Welcome to the Accessible Technology Webinar Series

Mobile Accessibility – The Status of Accessibility in Mobile devices

The Accessible Technology Webinar Series is sponsored by the Great Lakes ADA Center and the Pacific ADA Center, both members of the ADA National Network.

The Session is Scheduled to begin at 1:00 pm CT

We will be testing sound quality periodically

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Webinar Features

- **Closed captioning** – click **CC** icon (located in the Audio/Video Panel) or control-F8 (command-F8) and adjust your screen.
- **Questions** - Highlight *"Great Lakes"* in the participant list and "right click" on your mouse to send a private message. Type your message into the chat area that appears. The question will be viewed by all moderators. (Keyboard - F6, Arrow up or down to locate "Great Lakes" and select to send a message)
- **Customize your view** – You can change the size and location of any of the panels (Chat, etc.) by hovering your mouse over the ☰ icon at the right of each panel and select "Detach Panel". Each panel can be repositioned and resized.
- Please do not use emoticons or hand-raising features during this session

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Global Accessibility Reporting Initiative (GARI)

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Overview of Presentation

- Introduction of the MMF and the GARI project
- What GARI offer for customers
- How GARI fits into companies commitments to accessibility
- How are mobile phones designed and the how accessibility is factored into the design and development process
- Future Plans for GARI
- International accessibility developments - what is coming up and how they impact manufacturers and consumers.
- Q&A

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Background to the MMF & GARI

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Introduction to the MMF

- International association of radio equipment manufacturers
  - Representing around 80% of global handset sales; and
  - The providers of the majority of global network infrastructure
- Association's focus: health, safety and accessibility of wireless telecommunications equipment.
- Key areas of activity: research and standards support, regulatory harmonisation and public communications

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What is the GARI Project?

- Global Accessibility Reporting Initiative (GARI) is a global program to promote greater awareness of the various accessibility features of phones and wireless devices.
- Aims to ensure that all consumers have access to information to assist them in finding an appropriate phone to meet their needs.
- At the heart of the project is the GARI database and website, an extensive online repository of information on a range of features that consumers can use to learn more about, search for and compare, in order to find a suitable model for them.

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GARI Database

- GARI Database has been designed taking into account Australian, European and US requirements.
- Features 110 features for consumers to search for on an individual handset.
- Offers one of the most comprehensive guides on what features are available.
- Reviewed annually to take into account stakeholder feedback and technology developments.

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GARI Website

- GARI Website is available at: www.mobileaccessibility.info
- Offered in 12 languages
- Designed to help consumers learn about how various features enhance accessibility and then assists consumers to search for devices that those features.

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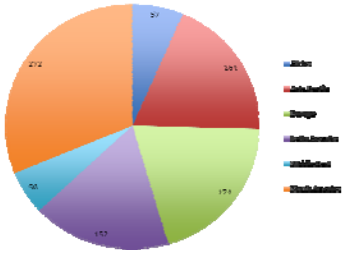
GARI Website

- The database now currently contains information on 607 unique models.
- Models by Region (some models are available in several regions)



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Site statistics

- **Statistics**
  - Site statistics indicate that we are now seeing more than 10,000 unique visits per month.
  - Over the last twelve months alone we have averaged over 240,000 hits per month.

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So what exactly does GARI Offer?

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What does GARI offer?

- The ability to be able to search for a suitable device using any combination of 110 features.
- To be be able to view those models that meet the criteria
- To be able to compare models side by side
- To be able to narrow the range of choice to a manageable number of models, in order to decide which model might best suit them.

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Step 1: Select Features

MOBILITY/DEXTERITY FEATURES

Speaker-phone capable	?
Text Messaging Service Capable	?
Predictive Text Input	?
Guarded/recessed keys	?
Device Coupling - Cable	?
Device Coupling - Infrared	?
Device Coupling - Bluetooth/WLAN	?
Flat Back for Table Top Operation	?
Automatic Answer	?
Automatic Redial	?
Any Key Answering	?
Voice Recognition for Dialing	?
Hand Movement	?
Voice recognition for accessing features	?

