Results from Election Night Accessible Radio Event

Approximately 150 guests visited 5 locations (Baltimore, Boston, Denver, Phoenix and Washington) on election night.   75 deaf and hard-of-hearing participants responded to questions concerning 3 displays.

- Large Display captioned Radio Election Coverage (n = 73)

- Accessible Radio Slide Show (n = 70)

- NPR internet feed of captioned election coverage (n = 68-75)

Participant breakdown by Age and Gender:

	19-30	31-40	41-50	51-60	61-75	75+	Unknown Age
Female	9%	1%	12%	19%	8%	2%	
Male	5%	5%	4%	7%	13%	1%	
Unknown Gender				3%			4%

Results from Large Display Radio Election Coverage

Q1: In terms of speed of captioning, did you think the text presentation was:

	All respondents
Too fast	29%
Too slow	14%
Inconsistent	3%
About right	58%

Q2: How did reading this display compare to reading television captioning?

	All respondents
Slower	34%
Faster	22%
The Same	43%

Q3: Did you think the presentation was accurate?

	All respondents
Extremely accurate	69%
Accurate	26%
Inaccurate	5%

Q4: In terms of understanding, how did you comprehend the text?

	All respondents
Completely understood the information	55%
Had some difficulty understanding	42%
Had significant difficulty understanding	3%

Q5: In terms of attractiveness and readability, did you think the text was fine as is, or too choppy?

	All respondents
Fine	27%
Too choppy	73%

Q6: If you could have a display like this on a radio at home, would you be interested in purchasing it?

Yes: 77%

Q7: If you could have a display like this on a radio in your car, would you be interested in purchasing it?

Yes: 66%

Results from Slide Show:

Q1: On a scale of 1-10, 1 being "I wouldn't use it at all" and 10 being "I would use it all the time, how often would you use an accessible radio in the following environments?

	Deaf	Hard of Hearing
Home (table top)	6.4	6.9
Alarm clock	6.8	5.1
Car	7.4	6.5
Portable (boom box)	6.2	4.9
Portable (iPod)	7.4	7.1

Q2: On a scale of 1-10, 1 being "not at all important" and 10 being "extremely important", how important do you think having an accessible radio would be to get information in the following genres:

	Deaf	Hard of Hearing
Emergencies	9.7	9.5
News	8.2	7.9
Entertainment	6.2	7.7
Weather/Traffic reports	9.2	8.1

Q3: On a scale of 1-10, 1 being "not important" and 10 being "extremely important", how important do you think the following features are important to include:

	Deaf	Hard of Hearing
Bed Shaker for alerting	7.5	7.7
Strobe for alerting	8.1	6.8
Ability to see music lyrics	6.7	7.4

Q4: On a scale of 1-10, 1 being "not important" and 10 being "extremely important" what kind of information do you want to see on the radio display:

	Deaf	Hard of Hearing
Radio Show Name	8.4	8.3
Host	8.4	7.7
Story title	8.6	8.6
Station frequency	7.8	7.8
Date Time	8.8	7.5

Q5: Would you be interested in purchasing a dual-screen view display (GPS for the driver and captioned radio for the passenger?

	All respondents
Yes	86%
No	13%
Maybe	1%

Q6: How much would you pay for a dual-screen view display?

	All respondents
Under $50.00	12%
$50-$99	36%
$100- $149	24%
$150-199	20%
$200+	8%

Q7: Would you be interested in a captioned radio display for the backseat?

	All respondents
Yes	46%
No	18%
Maybe, depending on the cost	36%

Q8: In a driving situation, what would the most effective way of getting the driver's attention would be?

	All respondents
Flashing light in dashboard	39%
Flashing light in radio	12%
GPS Message	11%
Shaker in car seat	24%
Stead light in dashboard	17%

Q9: What visual display on a radio would best correspond to a "warning sound" (the tone used to break into a program alerting the driver that an important message will follow).

	All respondents
Flashing color and font change	45%
Bright colors	36%
Words	19%
I don't know	7%

Q10: Which announcer identification scheme did you like the best?

	All respondents
Photo of announcer and name	60%
Color and name	27%
Name only	13%

Q11: In a large screen display (4" x 5"), which method of line presentation do you like best?

	All respondents
Block (3 lines)	16%
Scrolling (star wars)	69%
Equally fine	12%
Neither	3%

Q12: In a small screen display (1" x 4"), which method of line presentation do you like best?

	All respondents
Block (3 words)	35%
Scrolling (times square)	42%
Equally fine	13%
Neither	10%

OPEN-ENDED question: If you could change anything about the display, what would it be? (Answers were group in the following categories)

Speaker ID comments:

Need to know who is talking - name of person
put name next to the statements or change colors.
Different colors for different speakers. Use ful names at beginning of each segment and then initials when speaker changes
identify person by color
identify person by color
it needs to add "name" so we know who is speaking--it would benefit me for traffic or weather information.
distinguish the text for speakers with color
who is talking?
Identify who is speaking.
I would recommend putting someone's name in front of the speech to indicate who is speaking.
I would insert speaker's names in parentheses to distinguish text.
lines to be more clearer - name people who speaks.
block--and who is speaking? Maybe some colors (background). Maybe similar as navigation system when I stop and read news.
would like the name before the options -- for example, on my blackberry FM my name is always right before the captions and so is the person I'm talking to.. Ie : John: How are you? Wendy: I'm fine. Having a display in my vehicle would greatly benefit me as I tune in to find out how is the traffic before I venture out to any HWY, plus the weather report and other reports related to traffic.
Identification of speakers to the extent possible. This is especially important if the program has a well known reporter or public figures involved in the discussion. Captioned radio may be most attractive to people who have some hearing. For me it works better to have captioned television-- the visuals are important. Captioned radio gives me just the words - no facial expressions, no laughter, etc... No sense of the whole scene. I think maybe, a couple of times the captioning indicated "cheering," but the effect was not the same as seeing captioned TV.
Visually separate the speakers -- >> is insufficient. All caps inhibits readability.
Add gender of the speaker so that we can have a visual image because right now I'm not sure how many voices they are and maybe you could change the font of the voices and maybe the sizes.

