2021

Impact Report

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Impact Report

2021

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Digital Access for All

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We are proud of Qatar's ranking first worldwide in the Digital Accessibility Rights Evaluation Index 2020 (DARE Index 2020) for enabling members of society to access digital information, including persons with disabilities. This is an important achievement that is one of the indicators of the development of the communications and information services sector in our country, which has made significant leaps regionally and internationally.

His Excellency Sheikh Khalid bin Khalifa Al Thani,
Prime Minister and Minister of Interior

His Excellency Sheikh Khalid bin Khalifa Al Thani [@KBKALThani]. (2020, October 14). Twitter.https://twitter.com/KBKAlThani/status/1316390292707307520?s=20&t=EuVf4jurWDP2j_r_wyHmAw

Digital Access for All

Maha Al-Mansouri
CEO - Mada Center

Under this slogan, we at Mada succeeded in completing the journey of our achievements in the 2019-2021 strategy, which focused on promoting digital inclusion and building an inclusive technological society for persons with disabilities and the elderly according to article 9 of the United Nations Convention on the Rights of Persons with Disabilities on accessibility and in line with the sustainable development goals 4, 10, and 11. Today, and in the process of achieving the Qatar National Vision 2030, we have become the Center of Excellence for digital access in Arabic in the world.

Mada Center made great progress at all levels to reduce the digital gap that may hinder the access of persons with disabilities and the elderly to ICT in the State of Qatar and the Arab world. We have made remarkable progress in improving the quality of services provided to them, enabling them to live independently and ensuring their effective participation in the development process in all fields.

Based on our role as a strategic enabler in the field of ICT access, we worked over the last three years to build more effective strategic relationships and partnerships locally and internationally. Consequently, we successfully implemented specialized projects through our partnership with the education sector to ensure inclusive digital education, and with the culture and community sector to be more inclusive through ICT. This was achieved by developing and providing a wide range of services and activities aimed at building the capabilities of strategic partners, developing and adopting digital platforms in accordance with digital access international standards, providing consultations and raising awareness, in addition to increasing the number of assistive technology solutions in the Arabic language through the Mada Innovation Program. As a result of these efforts, the adoption rate of ICT accessibility in the State of Qatar increased from 41% to 74%, with an increase of 78%.

We are proud to share with you our most important accomplishments across all levels through our 2019-2021 strategy to enable PWDs and the elderly to live independently and fully participate in all fields and to ensure their access to ICT.

At the global level, we succeeded in making Qatar a leader in the field of ICT access. **Qatar ranked first internationally** and regionally among more than 137 countries **in the second edition of the Digital Accessibility Rights Evaluation Index (DARE Index) 2020,** by The Global Initiative for Inclusive ICTs (G3ict), one of the United Nations initiatives. This rank is a clear indication of the progress we have made in implementing digital access rights across key sectors in line with the United Nations Convention on the Rights of Persons with Disabilities (CRPD) ratified by the State of Qatar in 2008.

At the regional and international levels, in 2020, we won the UNESCO-Prince Jaber Al-Ahmad Al-Jaber Al-Sabah Prize for the Digital Empowerment of Persons with Disabilities for our role in promoting digital inclusion, and we succeeded in providing digital access solutions and accessible platforms to overcome COVID-19. We also received the UNESCO Open Educational Resources (OER) Implementation Award following our active participation in the OE Global 2021 Education Conference.

At the local level, we received the Digital Excellence Award in the Governmental Sector 2020 as a result of our pioneering and innovative efforts in promoting innovation in the field of ICT access through the Mada Innovation Program.

I am pleased to say that we, at Mada, have succeeded in overcoming all the obstacles that the COVID-19 pandemic has placed in the way of the successful implementation of the 2019-2021 strategy. Receiving these awards is compelling evidence of the great success achieved by Mada Center and the great efforts we have made to implement this strategy in the education sector, culture and community sector, innovation, research and raising awareness in the field of ICT access to enable persons with disabilities and the elderly.

Qatar has ranked 1st
worldwide in the Digital Accessibility Rights Evaluation Index 2020

Education Sector

74%

is the achieved adoption rate of ICT accessibility in the education sector

We have succeeded in enabling the education sector to ensure inclusive digital education and continuous learning through ICT by providing many services and implementing various activities as part of 6 strategic partnerships with the Ministry of Education and Higher Education, Qatar Foundation, Carnegie Mellon University - Qatar, Hamad Bin Khalifa University, Community College, and Qatar Center for Career Development. Our work through these partnerships has resulted in a 100% increase in the adoption rate of ICT accessibility in the education sector from 37% to 74%. The services which we provided to the education sector included capacity building, training, consulting, developing specialized academic courses, assistive technology services, and access to educational resources and websites.

300 teachers trained in the education sector

As part of our continuous endeavors to raise awareness of the importance of inclusive education and digital knowledge, we worked hard to train highly qualified national staff to push the digital transformation process forward and ensure an inclusive educational process that includes the student, the teacher, and the educational environment. Mada has successfully managed to build the capacities of 140 trainees in the education sector within the Mada tailored training program, where we provided 60 specialized training hours in the field of digital access, inclusive digital education, and assistive technology.

We have also succeeded in building the capacities of 62 national educational staff within the "Tamheen" initiative of the Ministry of Education and Higher Education after being trained by Mada. We offered these trainees 154 training hours to keep pace with the requirements of the 4th Industrial Revolution so that they are able today to apply the skills of inclusive digital education in the school environment.

