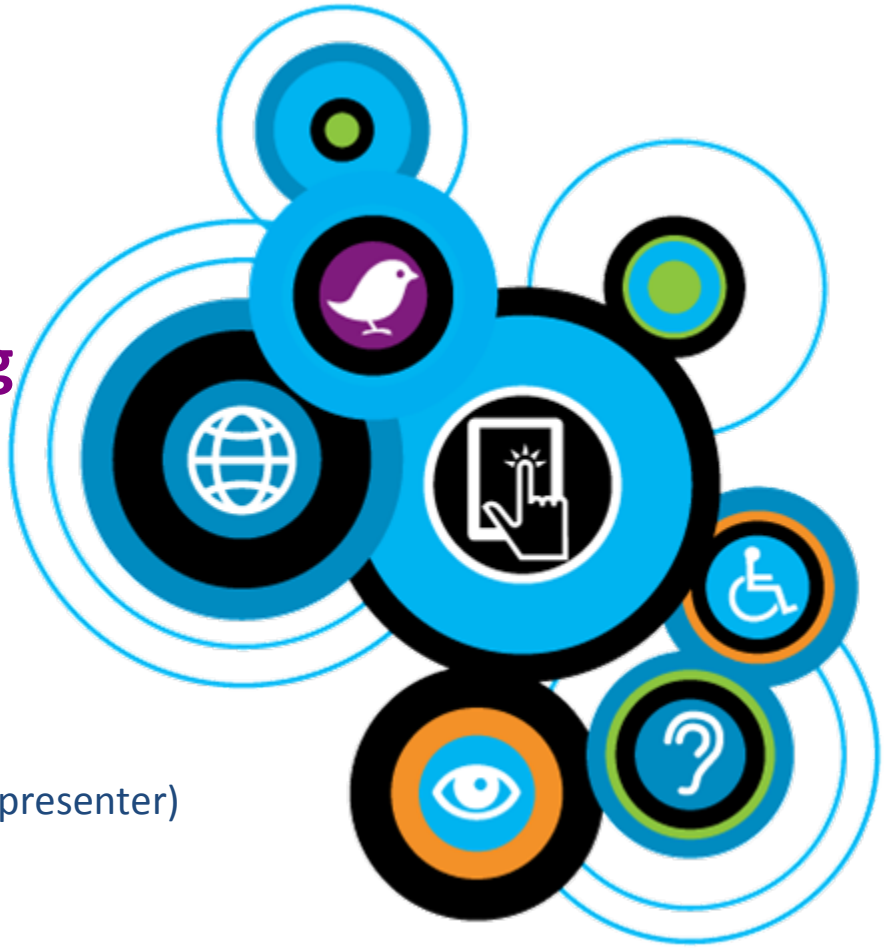
Overcoming Accessibility Challenges of Web Conferencing



Authors:

Mary Jo Mueller, IBM Accessibility Standards Lead (presenter)
Marc Johlic, IBM Accessibility Consultant
Susann Keohane, IBM Accessibility Consultant

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Have you ever wondered …

- *Are you conducting accessible Web conference meetings?*
- *What are the different user needs in a Web Conferencing environment?*
- *Why inclusion matters to more than just people with disabilities?*
- *How to overcome accessibility challenges in a Web conferencing environment?*
- *What are some best practice guidelines to make your Web conference meetings inclusive to all?*

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Agenda

- In this session, we will:
  - Discuss the importance of accessible Web conferences
  - Understand disability types and needs within a Web conference
  - Identify considerations for Web conferences
  - Discuss how to overcome accessibility challenges in a Web conference environment
  - Questions and answers

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Disclaimer

- The session will discuss best practices and simple techniques for the inclusion of people with disabilities in a Web conference setting
- These best practices are application independent / delivery system independent
- Techniques range from new techniques to some common sense guidelines that are often overlooked, yet when implemented greatly improve the accessible experience of the Web conference
- No endorsement of any products is inferred

- Conclusions are based on anecdotal experience
  - There may be errors and omissions (and probably even a few wild assumptions)

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Accessibility: It's about all of us

The People of a Smarter Planet

Accessibility extends the capabilities of technology to accelerate social innovation and create shared value for all the citizens of our Smarter Planet.

