digital access for all



Digital Accessibility Rights Evaluation Index 2020

Annual Report 2020



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Chairman's Message

The Ministry of Transport and Communications (MoTC) is committed to creating an integrated digital community, where everybody has equal access to technology, by providing as many opportunities as possible to enhance their digital readiness to participate in building a knowledge-based economy. We believe in the importance of investing in information and communication technology to unlock the potential of persons with disabilities and help them to achieve independence.

The Ministry of Transport and Communications has identified the need to enable PWDs and the elderly to access ICT as a top priority, which has been reflected in the development of several policies, strategies, and plans to support persons with disabilities, including the Digital Inclusion Strategy and the National e-Accessibility Policy to overcome all obstacles that prevent easy digital access for PWDs. In addition to that, MoTC established the Mada - Assistive Technology Center Qatar that has made great achievements locally and internationally in the field of ICT access.

Mada - Assistive Technology Center Qatar, the world's center of excellence in ICT access in Arabic, is leading the development process through its strategy that aims to unlock capabilities, enable and develop inclusive digital education and community. Both MoTC and Mada's strategies are in line with Qatar national strategy through welcoming all local, regional and international organizations and strategic partners in order to achieve sustainable development goals and Qatar Vision 2030. All these efforts aim to improve the quality of services provided to PWDs and the elderly to enable them to live independently and to ensure their active participation in the development process in all fields.

These policies and strategies have placed the State of Qatar among the most developed countries in the field of ICT access, as Qatar has ranked first worldwide in the Digital Accessibility Rights Evaluation Index 2020 (DARE INDEX) issued by the Global Initiative for Comprehensive Information and Communication Technologies (G3ict).

His Excellency Mr. Jassim Bin Saif Al Sulaiti Minister of Transport and Communications

CEO's Message

Mada - Assistive Technology Center Qatar always considers the pillars of the Qatar National Vision 2030 in its work by committing to the inclusion of all individuals in the society. The Center believes in the right of persons with functional limitations (persons with disabilities and the elderly) to have equal access to all information, applications, electronic services, and digital content. We are working to achieve our strategic goals by building more effective strategic relationships and partnerships locally and internationally. We also work to advance our role as a strategic enabler in the field of ICT access by providing our strategic partners and others with the best services that include capacity building, innovation support, digital access accreditation services, awareness-raising, research, and policy awareness.

We, in Mada, are proud of what we have done so far to make our beloved country Qatar one of the developed countries in the field of ICT access, as Qatar ranked first worldwide in the Digital Accessibility Rights Evaluation Index 2020 (DARE INDEX) issued by the Global Initiative for Comprehensive Information and Communication Technologies (G3ict). This international UN Index has shown the great level of commitment of the State of Qatar towards the rights of PWDs, digital inclusion, and its belief in the importance of investing in ICT to unlock the potential of PWDs and help them to achieve independence.

In recognition of its role as a driver and facilitator for digital inclusion that is working to build an accessible technological society, and as the center is a model for the sustainable application of technology for the inclusion of persons with disabilities, Mada Center won many awards in 2020, the most important of which is the UNESCO/Emir Jaber al Ahmad al Jaber al Sabah Prize for Digital Empowerment of Persons with Disabilities, and the Qatar Digital Government Excellence Award 2020.

In conclusion, I would like to confirm that we at Mada Center will continue our distinguished work in accordance with the latest international standards and the best international practices to enable access to ICT and develop the digital environment for the benefit of persons with disabilities and the elderly, so that we can move hand in hand towards greater prosperity and progress for our beloved country, Qatar.

Maha Al-Mansouri CEO - Mada Center 8 | Mada Center





Mada – Assistive Technology Center Qatar is a private institution for public benefit, which was founded in 2010 as an initiative that aims at promoting digital inclusion and building a technologybased community that meets the needs of persons with functional limitations (PFLs) – persons with disabilities (PWDs) and the elderly in Qatar. Mada today is the world's Center of Excellence in digital access in Arabic.

The center works through strategic partnerships to enable the education, culture and community sectors through ICTs to achieve an inclusive community and educational system. The center achieves its goals by building partners' capabilities and supporting the development and accreditation of digital platforms in accordance with international standards of digital access. Mada raises awareness, provides consulting services, and increases the number of assistive technology solutions in Arabic through the Mada Innovation Program to enable equal opportunities for PWDs and the elderly in the digital community.

Our Values

- We lead by innovating and customizing ICT accessibility technologies to enable our local, regional and international partners.
- We are passionate in understanding the needs of persons with functional limitations (PFLs) to address them meaningfully.
- We execute with the quality and agility needed for Mada to succeed as a Center of Excellence.
- We build relationships of trust and maintain constant and effective communication internally and with our partners.
- We take collective ownership and support each other to meet our common objectives and deliver with impact.



Vision Enhancing ICT accessibility in Qatar and beyond.

Mission

Unlock the potential of persons with functional limitations (PFLs) – persons with disabilities (PWDs) and the elderly – through enabling ICT accessible capabilities and platforms.

Digital Access for All

Despite the exceptional circumstances imposed by the COVID -19 pandemic on our world in 2020, and based on its belief in the importance of supporting and serving PFLs at all times, Mada Center continued its successful journey in implementing the center's strategy 2019-2021 under the slogan "Digital Access for All". The main goal of this strategy is to enable priority sectors related to ICT accessibility in the State of Qatar to achieve their goals through joint programs. Common goals include enhancing ICT access for persons with functional limitations (persons with disabilities and the elderly), achieving full inclusion, and ensuring their participation in the development process. Mada's efforts in 2020 resulted in the activation of several cooperation and strategic partnership agreements with strategic partners in the education and community sector.

With regard to the center's important achievements in the field of enabling the culture and community sector, 2020 was no exception. Mada succeeded in making the community more inclusive by committing to its role as a strategic enabler for ICT access through developing the capabilities of the education and community sectors and providing various services to its partners who serve PFLs including consulting, training, and capability building. In 2020, Mada continued to strengthen its position as the leading center in the field of innovation of digital access solutions and assistive technology in Arabic in the region and the world through the Mada Innovation Program.

In the field of digital access, in 2020 Mada provided specialized consultations to its strategic partners on ICT access, ecosystem, policies, plans, and research in accordance with the best international standards and practices. In order to follow up the implementation of the Mada 2019-2021 strategy, Mada Center continued to work on assessing the accessibility of the services of its partners and other stakeholders in Qatar.

Digital Accessibility

Refers to how well any type of electronic or online media can be used by people with visual, hearing, motor or learning disabilities, as well as by the elderly.

Mada Accessibility & AT Glossary.

Priority Strategic Sectors



Mada enables the education sector to ensure an inclusive education system at all levels and lifelong learning through ICT.

Culture and Community

Mada works to enable an equal basis for PWDs and the elderly to take part in cultural life in line with the Arabic identity via ICT. The center also supports the provision of opportunities for PWDs and the elderly to use their creative, artistic, and intellectual potential independently.

Education



and regional treaties, conventions, charters, legislation, and national plans call for ensuring that students with disabilities have equal access to guality education. Providing education for

students with disabilities also contributes to achieving human development, one of the most important pillars of Qatar National Vision 2030. Mada Assistive Technology Center Qatar believes that individual empowerment and support are not enough, it is also important to address ecosystem issues of persons with disabilities to ensure that they have everything necessary to succeed.

Mada Center's strategy aims at enhancing ICT access to unlock the potential of all persons with functional limitations (persons with disabilities and the elderly) through capacity building, spreading awareness, training, and supporting the development of accessible digital platforms in the field of education. Mada works to enable the education sector to ensure an inclusive digital education system at all levels and sustainable learning through universal access to ICT, in accordance with the latest findings of the digital knowledge revolution in terms of technologies, methods, and innovations that serve the target groups in the field of education.



Various international Mada's efforts in the education sector in 2020 resulted in the activation of many programs and projects within the framework of cooperation agreements and strategic partnerships with several strategic partners in the education sector, to enable this sector to ensure an inclusive digital educational system.

> In this regard, Mada achieved strategic success by activating 6 cooperation agreements, the most prominent of which is the signing of a strategic partnership with the Ministry of Education and Higher Education in the field of inclusive digital education support. The center continued to enhance its work in this field by activating several strategic partnerships with the Qatar Foundation for Education, Science and Community Development represented by preuniversity education in addition to Hamad Bin Khalifa University, Carnegie University, Qatar Center for Professional Development and Community College.





