<td>Aggregation of programmes, access services and metadata into TV channel; playout of TV channel</td>
<td>Aggregation of TV channels into TV service</td>
<td>Contribution of service to transmission network</td>
<td>Distribution of service via transmission network</td>
<td>TV receiver and decoder</td>
<td>TV programmes</td>
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<tr>
<td>Production of access service</td>
<td></td>
<td></td>
<td></td>
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<td>TV display device (vision + audio)</td>
<td>Access services</td>
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<td>Production of metadata</td>
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<td></td>
<td></td>
<td>Remote Control Device</td>
<td>Information about TV and access services</td>
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#4 System of systems

Let us work back from the viewer

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#4 System of systems

Differences between Pay and Free TV

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#4 System of systems
Differences for broadcasters

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How do vulnerable viewers living alone handle the switch from analogue to digital TV?

Can they connect a Set Top Box to their TV set?

Can they tune or re-tune their receiver as needed?

What does an elderly viewer have to do in order to watch a programme with subtitles?

How do blind people discover something they want to watch?

Are the access services mentioned in the Electronic Programming Guide (EPG) - also for repeats?
#4 System of systems
Example: Viewers with hearing aids
#4 System of systems

Example: Viewers with hearing aids

User scenario:
What does the user do when the phone rings?
Fashion Meets Technology

The design of medical instruments and health-care equipment has improved immensely in recent years. This miniature hearing aid, from Danish outfit Oticon, looks more like something out of a James Bond movie than the clunky earpieces of yesterday. Aimed at the image-conscious Baby Boomer generation, the stylish Oticon Delta...
Activity 2: Strategic priorities for making media accessible

- Work in groups
- Use one of the 6 worksheets for activity 2 (on following slides)
- Discuss what the **current** strategic priorities are for the organisation selected.
- Identify possible changes to the strategic priorities for the same organisation.
  - What needs to be changed?
  - Why is change necessary?
### Activity 2: Strategic priorities

**Doordarshan (DD)**

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Activity 2: Strategic priorities

Focus on...

- improving usability for programmes
- offering access services
- adding intelligence to the device
- e2e integration
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**Bharti Airtel**

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Activity 2: Strategic priorities

What are your conclusions?

What points are worth noting?
What have we covered in this tutorial?

- Four strategic options to promote media accessibility
  - Three strategies for content accessibility
  - One strategy for business processes
Outcomes
What should I be able to do?

You should be able to answer questions such as:

- What can be done to improve TV accessibility?
- How can an understanding of the value chain and the stakeholders help optimise media accessibility?
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Check list

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- Business Models
- Incentives, Sanctions
- Costs

Work Flows & Resources

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What is needed by the viewers? (chapter 2)

a) Changes to improve the usability of the content itself – mainstream scenario

b) Changes in the information about the content – mainstream scenario

c) The provision of an access service for the content – mainstream or assistive add-on