Total Global Population:

7+ billion people

Of these…

- **6 billion** have a cell phone

- **1.2+ billion** are people with disabilities

- **1+ billion** are mobile workers

- **600+ million** are over the age of 60

- **900+ million** have low literacy or are illiterate

- **Fewer than half speak 1 of the 10 major "link languages"** as their primary language.
- **5 billion** have *never* used the Internet.

- **1 billion** have used the Internet for less than 5 years.

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Inclusion matters

In today's global collaboration, **excluding** any individual means **leaving ideas, insight and opportunities** on the table.

What's impacted?

Your ability to:

- **Differentiate from competition**
- **Expand market reach**
- **Drive Innovation**

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Enabling collaboration

- Technology has evolved, so too has the way meetings are conducted

- Web conferencing is becoming the norm for collaboration because it
  - Enables global employees to work together
  - Saves time and money
  - Delivers the benefits of meeting face-to-face, without the headache, expense, and risk of travelling abroad
  - Enables communication of ideas easily and effectively

- Challenges
  - Shortcomings in the accessibility of Web conference environments can mean people with disabilities are not full and equal participants

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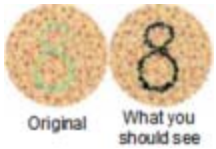
Understanding disabilities

Blindness People who are blind need meaningful text equivalents for images so a screen reader can "read" the information they need to navigate using only the keyboard	**Color Blindness**  Inability to distinguish the differences between certain colors, so need higher contrast to distinguish colors and alternative ways of identifying colored content.	**Low Vision** People with low vision need larger fonts and higher contrast	**Impacts of Aging** A gradual change that can impact the traditional areas of vision, hearing, motor and cognitive abilities
Deafness, Hard of Hearing People who are deaf or hard of hearing require visual representations of auditory information	**Motor Disabilities** People with difficulties in moving, controlling or coordinating movement of the body and may experience difficulties using the mouse or even the keyboard	**Cognitive Disabilities** Impacts the ability to access, process or remember information; and limits the ability to perceive, recognize, understand, interpret or respond to information	**Situational Disabilities** Prevent you from functioning in your usual manner Examples are: Loud/quiet environments, temporary injury, multitasking, driving, and non-native language

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Participants who are Vision Impaired or Blind

- Assistive technology:
  - Screen readers
  - Braille displays
  - Screen magnifiers
  - Optical Character Recognition

- Challenges in web conference:
  - Dependent on meeting delivery interface to be keyboard accessible
  - Constrained by lack of consistent, reliable keyboard access to navigate the web conferences
  - Limited or no access to whiteboard content, graphics, simulations, or demos
  - Constrained by font and color settings set by facilitator
  - Constrained by the presenter's use of color to convey meaning

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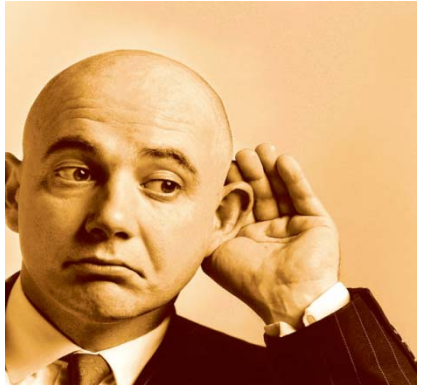
Participants who are Deaf or Hard of Hearing

- Assistive technology:
  - Closed captioning
  - Transcripts
  - ShowSounds

- Challenges in web conference:
  - Dependent on live captions and visual equivalents
  - Require the ability to increase volume of the content
  - Utilize VoIP features commonly used in web conference applications
  - Lack of support of accommodating technologies, such as TTY or IP Relay



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Participants with Motor Disabilities

- Assistive technology:
  - Alternate input (e.g. voice)
  - Access keys for application navigation
  - Latches that are easy to reach and manipulate
  - Keyboard alternatives (switch, sip and puff, etc.)