Services provided to strategic partners in the education sector



Digital Access Services

In line with its efforts to enable persons with disabilities, provide easy access to education and promote inclusive digital education, Mada Center has provided many digital access services to its strategic partners in the education sector. Mada, through its experts, has provided its partners with specialized consultations on information and communication technology (ICT) access, ecosystem, policies, plans, and research in the field of digital access in accordance with the best international standards and practices. As a result of these efforts and services, the website accessibility score for the education sector in Qatar has reached 93%. Mada Center has also carried out accessibility audits and assessments of 16 websites to ensure their compliance with the Web Content Accessibility Guidelines (WCAG). In 2020, the center granted digital access accreditation to four electronic platforms, including the application and website of the Qatar Foundation for Education, Science and Community Development, the Qatar Career Development Center website, and the Ministry of Education and Higher Education website. As part of the implementation of the partnership agreement with the Qatar Career Development Center, Mada's team of experts conducted two audits and assessments of the accessible visitor experience for the QCDC's sections in the children's educational amusement parks "Kidzmondo" and "Kidzania".







Digital access accreditation of the MEHE website Digital access accreditation of QCDC website

of the Qatar Foundation website and application

Services provided to strategic partners in the education sector



Consulting

Mada Center works to enable equal opportunities and to ensure an inclusive education system at all levels and lifelong learning through ICT. According to Mada 2019-2021 strategy, the center is committed to its role as a strategic enabler of ICT accessibility by developing the potential of the education sector and providing consulting services to partners who serve persons with functional limitations in this domain.

Mada Center provides expert consultancy on policies, plans, programs, and projects in the field of ICT access and assistive technology (AT), to promote and support the ecosystem to improve the quality of life of persons with disabilities and the elderly through accessible technology. Mada experts held 31 sessions for its strategic partners, and the sessions included 63 hours of consulting following international best practices and standards in the field of inclusive digital education.





Services provided to strategic partners in the education sector



Training & capabilities building

The primary goal of capabilities building is to enable individuals to be more skilled and professional, institutions to be more responsive and effective, and for the environment to be active and in harmony with the sustainable development goals. Mada has worked to activate strategic partnerships by building the capabilities of its partners in the field of information and communication technology access through training, empowerment, and the establishment of assistive technology stations to support persons with disabilities. Mada has also attached great importance to enabling individuals and building their capabilities according to the pillar of human development of Qatar National Vision 2030.

Mada's strategy and programs aimed at raising awareness of the importance of inclusive digital education, promoting the education system and vocational training, in addition to ensuring digital accessibility to educational programs and career counseling programs for strategic partners and workers in the education sector. These programs were designed and implemented by specialized experts in compliance with the highest standards of digital inclusion and the best international practices in this field.



Training sessions

Accredited Training Programs

Mada Center provides specialized and accredited training programs in the field of information and communication technology access to expand and enhance the services provided by active parties in the education sector to persons with disabilities and develop the AT ecosystem in this sector.

Creative Teacher Program

In the process of implementing the strategic partnership between the Mada Center and the Ministry of **Education and Higher Education** represented by the Training and **Educational Development Center,** which aims to support inclusive digital education, Mada Center held two accredited training programs; the "Creative Beginner Teacher Program" and the "Advanced Creative Teacher Program". The programs aim at training teachers to keep pace with the fourth industrial revolution in the field of inclusive digital education, to enhance the quality of inclusive digital education outcomes, and to train highly gualified national educational personnel to push the digital transformation process forward, including students, teachers, the educational environment, and the strategies and means of education.

"If a child can't learn the way we teach, maybe we should teach the way they learn."

Ignacio Estrada

Mada Center has succeeded, through this unique program, in developing the skills and knowledge of 23 teachers in the first program, the "Creative Beginner Teacher" and 26 teachers in the second program, the "Advanced Creative Teacher". through 158 training hours provided by experts from Mada and international experts in the field of ICT access in the inclusive digital education sector and the latest applications and practices of the Fourth Industrial Revolution.



Training preparations & settings

Mada's contribution included equipping 3 training rooms at the headquarters of the Training and Educational Development Center, and providing them with 30 technological solutions and assistive technology devices for supporting ICT access in the inclusive digital education sector. These rooms and corridors were designed to reflect the program's mission and vision and provide an appropriate environment for inclusive digital education according to international best practices.

In view of the importance of providing trainee teachers with tools that help them to apply the knowledge and information gained from the program, Mada provided 41 "Surface Pro" devices for all trainees in the "Creative Teacher Program", including educational electronic programs and applications such as Microsoft 365 and Clicker 7. The trainees and those in charge of the program were trained to use these technological solutions in cooperation with Mada's strategic partner, Microsoft.





Assistive technology training





Honoring the top 4 trainees in the Creative Teacher Program



The Creative Beginner Teacher Program included organizing several field visits for the trainees to Mada Center, Msheireb City, and the Innovation Lab of the "TASMU" strategy at the Ministry of Transport and Communications, in order to learn about the concept of inclusive smart cities, sustainable development and the importance of innovation that supports inclusive digital education. Trainees had the opportunity to experience the applications and practices of virtual reality and its use in inclusive digital education.



Final projects and graduation ceremony for trainees

The trainees in the Creative Beginner Teacher Program completed their graduation projects using educational technology solutions that support the Fourth Industrial Revolution under the supervision of Mada AT and digital access experts. The evaluation committee approved 23 successful graduation projects, of which 9 were very distinguished projects where trainees presented modern technological solutions which were employed to ensure an inclusive educational process. A graduation ceremony was organized for 23 female teachers in the first phase of the program in February, in addition to the graduation of 22 female teachers during the virtual closing ceremony in November after all of them successfully passed the **Creative Beginner Teacher Program** under the patronage of His Excellency Dr. Ibrahim bin Saleh Al Nuaimi, Undersecretary of the Ministry of Education and Higher Education and in the presence of the CEO of Mada, Mrs. Maha Al-Mansouri.

Educational Empowerment Program

Mada Center also participated in the "Educational Empowerment for Teachers" program, which aimed to train 60 teachers on the use of assistive technology and digital access solutions to provide an inclusive educational environment for all. The center conducted 12 training hours via Microsoft Teams in three remote sessions; "Accessible Electronic Documents", "Design and Use" and "Assistive Technology in Education".





benefit rate

Educational Empowerment Program







100% satisfaction rate

133 training hours Advanced Creative Teacher Program









AT

41 Surface Pro devices 3 training rooms were equipped with 30 technological solutions





Training program for the accreditation of 10 career facilitation mentors

In the process of implementing the partnership agreement signed between Mada Center and Qatar Career Development Center, a member of the Qatar Foundation for Education, Science, and Community Development, Mada introduced the "Training Program to Facilitate Career Development", which is the first accredited training program in the State of Qatar in the field of career guidance to empower and support students with functional limitations shift from the supported education to advanced education using ICT. This program aimed to enable career counseling professionals to develop career facilitation skills and access to information and labor market resources while enhancing their ability to deal with diverse groups in need of job facilitation, including persons with disabilities.

The program built the capabilities of trainees by providing 120 training hours in the field of employment skills, training clients and peers, and using ICT and Assistive Technology in job facilitation for the benefit of persons with disabilities. During the program, the National Career Development Association (NCDA) provided comprehensive training to qualify participants in the field of counseling and career facilitation for persons with disabilities.

The total number of trainees in the program was 10 career counseling specialists from the Ministry of Administrative Development, Labor and Social Affairs, the Ministry of Education and Higher Education, the Qatar Career Development Center, and the Ghaya Management Training Center. This program paved the way for the participants to obtain accreditation for the practice of facilitating professional development as professional service providers from NCDA and Mada Center.



Assistive Technology Superusers Program

In line with Mada Center's endeavors to build capabilities in the education sector to ensure inclusive education, and in cooperation with the Qatar Foundation for Education, Science, and Community Development, the center held a specialized training program "Foundations in Assistive Technology 2020" accredited by the Technological University of Dublin, to train 22 AT specialists on the use the latest AT solutions to support PWDs in the education sector. This program targeted workers in the education sector from Qatar Foundation, Ministry of Education and Higher Education, and Community College in Qatar.

The program aimed to provide participants with the necessary knowledge and skills for the decision-making process in the field of assistive technology, to increase the participants' confidence in their skills, and to provide them with an in-depth understanding of the tools and processes required to support assistive technology users. To achieve these goals, 11 training sessions were held to discuss many topics, the most important of which was; the definition of assistive technology, Microsoft tools for education and alternative access through AT devices, distance education using AT, evaluation methods, provision of AT solutions for students with multiple disabilities, and the introduction of artificial and virtual intelligence.









Events

The launch of Mada AT station (Qatar Foundation for Education, Science and Community Development)

Within the framework of the strategic partnership between Mada Center and Qatar Foundation for Education, Science and Community Development represented by pre-university education, the center launched the Mada Assistive Technology Station at AL Awsaj Academy on November 25, 2020. Mada provided training to specialists on the features of AT devices and services and how to use them for the benefit of persons with disabilities in Education.

This station, which provides many educational AT solutions, plays an important role in promoting and developing services in the field of comprehensive digital education by facilitating access to ICT technology for students with functional limitations in order to empower them and achieve equal opportunities in the education sector to meet the needs of PWDs in the State of Qatar.











