

GREAT
talks

Accessible Telecommunication Services for All Through ICT Innovation

Anirban Lahiri

26th August 2020



الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

mada
مدى
digital access for all
نفاذ رقمي للجميع

Why is Accessible Telecommunication Services Important?

The impact of tele-connectivity on People with Disabilities is compounded because access to digital content and to outer society goes a long way in breaking down socio-economic barriers traditionally faced by them.



الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

Convention on the Rights of Persons with Disabilities (CRPD) Article 9 - Accessibility

The State of Qatar is a ratifying party to the UNCRPD which states:

“To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas. These measures, which shall include the identification and elimination of obstacles and barriers to accessibility, shall apply to, inter alia:



Convention on the Rights of Persons with Disabilities (CRPD) Article 9 - Accessibility

- f) To **promote other appropriate forms of assistance and support** to persons with disabilities to ensure their access to information;
- g) To **promote access** for persons with disabilities to new information and communications technologies and systems, including the Internet;
- h) To **promote the design, development, production and distribution** of accessible information and communications technologies and systems at an early stage, so that these technologies and systems become accessible at minimum cost.”



National e-Accessibility Policy Implementation

Four key provisions:

- Web Accessibility
- Telecommunication Services
- Automated Teller Machines and Public Access Terminals/Kiosks
- Assistive Technologies & Accessible Digital Content



الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

National e-Accessibility Policy Implementation

With regards to Telecoms, the Policy says, “As access to telecommunications services is mandatory for inclusion and integration in the ordinary economic and social mainstream of society today, MOTC requires that telecommunications service providers in Qatar ensure accessibility to critical telecommunications services and technologies as described below.”

- Accessible Handsets and User Interfaces
- Accessible Public Payphone Service
- Sign Language Relay Services
- Special Rates and Plans
- Awareness Campaigns
- Accessible Emergency Services



Accessibility Services

Hearing Impairment



Teletypewriter (TTY)



Video Relay Service



Telecommunication Relay Service



Closed Captioning



الشمول الرقمي
Digital Inclusion

Teletypewriter (TTY)

Teletypewriter (TTY) is a device that allows individuals who are deaf or hearing-impaired to communicate via the telephone by typing text messages.

Pros:

- Direct Communication
- Communication of confidential content



Teletypewriter (TTY)

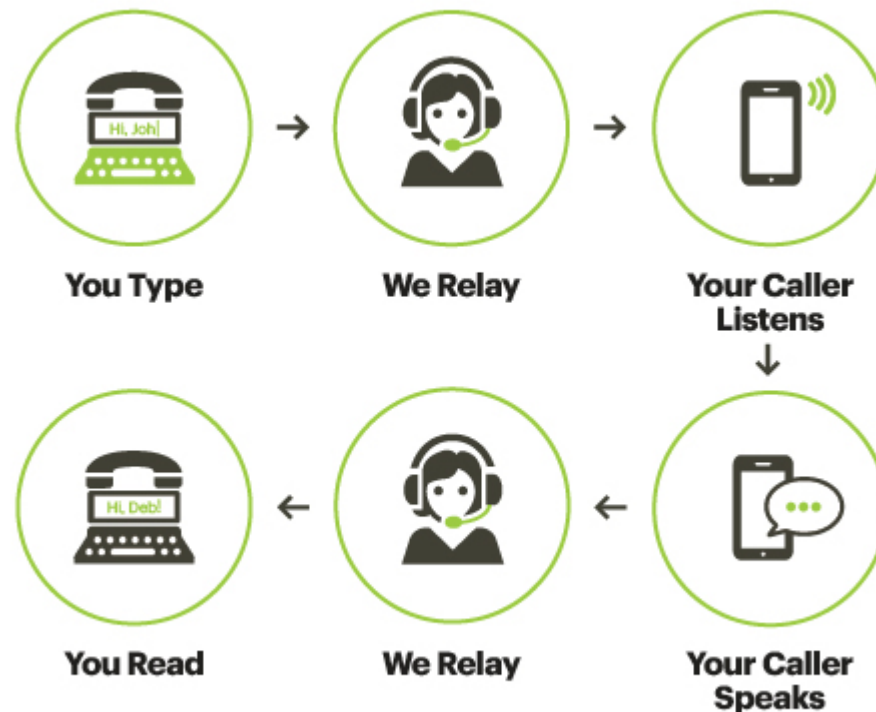
Cons:

- Requires compatible device/s
- Physical or Dexterity difficulties
- Requires literacy & soft skills
- Do not facilitate communication for sign-language users



Telecommunications Relay Service (TRS)

An alternative to TTY is the use of Telecommunications Relay Service (TRS) to communicate with individuals who are Deaf or Hard of Hearing.



