International Conference on ICT in Serving Individuals with Disabilities and Learning Difficulties

20-22 May 2012 Kuwait



المؤتمر العالمي لتكثولوجيا المعلومات والاتصالات في خدمة ذوي الإعاقات وصعوبات التعلم

22-20 مايو. 2012 ـ دولة الكويت

Building Capacity in Assistive Technology for Arabic speaking people with a disability, challenges and next steps

David Banes – Mada Center Qatar



مركز التكنولوجيا المُساعِدة قطر

qatar assistive technology center

Assistive Technology



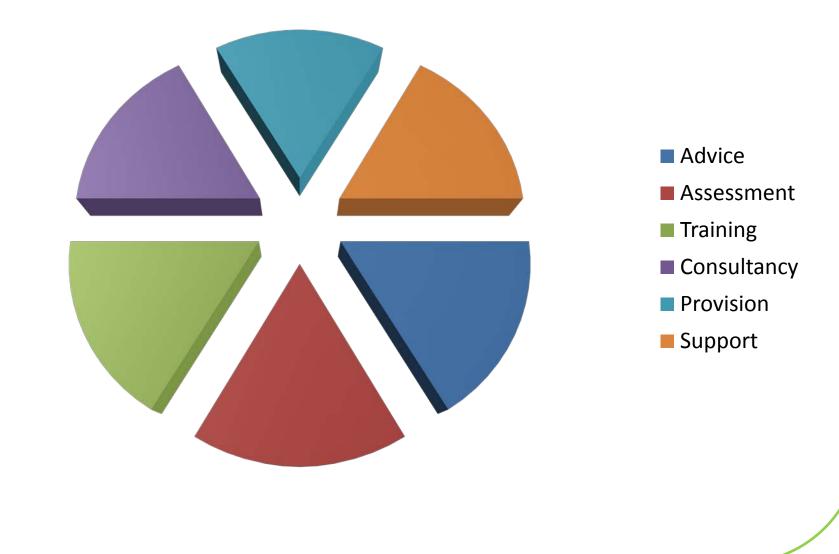
Scale of the issue

- Always greater than estimated
- Issues of non disclosure
- Diagnosis does not accommodate functional limitation
- Hidden disabilities may be unreported
- Learning disabilities poorly defined
- International comparisons would suggest 1 in 5 of population has additional needs at some stage

Issues of Adoption

- Awareness
- Confidence
- Availability
- Cost
- Support
- Language
- Literacy
- Poor information is a risk

Services



2011-2012

- Visitors to Center 763
- People assessed 450
- Provision Licenses/solutions 64
- AT localised 8
- Factsheets produced
- Training provided
- Accredited professionals
- eAccess audits

450
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8
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AT in Arabic

- The development of assistive technologies for Arabic speakers is a crucial element in delivering inclusive education
- Such Assistive technology must encompass a full range of needs and embrace both commercial and open source solutions to reduce the cost of entry level and build a market

Support for Visual Impairment

• Portable Aids



• Screen readers

	كانية ارسال و	لانجليزية بحيث يتم قراءة محا ترنت. كما اضاف البرنامج اه لاتر قد ما الاتر الا
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يرنامج الآلة القارنة وهو	مد سما سال ا	ن هنا يتضح الهدف من روج بالكفيف من عزلة الظلا

قارئ المستندات

Magnification



Mobile devices



Support for Literacy

• Word Prediction

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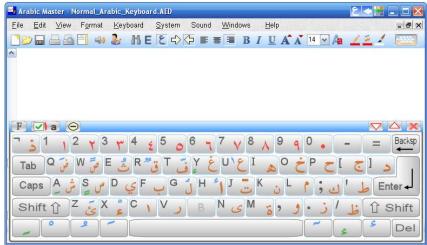
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Support for Physical Needs