New AT stations launched in 2020



AT stations already available in the education sector





The participation of the Mada "Young Innovators Club" in the World Innovation Summit for Health "WISH"

Mada Center participated in the World Innovation Summit for Health "WISH", organized by Qatar Foundation for Education, Science and Community Development and operates under the patronage of H.H Moza bint Nasser. "WISH" is a global initiative whose aim is to 'promote and facilitate innovation in healthcare delivery around the world. In 2020, WISH was held virtual due to COVID 19 restrictions. Mada participated in the "Innovators of Tomorrow" program which was held from the 4th of November 2020 to the 11th of November 2020. The program aimed to enable students with disabilities to acquire practical skills, develop innovative solutions and methodologies, and overcome challenges in various fields.





Mada has worked closely with the Ministry of Education and Higher Education to enroll 5 students with disabilities in the Innovators of Tomorrow program. Students had a 3-days training workshop on App development, and at the end of the workshop, they framed specific challenges. Students had 3 weeks to work on their solutions/project prototypes, and they had a weekly follow-up session with the trainers for guidance and progress check. In the 3rd and final stage of the program, students presented their solution prototypes.

The students were trained to use the MIT APP Inventor that uses the concept of block programming targeted towards beginners in programming along with web software to develop mobile applications. In addition to providing the necessary devices and assistive technology solutions for the participating students, access to Mada's Fablab was made available for project development.

The students who participated in the "Innovators of Tomorrow" program developed unique and innovative solutions to address issues in healthcare. Each student created a mock-up mobile application and a poster which were presented in the Innovators of Tomorrow pavilion in the WISH Conference.



Teaching and Learning Forum 2020

Mada Center participated in the "Teaching and Learning Forum 2020", which was held by the Educational Development Institute of Qatar Foundation on October 11, 2020, as a virtual forum for international teachers and leaders across Qatar to exchange experiences and opinions in the field of the resilience of education, where the attendees exchanged innovative solutions in education to make the learning process sustainable after COVID -19 pandemic.

Within the forum's activities, the center held a training session on "Digital Documents Accessibility" that dealt with the best international practices and standards used to design digital documents in education so that they are accessible by all students and workers in the academic field, including those with disabilities, which will support and develop the educational process.



Mada's Accessibility & AT Glossary

Coinciding with the celebrations of International Mother Language Day (IMLD), and within the framework of the Mada Innovation Program, which aims to enhance digital access in Arabic language and encourage innovators to provide more technological solutions for persons with disabilities, Mada Center launched "Mada's Glossary", that provides a thorough explanation of the main terms in the field of inclusive ICT access and Assistive Technology (AT) in both Arabic and English.

The main objective of developing the glossary was to promote innovation in the Arabic language in various fields of technology. The glossary will provide a list of terms in Arabic and English languages to assist researchers, experts, innovators, users, teachers, students, therapists, and related institutions to understand key terms related to ICT, digital accessibility, and Assistive Technology (AT).

This project has been developed to provide an effective contribution as a vital knowledge source for all concepts and terms that serve the programs, activities, and services of Mada Center, as well as the target groups and society in general. It contributes to the spread of culture and awareness related to inclusive digital accessibility and highlights the center services represented in capacity building and providing assistive technology in Qatar and the region.





The launch of Mada's Accessibility & AT Glossary

HAMAD BIN KHALIFA UNIVERSITY عضوفي مؤسسة قطر Member of Qatar Foundation

Mada Glossary consists of (354) terms, each of which is concerned with providing a clear explanation of everything related to persons with disabilities, accessibility, and technology. Moreover, the center seeks to continue its work on developing this project in advanced stages by adding more terms and translating them into other international languages to increase the impact and enhance inclusiveness, and raising awareness in this field. Mada Glossary was reviewed in cooperation with the Institute for Translation Studies in HBKU within the framework of activating the cooperation agreement between Mada and Hamad Bin Khalifa University signed during QITCOM 2019.



Mada's Accessibility & AT Glossary Portal



In line with Mada Center's efforts to implement the Mada strategy 2019-2021 aimed at supporting equal entitlement to cultural and linguistic identity and

harnessing all potentials to achieve maximum societal benefit in the field of information and communication technology access, the center has achieved remarkable success in enabling equal basis for PWDs and the elderly to take part in cultural life in line with the Arabic identity via ICT. The center has also succeeded in providing full support to users, and opportunities for persons with disabilities and the elderly, by providing them with the latest technological solutions in the Arabic language to facilitate the independent use of their creative, artistic, and intellectual potential.

In the context of expanding its partnerships, Mada activated 7 strategic partnership agreements with several prominent entities in the country, including the Supreme Committee for Projects and Legacy, the National Tourism Council, the Communications **Regulatory Authority, Qatar National** Library, and Qatar Rail, in addition to a strategic partnership agreement with Qatar Central Bank and Qatar Museums. Scope of work in the field of ICT access was also signed with the Qatar Leadership Center.

These agreements and partnerships are of great importance for establishing equal access and opportunities for persons with disabilities and the elderly to enable them to participate naturally in cultural life and to unlock their creative, artistic, and intellectual potential independently through ICT. It also strengthens cooperation to achieve access to ICT to achieve strategic goals and ensure keeping pace with the requirements of the Fourth Industrial Revolution, and to participate in the realization of Qatar National Vision 2030, which emphasized the importance of knowledge economy, sustainable poment, on unications or Authority State of Qatar State of Qatar State of Qatar Constructions Construct development, and innovation.













Services provided to strategic partners in the culture and community sector



Digital access services

Mada Center provides specialized digital access services via its experts to strategic partners in the fields of ICT access, ecosystem, policies, plans, and research following the international best practices and standards to enable an equal basis for persons with disabilities to participate in cultural life according to the Arab identity through ICT. Mada services for digital access have enabled persons with disabilities and the elderly to access ICT in public places, websites, mobile applications, electronic documents, digital content, selfservice machines, and ATMs, in a holistic process that paved the way for better accessibility.

As a result of these efforts and services, the percentage of websites' accessibility in the culture and society sector reached 92%. Mada also carried out accessibility audits and assessments to 41 websites and 8 electronic applications to ensure their compliance with the standards of (WCAG 2.1) Web Content Accessibility Guidelines. Mada's team of experts also conducted audits and evaluations of the visitor's accessible journey for many of the platforms, services, and electronic applications of its strategic partners in the culture and community sector.



accessibility score for the culture and community Sector





User journey assessment in libraries

User Journey

ICT Accessibility in public places is an inclusive process that ensures overcoming all obstacles facing persons with disabilities and the elderly when trying to access information and services in various public spaces. Mada Center provides various services in the field of enhancing digital access to various institutions, as it provides the necessary guidance on how to ensure that public spaces and services comply with international standards for digital accessibility. The center works to ensure access to audio advertisements, information panels, electronic service kiosks, and automated teller machines (ATMs). All this makes the various public places (commercial centers, hotels, airports, convention centers, etc.) accessible to persons with disabilities and the elderly.

In the process of implementing the Mada strategy, the center worked on assessing the accessibility of the Qatar National Library, Qatar Islamic Museum, Qatar National Museum, three hotels, two restaurants, a mall, and two metro stations. A team of Mada digital accessibility experts conducted a comprehensive assessment of digital access services in these entities and provided the necessary recommendations for their development.

User Journey assessment in restaurants



User journey assessment in museums



User Journey assessment in hotels



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Accessibility evaluation of 78 ATMs Mada Center seeks to improve PFLs digital access to the various digital platforms in the country, including banks and banking services in accordance with the Web Content Accessibility Guidelines (WCAG 2.1).

Within the framework of the partnership between Mada Center and Qatar Central Bank that aims to facilitate access to financial and banking services for individuals in the State of Qatar, including those with disabilities and the elderly, Mada Center launched a project to assess the accessibility and usability of several ATMs in Qatar for PWDs and the elderly. The project also aims to accredit ATMs that pass Mada digital accessibility evaluation and to develop a database that includes a list of accessible ATMs in the State of Qatar.







ATMs passed Mada's digital accessibility evaluation



\$

banks were evaluated

ATMs

were

Phases of the evaluation project:

- A specialized training program on digital access was held for bank workers by Mada experts, in coordination with Qatar Central Bank employees.
- · Forming a joint work team from **Qatar Central Bank and Mada** Center to ensure the successful implementation of the evaluation process.
- Identifying the locations of 78 ATMs to be evaluated by Mada Center and setting a schedule for launching the evaluation process.
- Preparing a list of ATMs that passed the initial assessment.
- Conducting a final evaluation of the candidate bodies in cooperation with volunteers with disabilities and Mada Center experts.



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78 ATMs were evaluated in various locations of the State of Qatar according to Mada.s digital accessibility standards of which 11 ATMs obtained the accreditation of Mada Center. In addition, two Qatar Central Bank employees were trained to evaluate ATMs accessibility, and 27 employees in various banks were also trained on mechanisms for evaluating digital accessibility.