- Challenges in web conference:
  - Dependent on meeting delivery interface to be keyboard accessible
  - Constrained by lack of consistent, reliable keyboard access to navigate the web conferences

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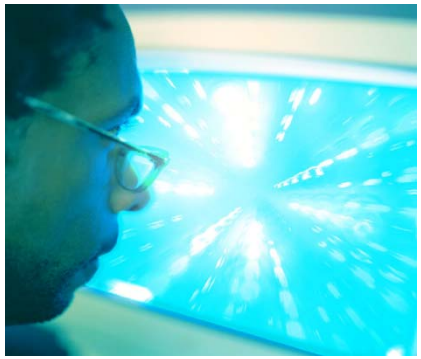
Participants with Cognitive Disabilities

- Assistive technology:
  - Word prediction aids
  - Reading/writing comprehension aids

- Challenges in web conference:
  - Constrained by influx of information in web conference, such as, chat rooms, slide presentation, audio, whiteboards, and so on



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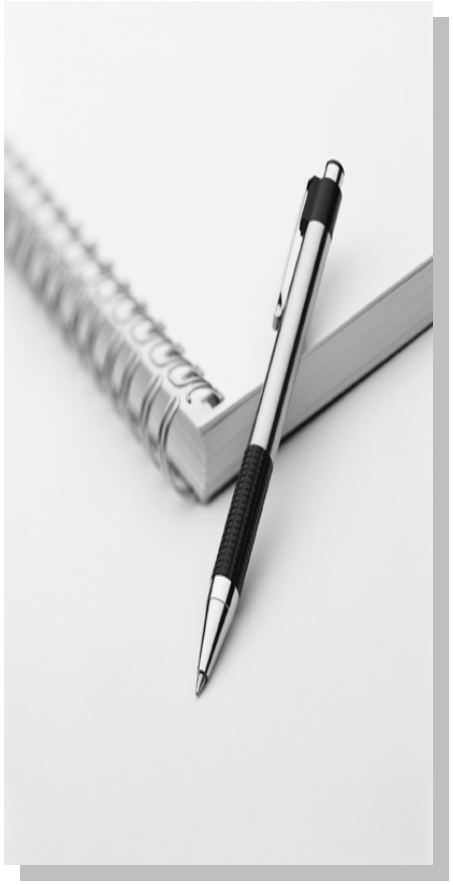
Overcoming accessibility challenges

Considerations for Web conferencing:



- Conference facilitator guide
- Telecommunication considerations
- Conference invitations and accommodation requests
- Meeting room introductions and orientation
- Interactive content
- Q&A and text chat
- Conference follow-up

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Conference facilitator's guide

- If your organization is spread across multiple sites, it may make sense to develop a Web conference facilitator's guide.

- The guide would:
  - Explain the needs of different disability types
  - Provide references to accessibility standards and company requirements
  - List known limitation with meeting delivery systems
  - Outline best practices for conducting Web conferences
  - Explain how to subscribe to captioning service
  - Provide references to additional accessibility education

- Benefits:
  - It's invaluable resource for facilitators
  - Provide a simple to follow checklist
  - Ensures a level of consistency

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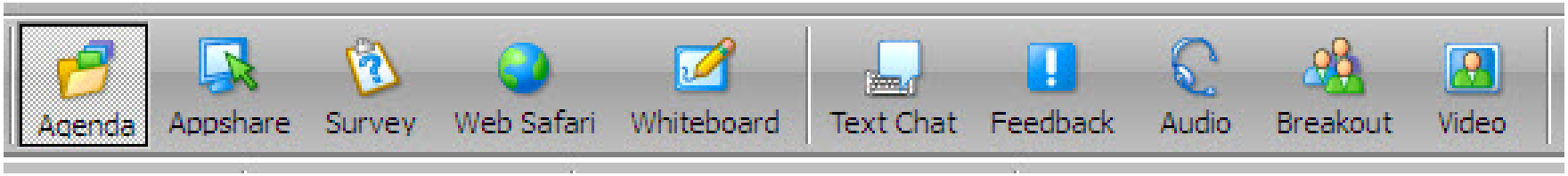
Considerations prior to Web conference

- Read up on accessibility and the disability types and needs
- Be prepared to send accessible meeting material prior to session
  - Validate the accessibility of all meeting materials
  - Conference providers may have two versions
    - Accessible version that is sent to participants prior to session
    - Presentation only version used strictly for presenting in the live session
- Understand the accessibility limitations of the meeting delivery system's interface
- Assign an accessibility advocate for the call
  - Reminds participants to announce their name before speaking
  - Monitors the live transcriptions to correct errors



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Telecommunication considerations

- Alternate telephonic system must be provided when using VoIP
- If the moderator gives the ability for participants to ask questions during the presentation through chat or VoIP, then participants on the phone must be able to ask questions as well
- Enables the transcription services company to listen to the audio for interpretation