Scroll Format comments:

I would like the information to scroll the opposite way (new text on top)
Text would come in from top rather than bottom. Continuous feed rather than jumping in with a block of text. Announce breaks/commericals - "music"
more lines and scroll as each line was available
try to have caption scroll out from left to right. The reading would be more appealing--along with the right pace.
I really need to hear and see the display at the same time to judge how I'd change it. But offhand, I'd like it to scroll up rather than popping up.
I'm not sure if maybe it only displayed 3 lines at a time it might be easier to read. I would try to drive and read the radio at the same time!
Make the display move slower, otherwise fine.
I'm more used to word by word like CART or live news broadcasts. The line by line here takes getting used to. I prefer word by word, seems more on top of things + easier to follow.

Smoother Scroll comments:

that jerky try to change to smooth
should scroll smoothly instead of stepping with each line being filled with text
when the line advances, my eyes have to re-target what I was reading before the line advanced. Would be nice to have smooth transition
smoother scrolling
smoother scrolling
make sure the text isn't too choppy keep it ongoing smooth.
It would be nicer to give smooth scrolling effect in order to eliminate the choppiness.
Try to use a paragraph message -- hard to follow up reading while too choppy. Wonder if Sidekick II wireless pager can get NPR msg 7
Just more smoother--more like TV captioning. Need to add tone/if serious/funny/ etc.
Scrolling would be much better than the choppy-blocky display we had tonight.

Text format comments:

different font that's easier to see and read
there were many words that were stuck together. Also I would suggest capitalizing at the beginning of the line.
reading white text is very difficult for long periods of time. Please aim for black text on a fairly neutral background - yellow, tan, crèam, etc.
I would also try to include visual aids of important information in the background to aid in relay of the message. Could this be put into Tom-Tom?
user control of font and color contrast to change w/ speaker at his / her preference as an option. I would like to see audio cues (noisy background, cough, laugh) + to include tone of voice. The captioning does not convey emotion-- system that can be developed via font styles + formatting to convey background noise, atmosphere, tone of voice, etc.
Make it self paced -- radio equipment could have some buffering ability to permit such self pacing. The all caps is also impeding readability. It should be in lowercase -- all caps lines slow down reading! Just compare, who would want to read the whole book or newspaper all in caps?
All caps is a challenge. The choppiness of the sentence format inhibits reading flow or scanning. As a universal design advocate I would love to see this technology feature integrated into all radios.
Yes - sentences too short -- text into a more natural sentence format -- Longer lines. Jerky

> motion why few lines. Identify speakers. But I'd be most interested in having radio like this with a display on my TV at home. Consider applications for elderly-- many hearing + vision impairment. Consider applications for foreign language speaking populations and classrooms in urban areas like ours. Visual processing of audio produces a greatly enhanced effect to students who have English as a second language.   Caption radio service could also be great on airplanes, airports, other public areas where audio transmission may be limited and can be enhanced.

Other comments:

My hearing loss is not that significant. But it is an interesting concept and might prove useful to me for emergencies
TV is more like a live radio as it has visual access where we can see the facial expressions while hearing people would hear the tone of voices -- consider NPR-TV? =)
In some way we can learn to use it.
I liked the number of lines available.
I'm the primary driver and this would be too distracting
Be consistent -- either show one line @ a time & change one line at home or leave multiple lines up for longer (in order to read) and change whole paragraph at a time.
Sync it with the spoken radio service. Text ran about 20 seconds ahead of spoke source, which will irritate aging baby boomers and CI users, both of which have some hearing.
instead of relaying via text, all info relayed in ASL is preferable.
It's just too new for deaf access. One day it will improve as technology adjusts
Maybe a block of text that changes all at once, as opposed to the scroll on display. If this came to my blackberry, I would use it.

Survey Monkey – Web survey results:

Q1: In terms of speed of captioning, did you think the presentation was:

Too slow	64%
Too fast	7%
Just about right	29%

Q2: In terms of captioning, how does reading this display compare to reading television captions?

Slower	65%
Faster	9%
The same	26%

Q3: In terms of accuracy, did you think the presentation was

Extremely accurate	10%
Accurate	56%
Inaccurate	35%

Q4: In terms of understanding, did you:

Completely understand the information   35%
Have some difficulty   47%
Have significant difficulty   19%

Q5: If you could have access to captioning on the internet for NPR shows, how often do you think you would use it?

All the time	18%
Often	35%
Sometimes	35%
Rarely	10%
Not at all	3%

If you could have access to captioning on the internet RANK the order of importance for these features:

	Most important	Important	Somewhat important	Least important
Accuracy, regardless of how many audio streams (radio shows, videos) were captioned	59%	15%	12%	14%
Real-time access to audio streams (radio shows, videos)	26%	51%	18%	5%
Access to all radio shows, not just a few	7%	26%	41%	26%
Access to all video streams, not just a few	25%	17%	24%	34%