Consulting

Mada Center works through strategic partnerships to enable the community and culture sector to become more inclusive through information and communication technology. The center achieves this by building the capacity of partners, supporting the development and adoption of digital platforms in accordance with international standards for digital access, providing consultations, raising awareness, and increasing the number of assistive technology solutions in the Arabic language. In this context, Mada Center provides specialized consulting services to its partners to develop policies, plans, and prepare programs and projects in the field of ICT access and assistive technology to enable equal opportunities for the participation of persons with disabilities and the elderly in the digital society and to promote and support an inclusive ecosystem. These consultations are provided following the best practices and international standards by a dedicated team of experts and specialists.

> Consulting hours provided for strategic partners in the culture and community sector

Capability building

Mada Center believes that enhancing and building the capabilities of individuals is the most inevitable change that guarantees the sustainability of services provided to persons with disabilities in the State of Qatar. The enhancement of the capabilities of workers in the culture and community sector improves their knowledge, skills, and willingness to work, and it also develops their skills to provide more appropriate and professional services to the target groups.

The center works to build the capabilities of its strategic partners in the culture and community sector in the field of ICT access, to promote inclusion and enable persons with disabilities and the elderly, which enhances their independence and achieves equality in accessing all available services. Mada's efforts in this field also contribute to providing the opportunity for persons with disabilities to actively participate in cultural, intellectual, economic, and entertainment life on an equal basis.

Trainees from the culture and

community sector

Training sessions for partners in the culture and community sector





Training workshops in the culture and community sector



Events

Mada Center was the ICT accessibility partner of the Doha Jewelry & Watches Exhibition 2020

In the context of promoting the partnership between Mada Center and the National Tourism Council in the field of ICT accessibility, and to ensure inclusive shopping experience at the Doha Jewelry and Watches Exhibition, which was held from 24-29 February 2020 at the Doha Exhibition and Convention Center, the center, as the ICT accessibility partner of the exhibition, provided ICT accessibility solutions in accordance with international best practices and standards, in addition to ensuring the provision of inclusive customer service. The center provided many technological solutions to facilitate access for persons with disabilities and the elderly to the exhibition and its activities.

A special inclusive customer service area was set up and supervised by a specialized team that provided the necessary support through assistive technology devices and solutions when needed to enhance communication and support independence in shopping.









Mada also held several consulting sessions for the Doha Jewelry and Watches Exhibition team, in addition to providing 4 training workshops to build the capabilities of DJWE employees on the registration process, inclusive customer service, how to deal with visitors with disabilities, and the use of assistive technology devices. A customer service area and an inclusive information area were established following international standards at the exhibition site. The area was supported with 19 assistive technology solutions to communicate with participants and visitors with disabilities over 6 days. Besides, various publications were provided with a bar code (QR Code) to translate the content into sign language while providing an audio description feature.









HEYA Mada Center was the ICT accessibility partner of Heya Arabian Fashion Exhibition 2020



In the process of activating the partnership between the Mada Center and the National Tourism Council, Mada Center participated in organizing the Heya Arabian Fashion Exhibition as the ICT accessibility partner. This participation aimed at facilitating access for persons with disabilities and the elderly to the exhibition and its activities through the provision of inclusive customer service and assistive technology solutions.

The 17th edition of Heya Arabian Fashion Exhibition was organized on November 27, 2020, at the Doha Exhibition and Convention Center, under the patronage of Her Excellency Sheikha Al Mayassa bint Hamad Al Thani.

Mada Center held several training sessions for the exhibition's work team, covering multiple topics including accessible registration process and inclusive customer service. The center also provided 12 assistive technology solutions to facilitate the access of persons with disabilities and the elderly to the services of the exhibition and enable them to participate in its various activities.





ATAR المجلس الوطني للسياحة National Tourism Council

Mada Center participates in the celebration of the "International Open Access Week"

مكتبة قطر الوطنية

Oatar National Library

Mada Center participated in the seminar "Open Access in the Time of Covid 19" organized by the Qatar National Library in celebration of the "International Open Access Week 2020" "Open with Purpose: Taking Action to Build Structural Equity and Inclusion. The center discussed "Sources of Open Access for Researchers and Innovators to Enhance Accessibility for PWDs and the elderly during the Covid-19 pandemic".

The center emphasized the importance of promoting open access through research projects, such as "Tawasol Symbols", and its role in increasing the number of solutions and innovations that enhance digital accessibility for persons with disabilities. The Mada Innovation Program grants and competitions were also presented with a focus on the grants it offers to provide open-source resources for innovators and researchers.



Services provided for other parties



electronic platforms received Mada digital accessibility accreditation



accessible user journey assessment





consulting sessions



government websites accessibility score





Mada digital accessibility

accreditation for Public

Prosecution self-service

devices



User Journey assessment in QU library



Mada digital accessibility accreditation for CAA website



Mada digital accessibility accreditation for Tasmu website

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Mada digital accessibility accreditation for Qatar Exchange website

Open Training Program 2020

Mada Center launched an open training program with the aim of building capabilities in the field of ICT access to enable and promote the integration of persons with disabilities and the elderly into society and to create a more accessible surrounding environment. In order to ensure the achievement of the program's goals, it was made available to all members of society and implemented following international best practices and standards in this field. During the year 2020, 43 training workshops were held to build the capabilities of more than 687 trainees. The main topics of these training workshops addressed three main areas: ICT access, international best practices and policies in the field of ICT access, and assistive technology. To register in the program, please visit the Mada website, where the list of training workshops is constantly reviewed and updated.





ورشة تدريبية











Mada's Response to COVID

The center was keen to continue work during this crisis to ensure the rights of persons with functional limitations (persons with disabilities and the elderly) to digital access at all times and circumstances, to provide an inclusive education system at all levels, and to support continuous learning through ICT, and to enable PWDs to participate in cultural life through ICT.

The Covid-19 pandemic has required various sectors of society around the world to take preventive measures to limit the spread of infection among people. As Mada Center was keen to protect the health and safety of customers, partners, employees, and their families, the Center decided to adopt the remote work system on March 12, 2020.

Mada Center took many decisions and activated them to ensure the proper progress of work and without any interruption in the provision of services to the target groups. The center has also resumed remote work in order to ensure that the services provided to its strategic partners, governmental and non-governmental agencies, persons with disabilities, and the elderly are not affected. Urgent work has been done to develop various solutions and launch digital platforms and portals to meet the needs of society during these exceptional times, in addition to providing specialized support to mitigate the effects that the current crisis may have.

The launch of inclusive digital portals

Given the current conditions in the world in general and in the Throug State of Qatar in particular, and considering the circumstances center imposed by the Covid-19 pandemic; Mada Center realized the lar the important role of inclusive digital platforms in helping applica everyone without exception to access digital services and variou benefit from the advantages of such portals in accordance with international best practices and standards. In fulfillment of its mission to provide services and unlock the potential of persons with disabilities and the elderly through capability building and support for the development of digital portals, Mada center and services in the education, culture, and community sectors, namely, Inclusive Digital Education Portal and Inclusive Digital Culture and Community Portal.

Through these two portals, the center has been keen to provide the largest possible number of applications, open sources, and various local and international services provided remotely, so that people can obtain information and support through the links and pages listed on these portals. The center also works on updating these portals and evaluating their efficiency to ensure that everyone gets access to ICT.

تنویه | Announcement

تم اعتماد نظام العمل عن بعد ضمن الإجراءات الاحترازية لمركز مدى للحد من تفشي فيروس كورونا.

The remote work system was adopted among the preventative measures taken by Mada Center for limiting the spread of corona-virus.



Inclusive Digital Education Portal

Inclusive Digital Education Portal promotes distance education as an initiative aimed at enabling the education sector to ensure inclusive education for all students, especially those with disabilities or functional limitations. This portal contains open educational programs and resources (OERs) available in the public domain of the Internet with an open license. These portals provide a range of interactive online services for teachers, learners, parents, and others involved in the education process. It also provides the information, tools, and resources necessary to support and enhance education following universal design principles for learning and an inclusive digital learning environment.

Besides, the portal includes a variety of applications categorized into sections to improve specific skills such as reading, writing, cognition, and mathematics. It also includes accessible educational resources designed and developed with Mada's accreditation to meet the needs, abilities, and cognitive capabilities of students of all levels in general, and students with disabilities in particular.



Inclusive Digital Culture and Community Portal

The Inclusive Digital Culture and Community Portal provides access to digital resources as an initiative aimed at enabling access for persons with functional limitations (persons with disabilities and the elderly) to the available electronic resources and services that they need daily, such as e-government services, e-procurement services, e-health services, and many more useful and approved resources.



Mada's Activities



Innovation

Mada Innovation Program The Mada Innovation Program is designed to encourage innovators to create Arabic technological solutions for persons with disabilities and the elderly in Qatar and the Arab world through various programs including grants and localization, entrepreneurs support, competitions, and endorsement.