Video Relay Service

Video Relay Service (VRS) is a form of Telecommunications Relay Service (TRS) that enables persons with hearing disabilities who use Sign Language to communicate with voice telephone users through video equipment, rather than through typed text.



Video Relay Service

Benefits:

- Able to communicate Sign Language (SL) to Sign Language
- Facial Expressions and Body Language
- Flows back and forth just like a Telephone Conversation
- Conversation takes place much more quickly



الشمول الرقمي
Digital Inclusion

Video Relay Service



or an Android or iOS mobile device.



الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

Closed Captioning

Text transcription of audio content of multimedia video including the descriptions of the sound-effects of visual events occurring in the video.



الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

Accessibility Services

Blind/Visual Impairment



Alternative Monthly Bill Format



Text To Speech Application



الشمول الرقمي
Digital Inclusion

Alternative Formats

- Braille
- Large Print
- Online Formats
- Digital Formats



Text-to-Speech

Beneficial for users who are:

- People who are blind and cannot see what is on the screen.
- People who have partial sight (often legally blind) and cannot see certain types of content.
- People with dyslexia and other cognitive and learning disabilities who need to hear and see the text to better understand it.



Alexa



Google
Assistant



Siri

Accessibility Services

Physical Impairment and the Elderly

- Smart Home Systems to help Home Automation



Smart Home Systems

- **Smart home technology** which may also be termed Home automation is the use of devices in the home that connect via a network, most commonly a local LAN or the internet. It uses devices such as sensors and other appliances connected to the Internet of things (IoT) that can be remotely monitored, controlled or accessed and provide services that respond to the perceived needs of the users.



Smart Home



NBC NEWS

Smart Home Systems

- **Smart home technology** which may also be termed Home automation is the use of devices in the home that connect via a network, most commonly a local LAN or the internet. It uses devices such as sensors and other appliances connected to the Internet of things (IoT) that can be remotely monitored, controlled or accessed and provide services that respond to the perceived needs of the users.



Local Telecoms Provider Accessibility & Special Needs Related Initiatives

الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

mada
مدا
digital access for all
نفاذ رقمي للجميع

Ooredoo



Following are the Accessibility and Special Needs initiatives/activities by Ooredoo:

- Call Center & Customer Billing Services
- 50% discounts on all mobile, Internet, and landline services for eligible PWDs
- 5G enabled and Google Assistant ready
- Digital Wheelchair
- Ooredoo Partners with MADA to Digitally Enhance Lives of Persons with Disabilities in Qatar at QITCOM 2019



الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

Vodafone



Following are the Accessibility and Special Needs initiatives/activities by Vodafone:

- Call Center & Customer Billing Services
- 50% discounts on all mobile, Internet, and landline services for eligible PWDs
- Collaborated with Mada to Develop and Publish the Vodafone Smartphone Accessibility Guide
- Supports Global Accessibility Reporting Initiatives (GARI)