VISION FEATURES

Tactile Key Markers - 'F' & 'J'	?
Tactile Key Marker - '5'	?
Standard Number Key Layout	?
Key Feedback - Tactile	?
Key Feedback - Audible	?
Audible Identification of Keys - Spoken	?
Audible Identification of Keys - Functions	?
Audible Cues - Battery	?
Audible Cues - Power	?

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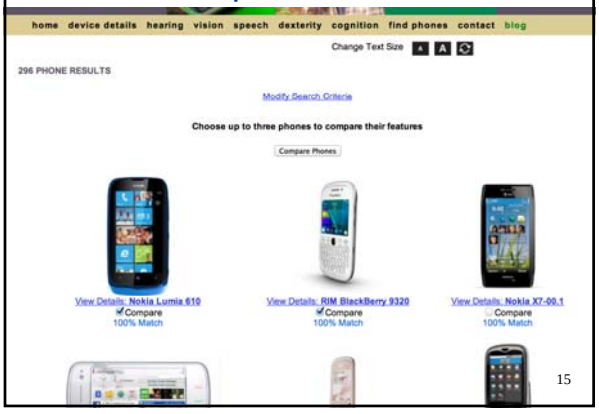
Step 2: View Results



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Step 3: Compare Models

MOBILE HANDSET/DEVICE COMPARISON

Features	Nokia Model:: Lumia 610	RIM Model:: BlackBerry 9320	Motorola Mobility Model:: MOTOROLA ADMIRAL™
HARDWARE INFORMATION			
Handset weight	131.5 Grams	102 Grams	134 Grams
Standby Time / Talk Time	32 Days 10 Hrs	18 Days 7.0 Hrs	3.3 Days 9 Hrs
Headset - plug connected	Yes	Yes	Yes
Headset - plug type	3.5mm, AHJ Headset WH-208	3.5	3.5mm
Touch Screen	Yes	No	Yes
Touch Screen - Heat Activated	Yes	No	Yes
Easy Battery Placement	Yes	Yes	Yes
Easy to Press Keys	N/A	Yes	Yes

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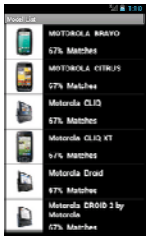
Also available as an App

- Vodafone Foundation in Spain developed two apps to promote GARI. Both are available for free.
- The first is available from the Nokia Store and the second from Google play for Android devices.



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Why is the GARI important?

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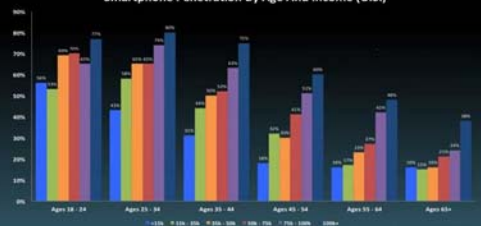
Mobile Phone Penetration

Silicon Alley Insider — Chart of the Day

Most future US smartphone buyers will be older and poorer

Smartphone Penetration By Age And Income (U.S.)



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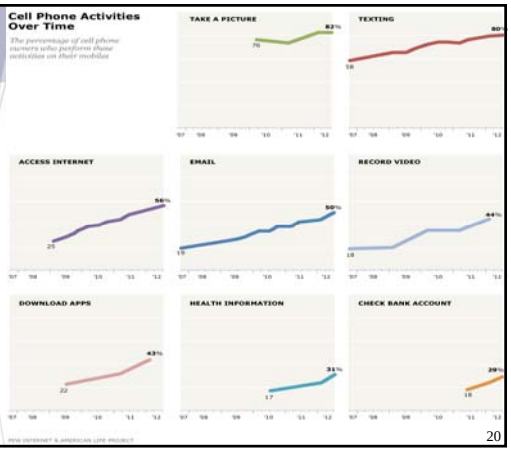
BUSINESS INSIDER