This program seeks to encourage and expand the market for the private sector in Qatar to meet the needs of the Arab world and increase awareness of assistive technology among innovators. Through all these programs, Mada Center provides subject-matter expertise as well as professional and end-user feedback to enhance and further improve solutions to best meet international standards.

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Endorsement Program





Competitions



Grants and Localization



Entrepreneur Support

The Entrepreneur Support aims to provide opportunities for individuals and emerging institutions interested in technology and innovation that have introduced products or services in the field of digital access and assistive technology, to empower and help them enter the local and Arab market.

Mada Center has established distinguished partnerships with business incubators, which constitute an important platform for developing the ideas of entrepreneurs and innovators, to develop and support emerging innovations in the field of digital access. The center provides the necessary training, advice, and expertise to entrepreneurs, in addition to supporting the development and evaluation of digital access solutions to ensure maximum benefit from these innovations for persons with disabilities and the elderly.

حاضنة الأعمال الرقمية Digital Incubation Center

Digital Incubation Center (DIC)

The partnership between Mada and the Digital Incubation Center (DIC) under the patronage of MOTC aims to boost ICT innovation in Qatar, particularly among young people working to start or develop a technologyrelated business. The Center services to help entrepreneurs works to provide support for and companies who either have entrepreneurs capable of an idea to start a business harnessing emerging ICT to create innovative products, solutions, or services that will contribute to improving the lives of PWDs and the elderly in Qatar and the region. MIP services offered to entrepreneurs include free office spaces, technical support, training and guidance, access to business mentors, and exposure to AT and accessibility market space.

Incubation Center (QBIC) Mada Center partnered with The Qatar Business Incubation Center (QBIC) which is one of the largest mixed-use business incubation centers in the MENA region that provides support or want to grow an existing business. The partnership support potential innovators and to develop their ideas, incubate their business, offer relevant funding, and help them connect with industry stakeholders.



حاضنة قطر للأعمال QATAR BUSINESS INCUBATION CENTER

Qatar Business



سلطنة عُمان وزارة النقل والاتصالات وتقنية المعلومات

SAS Oman

The partnership between Mada and SAS Oman envisions to support accessibility and AT business entrepreneurship in coordination and collaboration with relevant ICT industry stakeholders in the Sultanate of Oman and State of Qatar. In the long term, this will contribute to the development of a competitive AT and Accessibility sector within the region. SAS is between Mada and QBIC aims to a national entrepreneurship program in the field of ICT entrepreneurs by helping them that aims at providing the foundations for developing innovative projects and paving the way for entrepreneurs to establish IT projects that foster an entrepreneurial spirit in the ICT sector in Oman.

Qatar wins the World Summit Award 2020 in the category of Inclusion and Empowerment

"Bonocle", a Qatari innovation, supported and endorsed by Mada Innovation Program, wins the World Summit Award 2020 in the category of Inclusion and Empowerment as the first solution that translates Arabic content into Braille through a single cell.

مرک م

ENDORSEMENT

2020



Mada FabLab

Mada Center worked in cooperation with ibTECHar to establish and launch "Mada FabLab" (Manufacturing Lab) which was officially certified by the "Fab Foundation" as part of the international network of Fab Labs, which includes more than 1900 laboratories around the world.

Mada Fablab is the first hands-on inclusive technology and digital fabrication space in the region. It is an interactive accessible work environment that encourages everyone, including persons with disabilities, to innovate, manufacture, transform creative ideas into inventions, develop and share knowledge and experiences, which contribute to achieving sustainable economic and social development. Mada FabLab is a center for innovation and learning, as it is a digital fabrication laboratory equipped with devices and equipment that allows inventors, entrepreneurs, students, and artists to make their ideas come true, by designing prototypes for their innovations, manufacturing, and sharing them with an interactive community of technology specialists, researchers, manufacturers, and innovators.







Competitions

Mada Center, in coordination with local, regional, and international partners, sponsors competitions that provide opportunities for innovators and developers of ICT access solutions and assistive technology to obtain basic funding to support their products or services. This program helps them to benefit from these awards in developing their innovations to achieve the greatest possible benefit. In this regard, Mada participated in many events through which it presented awards in cooperation with its strategic partners, including:



Start of Science 2020

These efforts come within the framework of the Mada Center provided support to the contestants partnership between Mada Center and "Stars in the 12th season of the "Stars of Science" of Science", the pioneering program in the Arab competition in the field of innovation of digital world in the field of innovation, and one of the access solutions and assistive technology. Mada initiatives of the Qatar Foundation for Education, conducted an ICT Accessibility training session Science and Community Development, to increase on ICT Accessibility and e-Inclusion with the awareness, provide digital access services, and SOS Season 12 contestants to enable them to support the development of assistive technology develop and enhance their respective solutions solutions in Qatar and the Arab region. with accessibility in mind. Additionally, Mada provided subject-matter expertise to Ahmed Eng. Ahmed Fathallah presented an educational Fathalla on his educational platform using the platform using electronic cubes. The "Educational electronic cubes project.

Eng. Ahmed Fathallah presented an educational platform using electronic cubes. The "Educational Platform Using Electronic Cubes" was a technology incorporating a set of physical computerized cubes that communicate and coordinate with each other to bring educational activities to life. Its library includes English and Arabic games that will have an adaptive psychoeducational focus, which will work in tandem with the Cubes' machine learning algorithms to analyze children's learning patterns that can help in diagnosing early development problems should they arise.


Mada ALECSO Apps Awards 2020

Mada has collaborated with Arab League **Educational Cultural and Scientific Organization** (ALECSO) to launch the first of its kind awards intended to develop innovative Arabic mobile app solutions for users with disabilities called the Mada-ALECSO Apps Award.

Mada Center, in cooperation with the Arab League for Education, Culture and Science (ALECSO), organized the Mada – ALECSO Mobile Apps Award 2020 for the best mobile phone application in Arabic that helps to improve the lives of persons with disabilities. Through this award, MADA seeks to spread awareness and direct public and media attention towards the importance of applications for persons with disabilities in order to improve their physical capabilities and their living conditions. The award went to Amani Abu Al-ula from the State of Qatar for her application "Educational Encyclopedia", and Hayat for Information Technology from the Sultanate of Oman for the application, "Signbook".

Seedstars @Seedstars · Apr 3 Meet the winners of the ICT Accessibility Prize by @madacen dio and @LazarilloApp .Together with Seedstars, MADA's ICT Accessibility Prize seeks to attract innovative solutions globally that provide digital access and assistive technologies for disabled people



Mada-Seedstars ICT Accessibility Awards

Mada-Seedstars ICT Accessibility Award is a global award for startups that have been active for less than 4 years in the field of ICT access. The competition is supervised by both Mada and Seedstars, through which an innovation, innovative idea, product, or service in the field of digital access is nominated for the award.

During the Seedstars Global Summit 2020, they announced the Mada ICT Accessibility Awards 2019 winners. The competition was between two finalists, and the prize was awarded to both Talov and Lazarillo. Mada provided support for the innovations revealed by these two startups, which aim to improve the lives of persons with disabilities, through the Mada Innovation Program.

* seedstars

A BIG THANK YOU TO OUR PARTNERS! STAY TUNED FOR THE WINNERS ANNOUNCEMENT

OUR ACADEMIC PARTNERS Serrargite Mellon Liniterality Call Installing **OUR BUSINESS ECOSYSTEM PARTNERS** THALES Microsoft mada 1 zoom ORACLE wise accelerator <> GDG Dohe

Ooredoo 5G Virtual Hackathon

In cooperation with Ooredoo, Mada participated in the first Ooredoo 5G Virtual Hackathon to be held in the State of Qatar to provide a platform for innovators to develop their ideas. The event aimed to support entrepreneurs and develop innovations in the field of 5G and information and communication technology.





Mada Center presented smart solutions to enhance digital accessibility in smart homes and the design standards for these solutions and innovations that contribute to achieving more independence for persons with disabilities and the elderly. More than 150 teams competed in the event, 46 of which were selected. Teams competed in four categories: media and entertainment, SmartX, SportTech, and EduTech.



The Endorsement Program

The program targets international and local companies that already have ready-to-market ICT Accessibility and Assistive Technology solutions that require endorsement to access a broader market and specific institutions in Qatar and the Arab region. The endorsement of these solutions is subject to stringent criteria based on technical and end-user assessments. The following assistive technology solutions have been validated:

In 2020, Mada Center approved the Lazarillo app for smart devices that provides, for the first time in the world, an integrated solution for routing in buildings and across cities for persons with visual impairment through voice notes that also enable them to know the current location and nearby services.

In addition, Wonder Tree Accessible Gaming solution was endorsed by Mada. Wonder Tree Accessible Gaming is an augmented reality gamification solution that engages children with special needs for their therapeutic and cognitive development using the concept of mirror therapy via a webcam on a PC or a screen.

Class Quiz, in turn, was endorsed by the Mada Innovation Program. It is an educational platform that provides a set of interactive exercises that enhance the students' knowledge and develop their skills in mathematics and science in an entertaining way through the use of modern technology.