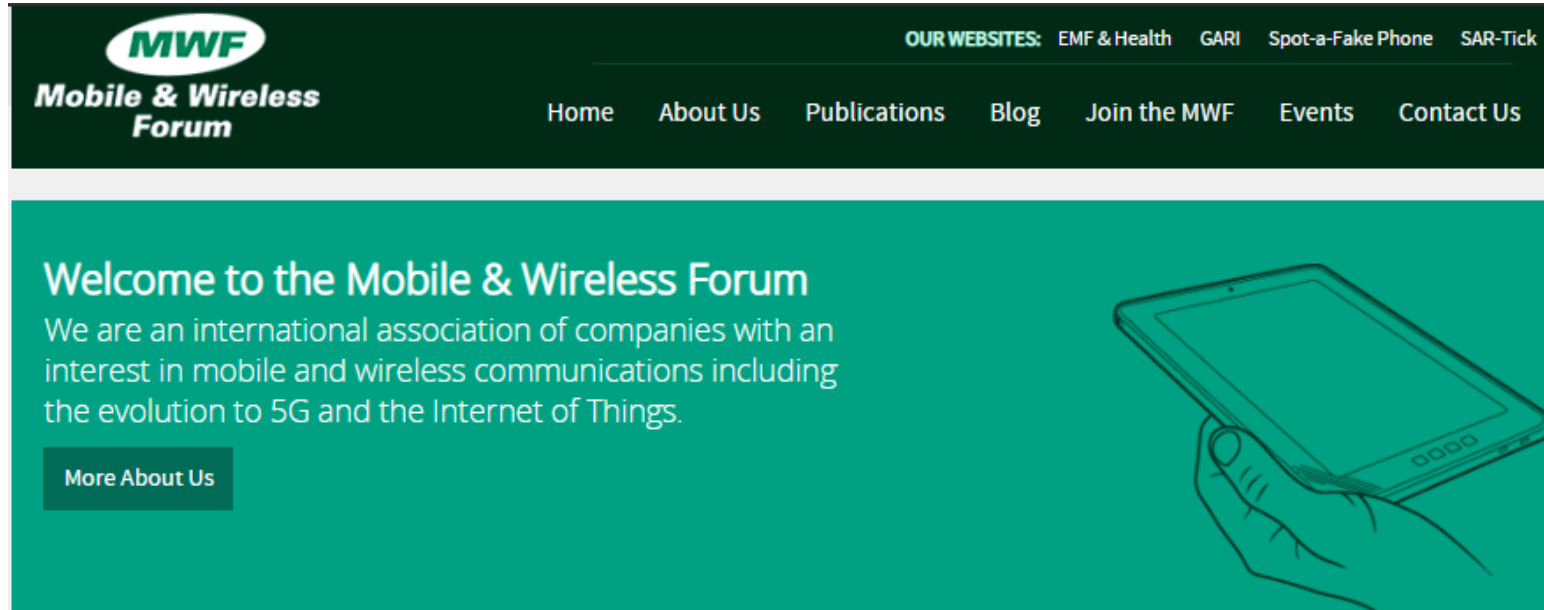


الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

MWF

Mobile & Wireless Forum



The screenshot shows the top navigation bar of the MWF website. On the left is the MWF logo, which consists of the letters 'MWF' in a white oval above the text 'Mobile & Wireless Forum'. To the right of the logo is a list of 'OUR WEBSITES: EMF & Health, GARI, Spot-a-Fake Phone, SAR-Tick'. Below this is a main navigation menu with links for 'Home', 'About Us', 'Publications', 'Blog', 'Join the MWF', 'Events', and 'Contact Us'. The main content area has a teal background. It features a heading 'Welcome to the Mobile & Wireless Forum' followed by a paragraph: 'We are an international association of companies with an interest in mobile and wireless communications including the evolution to 5G and the Internet of Things.' Below the paragraph is a 'More About Us' button. To the right of the text is a line-art illustration of a hand holding a tablet.



الشمول الرقمي
Digital Inclusion

ISSUES THAT WE WORK ON



Accessibility

Search for mobile devices and assistive apps that best fit your needs.



EMF & Health

Learn more about wireless technology and electromagnetic fields



SAR Compliance

Testing devices for compliance with national standards.



Counterfeit Devices

How to spot fake mobile devices.

#greattalks2020
great.mada.org.qa

GARI

Global Accessibility Reporting Initiative

Find Accessible Devices & Apps

Learn about Mobile Accessibility

We help consumers to find a device with the accessibility features that work best for them

What do you want to find?



Phones

Narrow down and compare options from different manufacturers.



Tablets

Compare the accessibility features you need.



Mobile Apps

Which devices support the accessibility apps you love?



Connected
Wearables

Compare options from different manufacturers



Smart TV

Compare the features from different manufacturers



الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

Thank You



الشمول الرقمي
Digital Inclusion

#greattalks2020
great.mada.org.qa

mada
مدى
digital access for all
نفاذ رقمي للجميع