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Conference invitations and accommodations

- Ensure the meeting invitation is accessible
- Refer to employee policy when requesting participant's accommodation needs
- Based on accommodation needs, set up proper services such as transcription service to caption the audio portion of the meeting
- Provide a list of keyboard shortcuts for the web conferencing software
- Include accessible preparation materials

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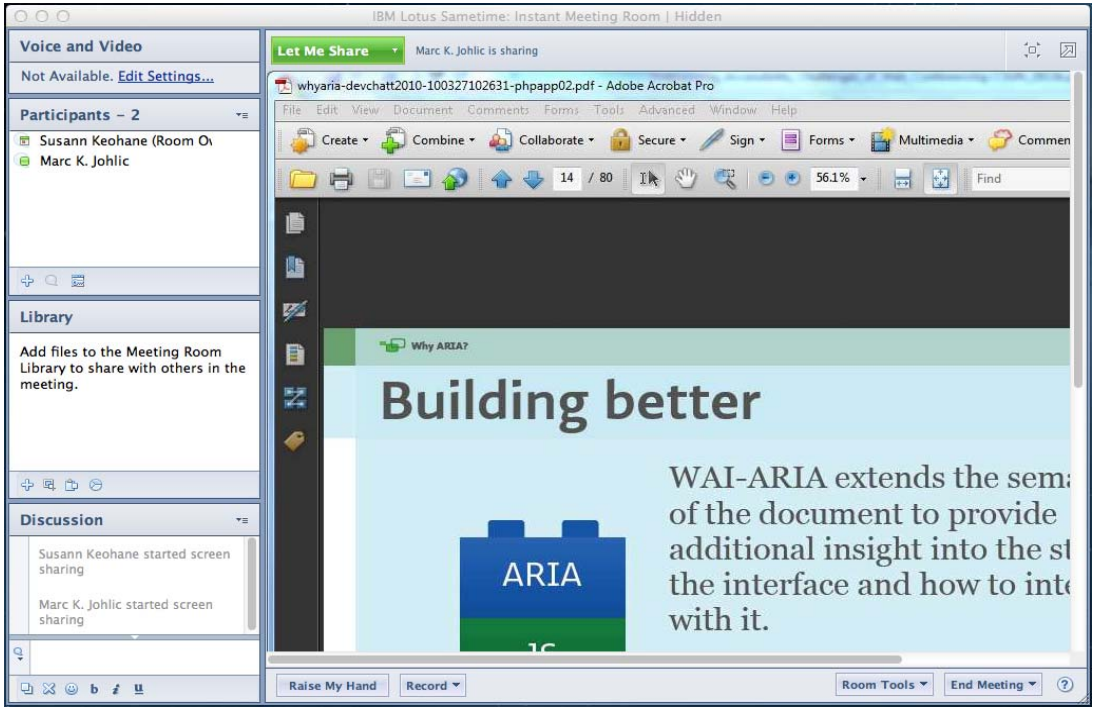
Meeting room introductions and orientation

- At the start of every Web conference, the moderator should verbally state how many participants are in the conference, and if possible, state their names
- Introduce the facilitator, assistant and presenters
- Announce if services are provided such as transcription, captioning and recording
- Explain what aspects of the environment, such as:
  - text chat
  - white board
  - polling
  - screen sharing



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Involving all when using interactive content

- For the interactive components of surveys, body language, and asking a question, the facilitator should:
  - Verbally ask all questions and be willing to accept verbal answers from those on the phone and within session, including all survey questions and results.
  - Provide an opportunity for those not in the Web conference environment to ask questions
  - Verbally describe the body language that is being displayed by a virtual participant (applause or thumbs up, etc.)

- The moderator must verbally describe and explain any content that is presented on the whiteboard

- Announce page number for participants who follow along local copy

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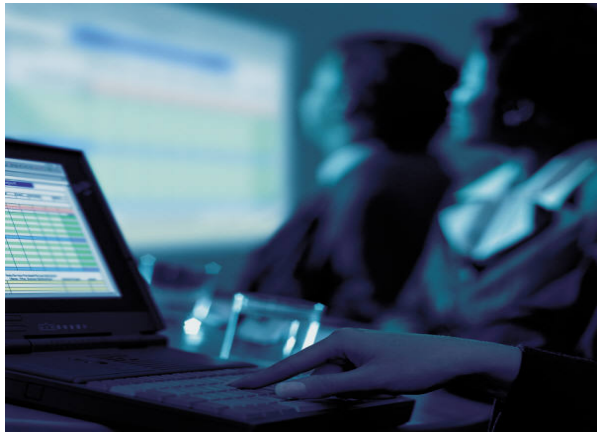
Demos, simulations, or multimedia

- The moderator must warn all participants before remotely launching any content on a participant's local machine.