• Keyboards and Mice • On Screen Keyboards





Support for Hearing Loss



Growth of Open Licences

- AT Bar
- FXC Software
- Open Source and freeware

Creative	Commons
	Creative

• OER

تجاهل الرئيسية في محاولة ATbar تطيمات الاستخدام يا	ATbar
شو شکرا تعم	الرئيسية

Accessible Digital Content

Websites

- Standards
- Learning platforms
- Information sources

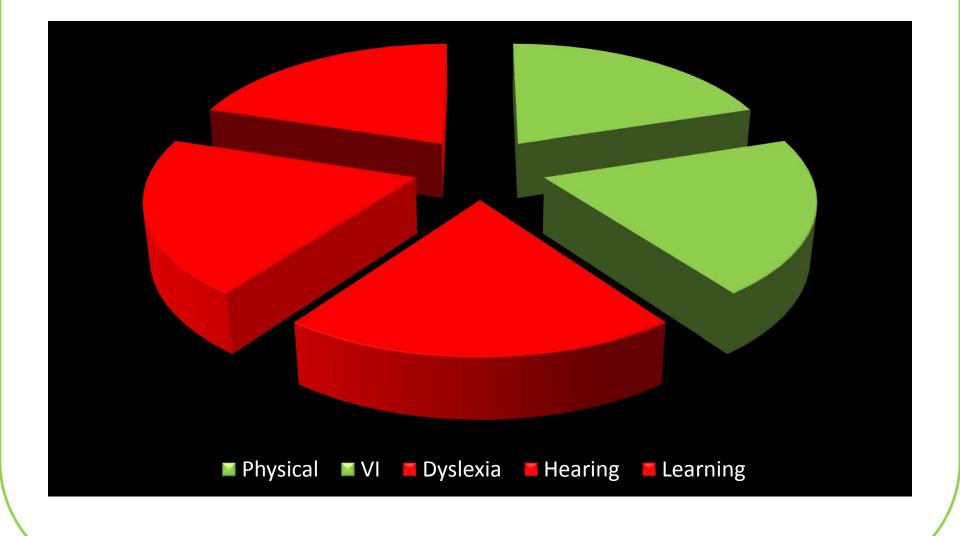
Content

- Ebooks
- Word
- Powerpoint
- Video

Accessible Content

- Bookshare
- Robobraille
- Easyconverter
- Creating and storing accessible Arabic resources in
 - Daisy
 - Mp3
 - Braille

Gaps



Research and Development

Technology

- Voice recognition
- Free Text to Speech
- OCR
- Wayfinding

Needs and Impact

- Implementation
- Best practice
- Priorities

Networks and Collaboration

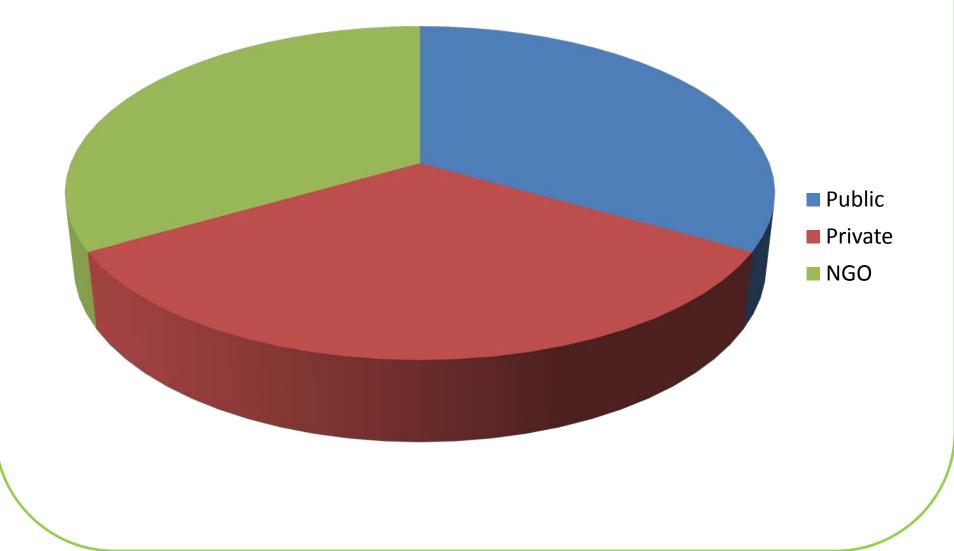
Global

- G3ICT
- Daisy
- ATIA
- W3C

Regional

- Link to Global Initiatives
- Research
- Development of solutions
- Localisation
- Training materials
- Building Arabic Capacity

Building Blocks



Ecosystem - examples

- Public
 - ictQatar launched eAccessibility policy for country
- Private
 - Qtel launched connected initiative for people with a disability
 - Microsoft launched Imkaan digital literacy materials
- NGO
 - Offer channels and resource to and for disabled people
 - Shaffalah, Al Noor, QSCCB, QSCCD, QSRSN, MS society etc