Further details about these solutions and applications are available on the Mada Innovation Program portal. https://mip.qa









The Mada ICT accessibility prize is a key for our expansion

René Espinoza Founder & CEO, Lazarillo, Chile



huge recognition for us and we believe it will be through the MENA Region



Grants and Localization

Mada worked in cooperation with stakeholders to identify theneeds of PWDs for assistive technology and digital access solutions in Arabic in line with the Qatari culture. Mada has supported startups and entrepreneurs to localize technological devices and solutions through the Mada Innovation Program, with the aim of improving digital accessibility for persons with disabilities at the local. regional and international levels. These solutions include:



E-Government kiosk

Mada collaborated with Korean Technology Firm Mada and Wonder Tree worked together to improve 'DOT Incorporation' by funding the localization of the accessibility of the platform to decrease the first E-Government kiosk that is accessible dependability on physical solutions and increase for persons with disabilities and the elderly. digital methods for therapy and education needs. It is an electronic device for implementing an Mada also supported the localization of the games with advanced administrative system suitable for the Wonder Tree so that they are accessible to everyone. digital information age, which can be installed Wonder Tree can provide Motor Therapy Sessions to in a governmental institution or a public place children with special needs for progressive motor to allow users to have e-Government services functions through Augmented Reality based Games directly. which are specifically designed to cater to the motor, cognitive and social developmental needs of special children. These Games provide clear reporting along with a verified metric to parents and therapists alike for assessment and cordial interventions.

All in One Kiosk provides government services like issuing a license or certifications without the need to going to any administrative offices. In order to make these kiosks accessible to all persons with multiple disabilities and the elderly, Mada adopted the universal design principles in developing them so they offer a comprehensive set of cross-disability interface techniques or strategies including a touchscreen interface, braille input, audio output, wheelchair accessible.



Wonder Tree Accessible Gaming

Wonder Tree Accessible Gaming is an augmented reality gamification solution that engages children with special needs for their therapeutic and cognitive development using the concept of mirror therapy. Using a webcam on a PC or a screen, the wonder tree portal can be used to inject joy into physical and cognitive therapy for kids through fun, interactive, augmented reality games which are easily accessible.

Research and Publications

Mada Assistive Technology Center pays special attention to research and publications in the field of ICTs accessibility, as the center strives to promote leading industry practices at the global, regional, and local levels.

Mada aims to conduct various researches to analyze the reality of digital access and develop solutions for ICT accessibility in the Arab region following the latest trends and international best practices, programs, and policies. As part of its efforts in this field, Mada conducted many types of research and technological projects under Mada Innovation Program. Mada's research projects are in line with 2030 SDGs, Qatar national development strategy, and the center's strategy 2019 -2021.

Based on its role as a strategic enabler in the field of information and communication technology access, in 2020, Mada released publications and specialized guides to provide reliable sources for interested people, professionals, and relevant parties, to support innovation, raise awareness and raise awareness of policies, international best practices and the latest trends in digital access and assistive technology.





"Arabic Phrase-Based Sign Language" **Research Project**

Mada launched the "Arabic Phrase-Based Sign Language System" project, to provide an integrated technological environment for the automated processing of Qatari and Arabic sign language through developing the first coding system for Arabic sign language in addition to an automated translation platform from Arabic into sign language.

In order to define the outcomes of this project, the center organized several focus sessions with persons with hearing disabilities to understand the challenges they face in the fields of education and culture and how technology can enhance their access to information. Mada's experts worked closely with deaf people, sign language researchers, mobile software and application developers, as well as experts, teachers, students, and sign language interpreters in Qatar and the Arab world to develop the first portal for automatic sign language processing. Software and mobile application developers will also benefit from the automated translation service from the Arabic language to the sign language encoding platform to develop applications and programs using virtual characters, to support digital content in Arabic sign language.

This project will provide the first video database containing a thousand sentences in Qatari and Arabic sign language recorded in videos and additional data to describe movements, facial expressions, and eye movement, allowing researchers, teachers, students, and sign language interpreters to search for Qatari and Arabic signs through a unified index that adopts an advanced coding system.



"Unified Arabic Braille" Research Project

Intending to promote its role as a leading center in innovation in the field of ICT access in Arabic in the region and the world, Mada launched the "Unified Arabic Braille Project" and the first electronic portal specialized in the Unified Arabic Braille Language. The importance of this project stems from the urgent need to provide Arabic Braille digital resources for those wishing to learn braille including parents and academics, and those wishing to stay up-to-date with Arabic Braille.

Mada developed a web portal containing a set of resources and lessons about Arabic Braille. The purpose of the portal is to provide digital content for the blind and people who want to learn the Arabic Braille system. The portal also provides a platform to discuss issues and propose new features for the current system. It represents the first specialized Unified Arabic Braille website, which contains detailed references to simple Arabic Braille, abbreviations, mathematics and science, and 8-dot computer braille, in addition to simplified lessons to learn reading and writing in Arabic Braille. Mada developed the first 8-dot Arabic Braille computer table to support Braille abbreviations in the fields of mathematics and science. The 8-dots computer Braille table is a tremendous addition that will assist users of Braille displays and speaking computer programs in a smoother use of braille.



The Unified Arabic Braille Project provides the first Liblouis software library based on the Arabic Braille table to develop Braille writing and reading skills for blind and deaf-blind people. Liblouis software library is a free and open-source tool, that provides converting, reverse converting, and braille formats for many languages, and it consists of a group of packages designed for use in many applications and devices, whether free or commercial. The Arabic table was created from scratch and included in the Liblouis Software Library. It relies on writing Arabic language and displaying it in the system of abbreviations. All Arabic abbreviations that were approved in the Arab Braille Conference in Riyadh in 2002 were also included.



2D and 3D Tawasol Symbols for AAC in Arabic

Individuals with extreme speech and language difficulties rely on Augmentative and Alternative Communication (AAC) systems to supplement or replace existing speech to effectively communicate with others. However, speech therapists and special support professors in the Arab region face challenges in using appropriate symbols for alternative communication systems because they have to rely on a list of western symbols expressing words in English and European languages.

Mada has identified the urgent need for effective communication in a society characterized by a diversity of verbal communication, languages, and styles, in addition to the different interpretations of visual symbols at the cultural and contextual levels. This prompted the center to launch a distinguished project to create "Tawasol" dictionary, which contains symbols that support both Arabic and English and consists of the words most used in speaking and writing represented by symbols and illustrations, in addition to taking into account that the vocabulary and symbols are culturally and contextually appropriate for the local community. This dictionary is one of Mada's tools that aim to improve communication skills for those with difficulties in communication or reading and writing.



This project succeeded in designing 1000 2D symbols and 291 3D symbols, in addition to developing an augmented reality application using these 3D elements. These twodimensional and three-dimensional symbols are also updated on the Tawaspl portal, to be available for download for various users and interested parties. The 3D Symbols Project specifically designs 3D elements to represent the supported 2D symbols. These 3D elements are provided via an application that supports 3D rendering (AR / VR app, Unity, Blender, etc.).



Mada Web Accessibility Monitor

The Mada Web accessibility monitor is a tool to create and maintain a list of accessible websites in the State of Qatar and to ensure that these websites are accessible to persons with disabilities according to international standards; WCAG 2.0 and 2.1 (A, AA and AAA). The tool can scan, archive web sites audits, page reports, and conduct multiple high-level reports of websites in the State of Qatar and the region. The system can monitor multiple websites and control pages that will be excluded from the scanning. The Monitor's capabilities include listing websites from most to least accessible with a score in a percentage calculated from WCAG2.1 recommendation.

Core functions are reliable and produce accurate results according to WCAG 2.0 and 2.1 A and AA guidelines. Scanned results are presented in a way that makes it easy for web developers to remediate issues identified in the report. The monitor was developed by Mada as a very unique initiative to ensure sustainability and accessibility to websites in Qatar.

W3C approves Mada as the Authorized Leading Translation Organization for translating WCAG 2.1 into Arabic

In line with its efforts to promote its pioneering role in the field of ICT access and digital inclusion in the Arab world, and as an active member of the World Wide Web Consortium (W3C), Mada Center was approved by W3C as the Authorized Leading Translation Organization (LTO) for translating Web Content Accessibility Guidelines (WCAG 2.1) into Arabic in accordance with W3C translation



policy. This approval highlights the regional and global role of Mada in the field of enhancing ICT accessibility in the Arabic language, in addition to the center's keenness to provide international best practices and standards for the relevant authorities and those working in this field in all Arab countries.

Web Content Accessibility Guidelines (WCAG) 2.1 covers a wide range of recommendations for making Web content more accessible. Following these guidelines will make content more accessible to a wider range of persons with disabilities. These guidelines address the accessibility of web content on desktops, laptops, tablets, and mobile devices. Following these guidelines will also often make Web content more usable to users in general.