Cell Phone Activities Over Time

The percentage of cell phone owners who perform these activities on their mobiles



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PEW INTERNET & AMERICAN LIFE PROJECT

How Americans Use Their Cell Phones — Specific Activities

% of adults in each group who use their cell phone to do the following activities

(Example of how to read this chart: 77% of smartphone owners — and 45% of all adult cell owners — use their phone to check weather reports or forecasts)

	% ever do this		% do this on a typical day	
	All cell owners	Smartphone owners	All cell owners	Smartphone owners
Check weather reports and forecasts	45%	77%	28%	52%
Use a social networking site	40	68	28	50
Get turn-by-turn navigation or directions while driving	37	65	8	15
Get news online	37	64	19	36
Play a game	36	64	20	37
Upload photos online so that others can see them	34	58	8	15
Listen to an online radio or music service, such as Pandora or Spotify	29	53	11	22
Check your bank balance or do any online banking	24	44	11	21
Visit a local, state or federal government website	17	31	3	6
Get coupons on deals to use at local businesses	14	24	3	5
Use Twitter	9	16	5	10
Watch movies or TV shows through a paid subscription service, like Netflix or Hulu Plus	8	15	2	4

Source: Pew Research Center's Internet & American Life Project, March 15-April 3, 2012 Tracking survey. N=2,254 adults ages 18 and older, including 903 interviews conducted on respondent's cell phone. Margin of error is +/-2.6 percentage points based on cell phone owners (n=1954).

Advantages of Mobile

As of April 2012, **55% of adult cell owners use the internet on their mobile phones**; nearly double what we found three years ago.

Going mobile:

- Makes information accessible ***anytime*** and ***anywhere***
- Puts information at our fingertips
- Magnifies the demand for timely information
- Makes information location-sensitive and relevant

Pew Internet Research 22

How does GARI fits into companies' commitments to accessibility

Providing wireless access for all includes not only implementing accessibility features but how we share product information.

GARI helps manufacturers:

- Store information in a centralized location online and share globally
- Standardize accessibility features being reported
- Showcase choice amongst handset models
- Market accessibility features directly to users

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Designing for accessibility during product development

We design accessibility features for people with disabilities: including hearing or vision loss, and limited speech, dexterity or mobility.

The product development process may include:

- Gathering feedback
- Educating product designers
- Testing for accessibility
- Marketing
  - Alternate Format Manuals (e.g., Braille)
- Supporting users through specially trained call centers

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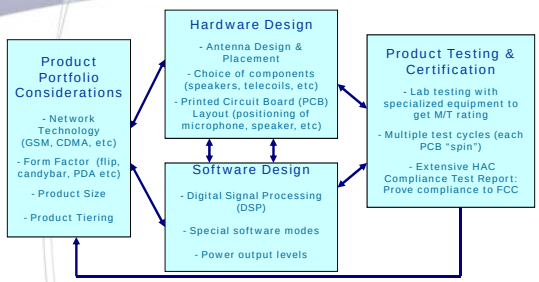
Example: Product Development Process for Hearing Aid Compatibility



Created by Dave Dougall
Research in Motion (RIM)

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Accessibility Solutions for Users with Hearing and/or Speech Needs

Accessibility features for users with hearing and/or speech needs may include:

- Video Chat
- Support for closed captioned videos
- Speakerphone
- Text messaging
- Vibrating Alerts
- Compatibility for assistive devices: Hearing Aids, TTY, neckloops

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Accessibility Solutions for Users with Vision Needs

The Text-to-Speech (TTS) found in many screen readers uses synthesized speech to speak the names of items as the user navigates the phone's user interface such as:

- Readout of the digits as they are depressed
- Readout of the phonebook contacts
- Readout of SMS and Email messages
- Readout of incoming Caller Identification
- Readout of menus and related functions
- Keypad echo when entering phonebook contact details
- Keypad echo when composing SMS and Email messages

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Accessibility Solutions for Users with Mobility Needs

Advanced Voice Recognition (AVR) analyzes and converts human speech into text to perform simple actions such as:

- Voice Dial
- Navigate
- Compose & Send Text/Email
- Make Restaurant Reservations
- Operate Handsfree*

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More Mobile Phone Trends

- Apps
- Emergency Calling
- Social Networking
- Cloud Services

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GARI Roadmap & Future Plans

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GARI Roadmap

- Just completed an extension to tablet devices and have begun the process of populating that section
- 1Q 2013: Launch the apps module – allowing consumers to see what accessibility related apps also will work on the device that they are interested in
- 2H 2013: Undertake second stakeholder feature review.
- Ongoing: Interested to work with organisations to integrate GARI into their own websites – using XML or other means.

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Tablets Section (New)

GLOBAL ACCESSIBILITY REPORTING INITIATIVE (GARI)
MOBILE HANDSET/DEVICE REPORT
Motorola XOOM™ with WiFi

Return

Manufacturer/Importer:	Motorola Mobility
Product Brand(s):	Motorola
Models:	Motorola XOOM™ with WiFi
Website and/or contact details for the product	http://www.motorola.com/accessibility
Date Completed:	May-22-2012

HARDWARE INFORMATION

FEATURE	DESCRIPTION	DETAIL
Device weight	Weight including battery.	708 Grams
Tablet Headset - plug connected	You can plug in a headset containing headphones and a microphone. This allows you to listen to music or talk without holding the device. This can be useful if you have trouble holding a device.	Yes
Headset - plug type	The type of plug a headset will need to have so that it can be connected to the device.	3.5mm
Touch Screen	Does the device have a touch screen?	Yes
Touch Screen - Heat Activated	If the device has a touchscreen, is it capacitive (sometimes referred to as heat activated	Yes

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Under Development – Apps Section

OPTIONAL ACCESSORIES

FEATURE	DESCRIPTION	DETAIL
Related accessories that may also benefit people with disabilities.		Yes

APPLICATIONS

While manufacturers have provided information about the device itself, information about applications has been provided by application developers directly. Any questions about the applications should be addressed to the developers through their websites.

(Test) ColorID

Description: Color Identifier uses the camera on your phone to speak the names of colors in real-time. It's a new Augmented Reality app for discovering the names of the colors around you!

Cost: Free
Developer Web Site: http://www.greengar.com/
Application Type: Utilities
Operating System Requirements:
Android Eclair 2.1 and Up
iOS 5 and Up

(Test) GARI Mobile Finder

Description: The GARI Mobile Finder is an application that lets you choose the mobile phone that better suits your needs! It provides more than 400 devices with more than 100 accessibility features such as voice recognition, high contrast, front camera, etc. Just choose the features that are more important to you.

Cost: Free
Developer Web Site: http://fundacion.vodafone.es/fundacion/es
Application Type: Utilities
Operating System Requirements:
Android Eclair 2.1 and Up

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Integration of GARI

- To date the GARI database has been incorporated into the following external websites:
- CTIA (http://www.accesswireless.org/Home.aspx)
- AMTA (http://www.amta.org.au/pages/GARI.Database)
- IZMF (http://www.izmf.de/de/node/100342) (German)
- CWTA (http://wirelessaccessibility.ca/)
- FCC (http://www.fcc.gov/AccessibilityClearinghouse)
- CFM (www.consumerinfo.my)

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Integration of GARI into third party sites

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GARI Stakeholder Support

- "The initiative of the MMF resulting in the creation of the GARI website is a significant and important milestone."
  - (Australia Consumer Advocates – TJA Article)
- "The most significant information initiative currently available. We would strongly encourage other manufacturers to participate."
  - (UK Consumer Panel Report)
- "We hope that many disabled and elderly people will use and benefit from the GARI website in years to come."
  - (OFCOM Press Release)

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Conclusion

- GARI developed in response to requests from disability and other stakeholder groups for better reporting of the accessibility features of mobile phones.
- The website addresses many needs and has been welcomed by key stakeholders.
- Feature-set continues to evolve and is reviewed annually with stakeholder participation and feedback.
- We continue to explore opportunities to promote the project so that together we can help to remove barriers to accessing the benefits of mobile communications.