- If the meeting topic includes software demonstrations, simulations, or multimedia, then the moderator must verbally describe everything that is happening.

- The verbal instruction must provide equivalent access and the same information as the visual content on the screen.
  - For example, the moderator might state, "First, I go to the Start button, then All Programs, and Select Lotus Notes. When Notes finishes loading, I go to File → Open → and a dialog box appears. In the filename input box, I type in "file1.odt," and then press Open to open the file."



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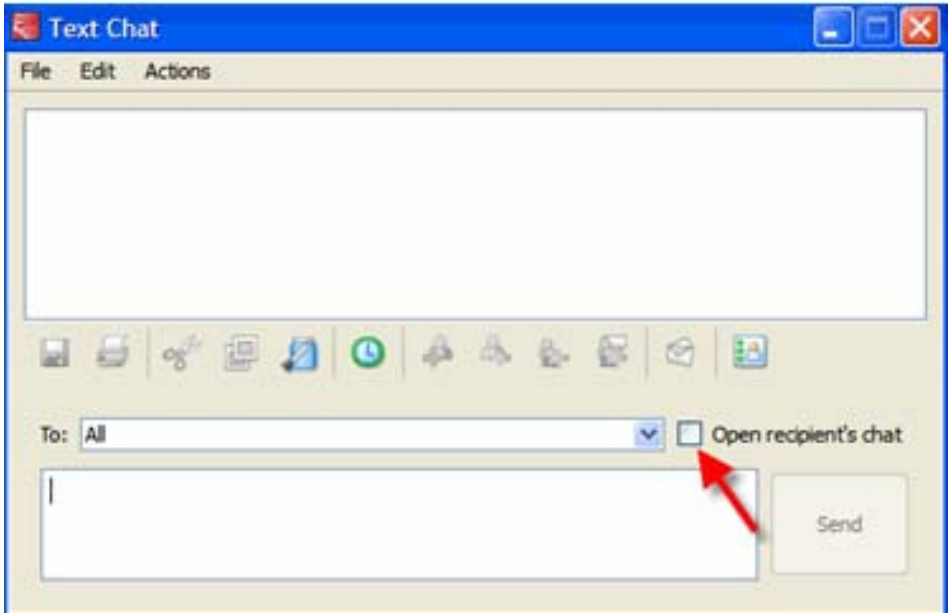
Q&A and text chat

- Most screen readers do not automatically announce or read when new text is entered into the chat window.

- If participants use the chat feature, the moderator should periodically stop and summarize or read out all relevant or important text in the chat window.



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Conference follow-up

- When a session is recorded, real-time text streaming or captioning should be provided
- The meeting transcript should be made available for download
  - Review the transcript and correct any errors
  - Common errors occur in technical verbiage, acronyms, and participant names
- The text chat should be saved and included for download with the recorded session
- If simulations, demonstrations, or multimedia are shown, the transcript must be a full text alternative of the simulation/demonstration, including a full description of what the simulation/demonstration was showing
- Conference content must be available in an accessible format

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Take away bullet points

- Inform all participants that accessibility accommodations can be arranged
- Provide accessible digital copies of content in advance
- Provide appropriate accommodations like captioning services
- Assign an accessibility advocate to monitor transcriptions
- Provide auditory or textual descriptions of non-textual content
- Make available a list of keyboard shortcuts for the meeting software
- Provide a telephone-based teleconferencing connection in addition to the VOIP (Voice over the Web) Webinar.
- Prepare for how all participants will be ask questions, vote, and collaborate
- Prepare accessible versions of the webinar recordings, videos require captioning and a transcript

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Questions & Answers

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Contact information

thank you

- Mary Jo Mueller
  maryjom@us.ibm.com
- Marc Johlic
  johlic@us.ibm.com
- Susann Keohane
  skeohane@us.ibm.com

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