17th International Conference on Computers Helping People with Special Needs (ICCHP)

Mada participated at the 17th International **Conference on Computers Helping People with** Special Needs (ICCHP) held on September 9-11, 2020. ICCHP is one of the largest European conferences on Accessibility Technology. The ICCHP served as a hub for professionals, and entities from diverse domains to submit outlines of concept papers, models, reports, ideas, and position papers on topics related to digital inclusion. The objective of the conference is to strengthen exchange and co-operation between practice and R&D as a key asset for technical and social innovation.

Mada actively participated in the conference by its contribution and successful publication & presentation of two papers namely, "Mada Accessibility and Assistive Technology Glossary A Digital Resource of Specialized Terms" and "An Overview of the New 8-dots Arabic Braille Coding System" for the digital edition of ICCHP Open Compendium - Future Perspectives of AT, e-Accessibility and e-Inclusion and Springer's Lecture Notes in Computer Science LNCS respectively.





Nafath periodical

Mada published 4 issues of "Nafath" In 2020, a quarterly periodical in Arabic and English. "Nafath" aims to be the leading source of information for the latest trends, innovations, and developments in artificial intelligence, devices, and digital solutions related to ICT accessibility.

Starting from its role as an information window around the world, "Nafath" periodical highlights pioneering work in providing solutions and services of ICT accessibility and AT locally, regionally, and globally. The periodical's articles were written by Mada's experts and international experts.

"Nafath" periodical provides the latest data and information on the most recent developments and news in the field of technology, digital solutions, smart applications, and their uses in education and theoretical and scientific knowledge. Furthermore, it highlights all technologies that have emerged from the Fourth Industrial Revolution that has generated a huge scientific and knowledge renaissance for humanity, in general, and for persons with functional limitations, in particular, by increasing inventions in various practical fields and facilitating human life in the era of modern technology and artificial intelligence.







Mada's Inclusive Portals

Arab world.

In line with Mada's efforts to achieve all its strategic objectives, the center developed accessible e-portals to serve its strategic partners, specialists, and those interested in accessing information and communication technology, in addition to PFLs in Qatar and the

These portals aimed to provide the largest number of applications, resources, and information for local and international services for partners, specialists, and persons with functional limitations. Mada continuously updates and evaluates these portals to support and enable the education sector and community and culture sector, and enhance independent living and digital access through ICT.

Mada's Inclusive Portals

Inclusive Digital Education Portal

Mada Center designed this accessible portal

to be supportive of distance education, as an

initiative that aims to enable the education

sector to ensure inclusive education for all

students, including students with disabilities.

This portal contains electronic educational

programs and resources that are accessible

In line with Mada's efforts to achieve all its strategic objectives, the center developed accessible e-portals to serve its strategic partners, specialists, and those interested in accessing information and communication technology, in addition to PFLs in Qatar and the Arab world. These portals aimed to provide the largest number of applications, resources, and information for local and international services for partners, specialists, and persons with functional limitations. Mada continuously updates and evaluates these portals to support and enable the education sector and community and culture sector, and enhance independent living and digital access through ICT.

and Community Portal

Inclusive Digital Culture

Mada Center designed this accessible portal that contains vital information, resources, and electronic services in the culture and community sector as an initiative aimed at enabling access of all persons, including persons with functional limitations (persons with disabilities and the elderly) to electronic sources and services through one platform.

Mada Innovation Program Website

Mada Center designed the Mada Innovation Program website to be an entry point and link between innovators, entrepreneurs, stakeholders, and specialists in the field of information and communication technology access and assistive technology on the one hand and the services and resources of the Mada Innovation Program on the other hand. The website aims to encourage innovators to create Araabic technological solutions for persons with disabilities and the elderly in Qatar and the Arab world through various programs including grants and localization, entrepreneurs support, competitions, and endorsement. The site also provides an opportunity to view the latest research and scientific studies, "Nafath" periodical, and the latest solutions approved by Mada Center. It allows its visitors to use Mada's various resources such as Tawasol Symbols, Arabic sign language project, and Unified Arabic Braille, in addition to serving as a forum for innovation leaders in the field of assistive technology and digital access.





Tawasol Symbols website

Tawasol Symbols website aims to provide a free Arabic symbols dictionary suitable for use by persons with a wide range of communication difficulties and to develop culturally and linguistically appropriate Arabic symbols for alternative and augmentative communication users in Qatar and the Arab countries.

Mada Accessibility & AT Glossary

Mada Center launched the first dictionary of its kind in the Arabic language for ICT access and assistive technology terms. This dictionary promotes innovation in Arabic in various fields of technology, by providing a glossary in both Arabic and English to help researchers, experts, innovators, users, teachers, students, therapists, and related institutions to understand key terms related to ICT, digital access, and assistive technology. The Mada dictionary represents a vital resource for capacity-building in this field in Qatar and the world, as it provides an important knowledge resource for all concepts and terms that serve the target groups and society in general, as it contributes to spreading culture and awareness related to inclusive digital access.







Events

Mada's main event: GREAT Talks 2020 The first accessible virtual event Mada center hosted the third edition of the annual event GREAT Talks, on the 25th and 26th of August, with the participation of more than 1,300 persons from 18 different countries. The goal of GREAT Talks is to provide a platform for sharing knowledge and experiences by bringing together experts, end-users, frontline workers, innovators, and providers to promote innovative technology solutions, share best practices, implementation strategies, research, and education in the field of digital access and assistive technology. GREAT talks

countries الدول



Despite the challenges posed by COVID-19 and the current circumstances in the world, and in order to implement Mada's strategy that is supportive of Qatar vision 2030 by working to consolidate the meaning of digital inclusion and building a digitally accessible society for persons with disabilities and the elderly and support ICT, Mada organized the event under the theme "Digital Inclusion", to highlight the ICT innovations in Arabic and best practices and topics in the field of ICT access.

Although GREAT Talks 2020 was a virtual event this year, Mada was keen to make all the necessary arrangements that made it a distinguished accessible event. Sign language and simultaneous English and Arabic interpretation were provided, enabling persons with hearing disabilities to attend the workshops. Digital accessibility standards were followed on the event's website at all stages, starting from the registration page to session selection all the way to the conference agenda.

Given the accelerating pace of technological change at the current time, which is driving people to access all kinds of information and perform most activities online, a key component of the event was to highlight the digital gap that can easily lead to the exclusion of some groups that can't communicate effectively or access technology especially PWDs and the elderly. Through its nineteen sessions, GREAT Talks focused on digital inclusion and the efforts made to bridge the digital gap. This edition of GREAT focused on digital inclusion and efforts to bridge the digital divide, as the event included 19 sessions with a variety of themes.







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GREAT Talks highlighted the importance of enabling the education sector to ensure an inclusive education system at all levels and continuous learning through ICT. The event dedicated many sessions to digital access to curricula in the Arabic language, and the challenges of distance education for students with disabilities. In addition, many workshops focused on enabling the culture and community sector to ensure an inclusive digital society for all by adopting the concept of digital access in organizational policies and highlighting innovative concepts and methods for accessing media, means of communication, as well as transportation.

In the field of digital access, GREAT Talks was keen to hold several sessions that dealt with international best practices and standards in digital access, accessible design, the most important accessible user interfaces, and the extent to which Qatar keeps pace with universal digital access. The event also dealt with the innovation ecosystem in the field of ICT access to promote localized assistive technology and the latest assistive technology solutions in the Arab world in order to keep up with the latest technological developments and the best ways to deal with ICT and digital access in a more efficient manner, especially in light of the ongoing global crisis and challenges.

With regard to Mada's efforts to promote innovation and support innovators, GREAT Talks discussed the importance of ICT access research as an integral part of the center's strategy, as several sessions were held to discuss research on persons with autism. The center's achievements and projects in this field were also highlighted, such as the Phrase-Based Sign Language project, in addition to the "Unified Arabic Braille" project. Mada implemented these projects out of its belief in the importance of enriching and promoting local and Arabized assistive technology to achieve more inclusion in the State of Qatar and abroad.

The virtual experience of GREAT Talks 2020 is an advanced addition to the inclusive digital education system, learning, and innovation in a changing and more dynamic world. This experience was characterized by flexibility and constituted a unique opportunity to effectively deal with the technology of the growing virtual world in which all people can share experience, knowledge, and learning in a safer and more accessible environment.











الشمول الرقمي Digital Inclusion





الشمول الرقمي











Mada Center participated in the **Conference of States Parties to the** Convention on the Rights of Persons with Disabilities

"Digital Accessibility Gaps and Opportunities: DARE Indes, Good Practices among 137 CRPD States Parties", held by the Global Initiative for Inclusive ICT (G3ICT) in partnership with Disabled People's International (DPI) on the sidelines of the Thirteenth Session of the States Parties to the Convention on the Rights of Persons with **Disabilities**.