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GARI Outreach

Outreach

MMF published an updated GARI invitation brochure

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GARI Outreach

Outreach

- Via the blog http://blog.mobileaccessibility.info/ MMF has published the following 8 new GARI blog entries:

Searching for a phone with a front mounted camera?
Looking for phones with accessibility API's?
GARI - Assistance for older people
Closed captioning on smartphones
Choosing a phone that's so smart it can make itself simple
Saving time with shortcuts
High contrast phone display's help those with limited vision
Personalised ring tones for function as well as fashion

The GARI blog is currently being worked on to also display blog entries in other languages.

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GARI Outreach

Outreach

- GARI on Twitter
- MMF continued to provide GARI-related information on Twitter. Status of tweets was 694 as of 17 September, up from 500 at last GA.

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International Developments

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GARI Outreach

Other updates and communications

- MMF continued to spread GARI information, in particular by promoting **embedment of the GARI database into the websites** of other organisations. ANATEL/Brazil and Sinditelebrasil, the Brazilian Operator's Trade Association already decided to embed a GARI link on their website but administrative procedures are still ongoing.

- The **Austrian** telecom regulator **RTR** embedded a link on its website in the consumer services section (http://www.rtr.at/en/tk/Konsumentenberatung).

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GARI Outreach

Other updates and communications

- MMF met with the Chairperson and the Vice-Chairperson of **BEREC End User Working Group** to present GARI. BEREC stands for Body of European Regulators for Electronic Communications, http://www.erg.eu.int/Default.htm. As the initiative was highly appreciated, MMF asked for support to reach a wider audience and to underscore the trustworthiness of the source, e.g. by providing access to GARI information on the websites of national regulators. Although it is up to the national regulators whether or not to present this information, MMF was asked to provide detailed technical information about GARI implementation. This information was then sent to all national members of the BEREC End User Working Group.

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GARI Outreach

Other updates and communications

- MMF received a **request from the Belgian regulator** who considers embedding a link to GARI.
- The **Nigerian Communications Commission** considers using GARI as official source for accessibility information regarding mobile phones. The issue is pending.
- Due to an **Austrian arbitration process** against an operator and one of MMF's members MMF supported working on an integrated response at the national level. As one of the plaintiff's arguments was that the operator sells mobile phones which are not accessible, spreading GARI news could help to fend off further claims.

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GARI Outreach

Other updates and communications

- As part of the wider project of **language expansion** and development of GARI, MMF implemented a complete and extensive revision in the Spanish and Portuguese versions of GARI, uploading new revised translations, as well as the new tablets section.
- The MMF has been discussing possible co-operation with the **Consumer Electronics Association Foundation** to allow their members to provide accessibility reports through GARI and for us to share the back-end. An outline of how this might work in practice is attached.

The MMF has also continued promoting the project to other possible companies including **Telstra**, **Vodafone Hutchison**, **Huawei**, **ZTE** and **HTC**.

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Looking forward

- Encourage integration of GARI into sites of NGOs
- Cooperation with other Trade associations
- Continue to expand GARI from the perspective of APPs
- Continues global support of Operators, Governments, and Consumers

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Questions & Answers

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Thank you for participating in today's Accessible Technology Webinar!

This session was recorded and will be archived in two days at
http://www.ada-audio.org/Webinar/AccessibleTechnology/

www.ada-audio.org 877-232-1990 (V/TTY)

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