An Arabic Ecosystem - Mapping



Advice

Assessment

Training

Consultancy

Provision

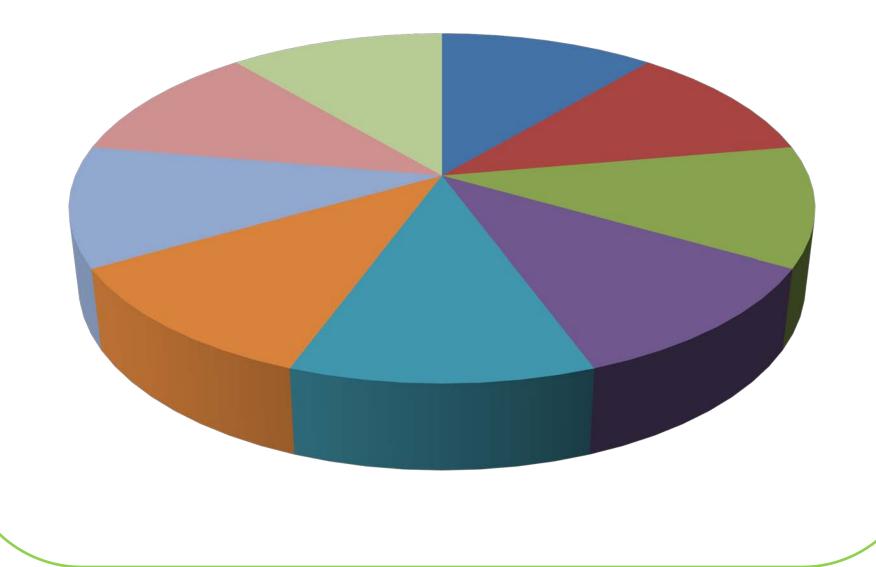
Support

research

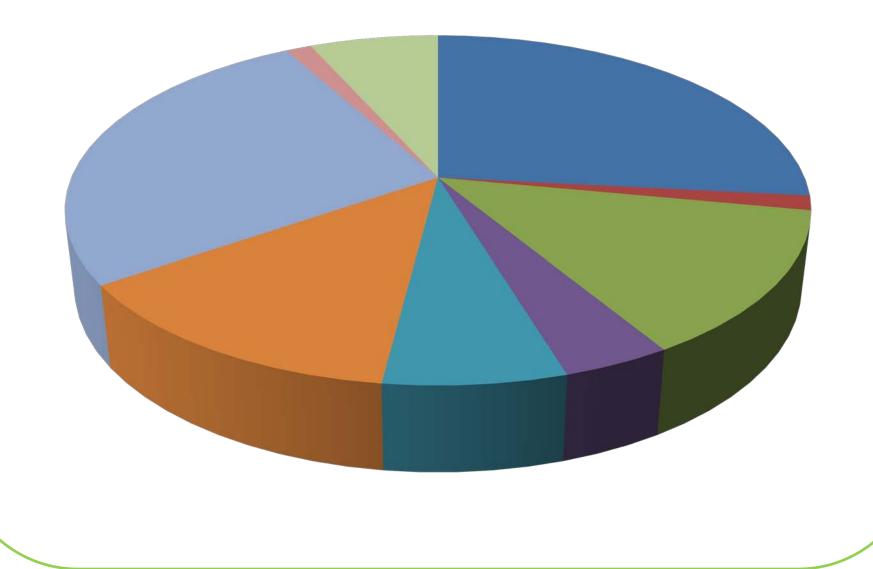
Iocalisation

eAccessibility

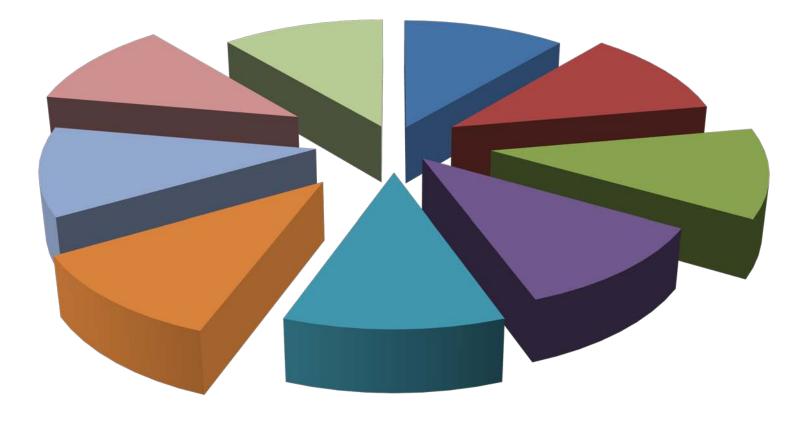
Mada



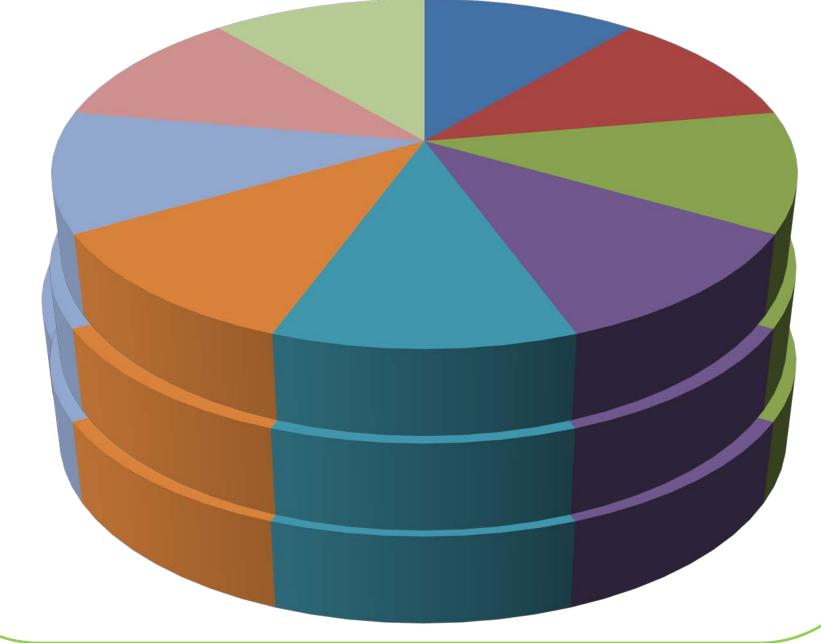
Organisation 1



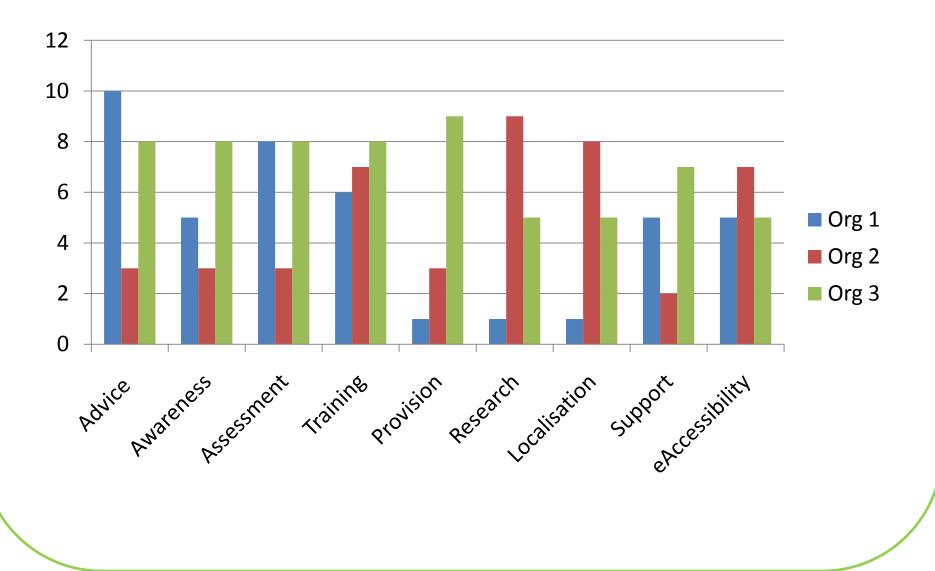
Organisation 2



Overlapping strengths and weaknesses



Mapping across organisations



Next steps

- Mada offers its materials under Creative commons for all to use and reuse
- Mada continues to seek to stimulate the development of Arabic Assistive Technologies
- Mada seeks to establish an Arabic AT network to undertake joint projects to meet the needs of all Arabic persons with a disability
- Invites expressions of interest in an initial meeting in Doha Autumn 2012

Thank You

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- www.facebook.com/madaqatc
- Twitter @madaqatc
- www.youtube.com/qatcmada

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