Mrs. Maha Al-Mansoori, CEO of Mada Center, presented the best practices followed in the State of Qatar in the field of digital access, the center's efforts and its outstanding achievements in enabling its strategic partners in various sectors in the country to achieve digital inclusion, leading to Qatar ranking first worldwide in the Digital Access Rights Evaluation Index (DARE Index 2020).

Mada Center participated in the virtual event The event was attended by a group of prominent international figures active in the field of digital access, who provided a review of the latest global trends and international best practices in the field of digital access. Participants in this event were Axel Leblois (President of G3ict), Mohammed Ali Loutfy, Ph.D. (Interim Executive Director of DPI), Trevor Carroll (Vice President, Australian Federation of Disability Organizations, AFDO, Australia), Luis Henrique da Silveira Mauchado (Founder, Association Mais Diferenças and Ktalise Tecnologias, Brazil), and Ekaete J. Umoh (National President, Joint National Association of Persons with Disability, JONAPWD, Nigeria).



Mada Center participates in the 2020 ESCWA meeting

Mada Center participated in the consultative meeting organized by the United Nations Economic and Social Commission for Western Asia (ESCWA) under the title "ESCWA National Policies and Technical Guidelines Templates for e-Accessibility for the Arab region". The meeting aimed to discuss and review the templates prepared by ESCWA within the framework of the Arab Digital Inclusion Platform (ADIP) project to support policymakers in Arab countries to enhance their national policies related to improving digital access. Mada presented its observations and recommendations regarding the development and approval of the proposed policies and technical guidelines templates after studying and reviewing them.







ESCWA

Arab Horizon 2030 **Digital Technologies for Development**

World Health Organization

Digital Inclusion Week 2020

In line with Mada Center's commitment to promoting international cooperation to achieve sustainable development goals, the center collaborated with the International Telecommunication Union on October 26, 2020, in organizing the Digital Inclusion Week event under the theme of "How digital accessibility served PWDs during the time of crisis - No one left behind". The week-long event brought together stakeholders from governments, UN organizations, government agencies, civil society, academia, healthcare professionals, the private sector, and others interested in advancing digital inclusion efforts.



The event included a virtual session that shed light on the importance of providing equal access to information and communication technology (ICT) especially for persons with disabilities in the Arab region in times of crisis like the Covid-19 pandemic, which is a reminder that everyone should show commitment and do more work in this regard. The session also included an open discussion between the ICT access experts in the Arab region and those who shared their efforts, achievements, challenges, and lessons learned during the COVID-19 pandemic.

The session topics included an overview of the states of access to information according to the UNCRPD on equal access to information for persons with disabilities. The best international practices and methods applied in the field of access to information in various fields such as education, culture and community were also discussed.

Challenges and opportunities were also highlighted along with the importance of adhering to international standards for ICT accessibility, in addition to the issue of exploiting available opportunities to raise awareness and change how government agencies, companies, and individuals perceive the importance of developing accessible platforms.

Speakers from Mada Center focused on the importance of renewing commitment to implementing digital inclusion, especially for persons with disabilities in times of crisis, and highlighted Mada's achievement in this regard by launching two platforms that support access to inclusive information in the sectors of education, culture and community. These two platforms cover two main areas: access to digital services during the crisis and its importance, and the inclusive Mada platforms in education and culture during the crisis. The speakers confirmed the keenness of Mada to support the learning process and promote independent living through information and communication technology.

The session concluded by highlighting the importance of unifying future efforts towards achieving more inclusion and overcoming times of crisis and benefiting from them by identifying areas in which measures must be taken to comply with the Convention on the Rights of Persons with Disabilities, Article (9) on access to information, in addition to raising community awareness of the importance of enabling persons with disabilities to achieve independence by promoting ease of access to information and communication technology on an equal basis







Mada Center participated in "The Elderly and Corona Pandemic" Forum

In line with Mada Center's efforts to enable and support persons with functional limitations and the elderly in facing the Covid-19 pandemic, the center participated in "The Elderly and Corona Pandemic "forum organized by the Ministry of Development, Labor and Social Affairs. In the discussion sessions of the forum, the center presented a working paper on "The Role of Mada Center in Supporting Persons with Disabilities and the Elderly during the Coronavirus Pandemic". This paper discussed various topics, the most important of which was the center's initiative to develop inclusive information portals to meet the needs of persons with functional limitations and the elderly during the Covid-19 pandemic. These portals were developed in accordance with international best practices and standards and they include the Inclusive Digital Education Portal and the Inclusive Digital Culture and Community Portal, which contain the largest number of information sources and services such as websites and electronic applications, in addition to a directory of services and consultations that are provided remotely via phone and WhatsApp.

The working paper provided an overview of Mada's efforts in the field of digital access services by providing specialized training workshops with the aim of enabling web developers in different agencies to improve their websites and enable different visitors to access them and use the services available independently. Besides, Mada provides training workshops within the capability building and remote training program for target groups to enable them to use modern technology and benefit from digital services in times of crisis.





Mada's awareness campaigns

Mada Center organized campaigns to raise awareness of the impact of information and communication technology, accessibility, and to encourage stakeholders to take specific measures. The center is active in raising the awareness of persons with disabilities of what information and communication technology can do to facilitate digital inclusion to enable them economically and socially.





Mada's inclusive portals

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Digital access awareness campaign



Digital Accessibility Rights Evaluation Index 2020



Mada Innovation Program



Mada in international media







Enhancing ICT accessibility through strategic pa Qatar and beyond



International Day of Persons with Disabilities









call: How ITU supports digital accessibility

Stay up to speed.

Top 10 Performing Countries that promote digital accessibility rights for persons with disabilities.			
1. Qalat	6. France		
2. Australia 3. Israel 4. Italy	7. (reland B. Brazil 9. United States of America		
		5. South Africa	10 Maite















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Ali Alamri @a alamri85 Aug 24 من معن المعتمر المعني المعني الحدث الافتراضي في نفاذ الرقسي GREAT Talks 2020. والذي سينطلق عداء ويستمر علي مدى يومين.-فرصة كبيرة للمهتمين بإمكانية الوصول.





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Mada's strategy 2019-2021 was a great success in achieving universal access to information and communication technology under the slogan "Digital Access for All". It has resulted in remarkable achievements that made Qatar a regional and global center in digital access for persons with disabilities and the elderly. There were many examples of the resounding success of this strategy, the most prominent of which was at the national level, as the Mada Center won the Qatar Digital Government Excellence Award 2020 from the Ministry of Transport and Communications. At the global level, the center was chosen to win the UNESCO/Emir Jaber al Ahmad al Jaber al Sabah Prize for Digital Empowerment of Persons with Disabilities 2020-2021 in recognition of its distinguished role in promoting the digital inclusion of persons with disabilities and its efforts to provide digital access solutions and accessible platforms in response to Covid-19. Mada's efforts played a great role in Qatar's achievement of ranking first worldwide on the **Digital Accessibility Rights Evaluation Index 2020** (DARE Index 2020) released by the Global Initiative for Inclusive Information and Communication Technologies (G3ict). This achievement proves the effectiveness of the Mada 2019-2021 strategy and its successful implementation and reflects the great commitment of the State of Qatar towards the rights of persons with disabilities in digital access to information and communication technology.







جوائزقطر للتميز الرقمي فــي القطـاع الحكـومــي QATAR DIGITAL GOVERNMENT EXCELLENCE AWARDS

أفضل بوابة متخصصة

Best Specialized Portal

mada digital access for all نفاذ رقمي للجميع

> برنامج مدی للابتکار Mada Innovation Program



UNESCO/Emir Jaber al Ahmad al Jaber al Sabah Prize for

Digital Empowerment of Persons with Disabilities for 2020 - 2021



United Nations Educational, Scientific and Cultural Organization

Mada Center wins the

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K... • 14 Oct 2020 @K... • 14 Oct الد بن خليفة آل ثاني ... فخورون يتصدر قطر المرتبة الأولى على مؤشر DARE Index العالمي والخاص بتمكين أفراد المجتمع من الوصول للمعلومات الرقمية بمن فيهم ذوو الإعاقة. هذا إنجاز مهم ويمثل أحد مظاهر تطور قطاع خدمات الاتصالات والمعلومات في بلدنا والذي حقق قفزات مهمة على مستوى المنطقة والعالم.

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Qatar Ranked 1st Worldwide in The Digital **Accessibility Rights Evaluation Index 2020**

Qatar has ranked first worldwide In the Digital Accessibility Rights Evaluation Index 2020 (DARE Index 2020) released by the **Global Initiative for Inclusive Information and Communication** Technologies (G3ict). DARE Index is a benchmarking tool that traces the country's progress in making ICT accessible for all, in compliance with the Convention on the Rights of Persons with Disabilities (CRPD) which was ratified by the State of

Qatar had the highest score in the various evaluation categories, getting 89 points out of a hundred. This achievement reflects the significant progress made by the country in the area of digital accessibility and the efforts of the government and Mada Center in enabling persons with disabilities and the elderly through various local programs and policy initiatives related