RTI
INTERNATIONAL

Usability vs Accessibility in Websites/Web Survey

Sandhya Bikmal

Sridevi Sattaluri

March 28, 2012

www.rti.org

Today's Presentation

- Usability v/s Accessibility
- Review some potential disparities
- Discuss survey questionnaire examples
  - User friendly ⟹ Accessible friendly
- Summary

Usability

- Capable of being used
  - Ease of learning
  - Efficiency of use
  - Memorability
  - Subjective satisfaction
  - Error frequency and severity

Accessibility

- Capable of being reached
  - Facilitate Assistive Technology devices
  - Keyboard accessible
  - Alternate text and content provided
  - Color independent
    - (alternate ways to convey info)
  - Style Sheet independent
  - Transcripts for multimedia content

Why does accessibility matter?

"The most personal argument is that we will all one day be in that situation where you need it. There's a continuum from people who have very severe impairments to people with very minor impairments and when you get up into your 40s you start getting into that category of minor impairments. I'm already in a situation where websites with fixed font sizes are getting harder to read for me. When people get into their 50s it becomes a real problem. Not just the font size but several other issues as well."

------ Excerpts from Jakob Nielsen's interview

Example - 1

Questions below will ask you about operations, staff, services and participant characteristics of your adult day services center <u>at this location</u> indicated in the mailing label on the front of this questionnaire. If your center is part of a campus that includes other types of care, such as a nursing home, residential care facility, rehabilitation center, hospital, or independent living/apartments, **exclude** these components in the answers you provide**. Provide answers only for adult day services center portion of the campus.**
If you need help answering any question, please refer to center records or request assistance from other staff.

Usability - Portions in Red signify importance or need to pay closer attention to what is being emphasized in that color

Accessibility - A user with visual impairments can only avail this if the developer uses either the 'Strong 'or 'Emphasize' tag.

Example - 2

Questions below will ask you about operations, staff, **SERVICES** and **PARTICIPANT** *characteristics of your adult day services* center AT THIS LOCATION indicated in the mailing label on the front of this questionnaire. If your center is part of a campus that includes other types of care, *such as a nursing home*, *residential care facility, rehabilitation center, hospital, or independent living/apartments*, **exclude** these components in the answers you provide. **Provide answers only for adult day services center portion of the campus.**
If you need help answering any question, please refer to center records or request assistance from other staff.

Usability - The usage of different fonts and size on a webpage makes the content not appealing to the user

Accessibility - An Assistive Technology device will read the content irrespective of size and font, making the content accessible.

RTI
INTERNATIONAL

Example - 3

Multimedia – Information is combined with the elements of text, audio, graphics and video.
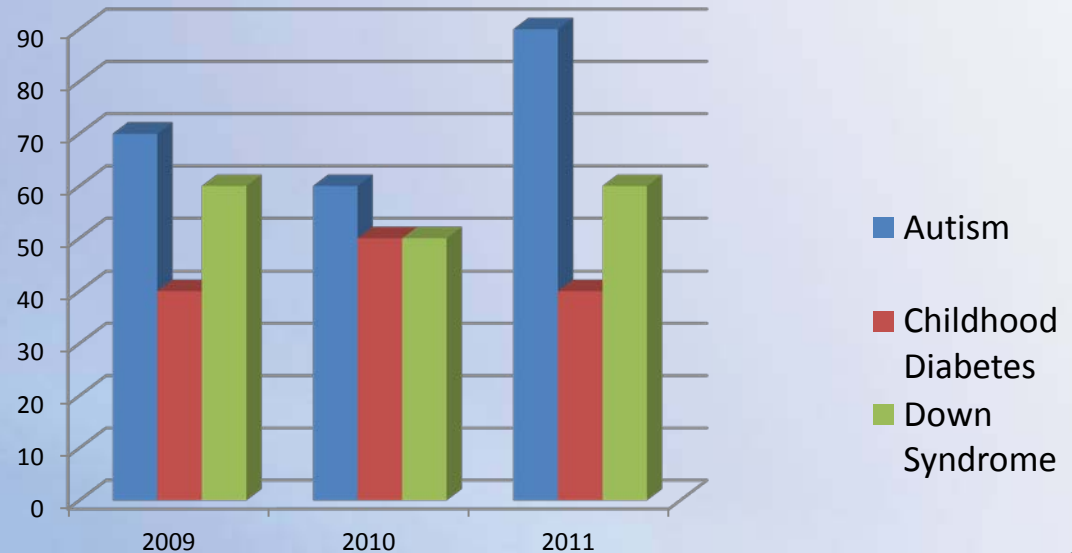
Usability – Using images, sound and animations can often be more comprehensible than large blocks of text. Communication research has shown that the combination of (aural and visual) offers greater understanding and retention of information

Accessibility – Audio interference with the speech from screen readers. Make appropriate accommodations on the webpage to provide transcripts of the multimedia content

Example - 4

From the graph, how would you rate the growth of Autism in 2011?

- ○ High
- ○ Low
- ○ Moderate
- ○ I don't know

Legend:
- ■ Autism
- ■ Childhood Diabetes
- ■ Down Syndrome

(X-axis: 2009, 2010, 2011; Y-axis: 0 to 90)

Usability - The graph provides a picture representation of data. Information is easily interpreted and the question can be answered

Accessibility - A graph is an image and unless appropriate and elaborate text is provided, a graph cannot be discerned for the visually impaired

Example – 5
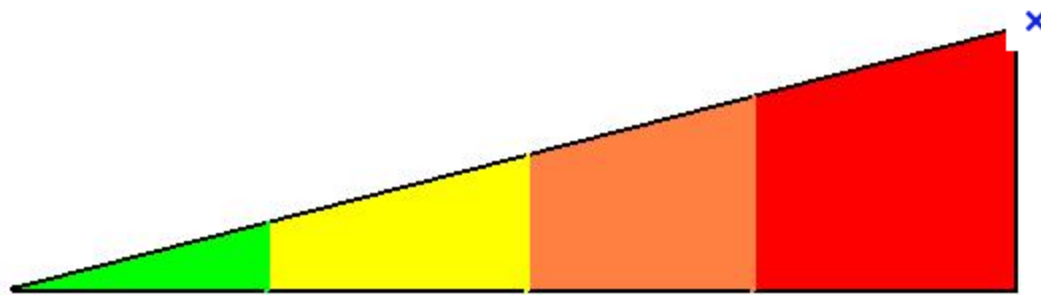
How volume controls should work on computer programs, websites, etc.

How they actually work

Summary

- Make websites/web surveys not "user-friendly" but "ALL users-friendly"

- Consider accessibility during design phase rather than implementation phase

- When using technology, use web standards and best practices that promote usability for the impaired population

More Information

Sandhya Bikmal

Research IT/QA Specialist

919.485.5537

sbikmal@rti.org

Sridevi Sattaluri

Research Programmer Analyst

919.541.5599

ssattaluri@rti.org

RTI
INTERNATIONAL