> **Mada Center had a great role in refining my skills, as I received training hours in giving lessons through live broadcasting and how to use accessible technology to suit the needs of all students. Online lessons were also available during Corona pandemic, and I benefited greatly from Mada in the field of innovation in education, as the Center supported us to be creative teachers capable of keeping pace with digital development.**
>
> **Sarah Al-Adham**
> Teacher from the Beginner Teacher Program (Tamheen)

The creative teachers training program that we held in Mada resulted in building the capacities of 100 new teachers, as we offered these teachers 6 specialized training hours in the field of digital access, inclusive digital education, and assistive technology.

Today, 40 trainers and female trainees from the Ministry of Education use the Surface Pro devices that we provided and installed the necessary training programs on. That is in addition to our success in improving the effective communication process for trainees by creating a digital platform through Microsoft Teams (Creative Teachers).

3 academic courses in digital access were offered for the first time in universities

10 certified career facilitators

80.6% is the digital access score of the education sector websites

We continued our efforts in building the capabilities of university students andtraining specialists in the field of digital access by designing, developing and approving 3 academic courses in digital access that were offered for the first time in state universities in collaboration with (Community College, Hamad Bin Khalifa University, Carnegie Mellon University-Qatar).

As for the Mada Accredited Training Programs, we trained and certified 15 additional AT super users, which resulted in an increase in the number of super users in the State of Qatar to 99 certified specialists from Mada who are qualified to provide assistive technology assessment services for people with disabilities.

We also succeeded in training and accrediting 10 career counseling specialists and graduating them from the "Facilitating Career Development" training program held by Mada Center in collaboration with Qatar Career development Center to be the first accredited training program in the State of Qatar in the field of career counseling to enable persons with disabilities to choose their career path and access jobs successfully.

In addition, we focused on providing ICT access services to our strategic partners. These services resulted in raising the digital access score of the partners' websites in the education sector to 80.6%, as we provided ICT access services (assessment, auditing, consulting, and reviewing) for 8 different websites.

66 consulting hours on best practices and international standards

Our efforts in this field culminated in having 3 websites and 1 mobile application in the education sector pass the digital access evaluation as a result of the application of the international standards for digital access WCAG 2.1, and thus they obtained the Mada Digital Access Accreditation.

> **QCDC is proud to have obtained digital accessibility accreditation from Mada, making its platform accessible to all community members, including people with special needs and the elderly.**
>
> **Qatar Career Development Center**
> Annual Report 2020

At the same time, our consultancy services for educational institutions (strategic partners) achieved great success, as our experts held 66 consulting sessions on best practices and international standards in academic curricula on digital access, inclusive digital education, and the use of assistive technology in education.

In the field of policy development, we were able to design a policy to support comprehensive digital education for Qatar Foundation schools in accordance with international best practices, as Mada experts provided 9 consultative sessions in this field to include digital access in the policies, regulations, and programs of pre-university education at Qatar Foundation.

The specialists of the Qatar Center for Career Development also benefited remarkably from the best practice guides that we have prepared, foremost of which is the "Best Practices Guide for Transition from Advanced Supported Education" and the "Education for All" best practices guide (inclusive technical and vocational education and training for persons with disabilities).

On the other hand, we were able to promote digital access to content and library resources at the Community College after applying the recommendations contained in the guide to international best practices in accessible libraries prepared by the Center.

16 AT Stations

assistive technology stations

As we are the pioneers in providing assistive technology services, we have achieved great success in enabling the education and culture sectors through assistive technology devices and solutions. Today, Qatar Foundation and Community College along with many schools and universities benefit from assistive technology services after our success in establishing 10 assistive technology stations and providing them with 902 devices and technological solutions within the assistive technology kits we distributed to ensure access to education. We have provided these technological solutions on a large scale to teachers and students with disabilities, bringing the number of Mada Assistive Technology stations across Qatar to 16.

We are proud of our strategic partnership and continuous cooperation with Mada Center in the field of digital access to include the citizens with special needs in the educational process and empower them academically through the various college policies that equally guarantee the right to education, appropriate assistive services, and general educational modifications for all students.

Dr. Muhammad Al-Nuaimi
President of the Community College
during the inauguration of the Mada assistive technology station at the Community College

In addition, our efforts in the field of improving and developing the process of supporting inclusive digital education and the significant integration of information and communication technology in the education sector resulted in the branding and equipping of 3 training rooms at the Training and Educational Development Center of the Ministry of Education and providing them with 30 technological solutions and assistive technology devices.

Mada provided me with devices to learn remotely - I could feel that I was learning equally with my classmates.

Hamad Al-Meqbali
Student with a mobility disability

The emergency response to the COVID-19 pandemic in the education sector

In response to the Covid 19 pandemic and to reduce the impact of the pandemic on students with disabilities, we succeeded in developing and launching an accessible electronic portal in March 2020 at the beginning of the pandemic, which contributed to supporting distance education and enabling students with disabilities. We provide visitors to this portal with more than 62 open educational resources that make it easier for teachers and students to access all information in one place. The number of the portal's visitors to date is 11,325.

mada.org.qa/services/inclusive-platforms/digital-inclusive-education/

In terms of preventive awareness of Covid 19, we were able to raise awareness among persons with learning difficulties and parents of persons with autism after we designed and published the preventive guide against the corona virus using Tawasol symbols in which 22 different symbols were used. We have provided this guide to schools and centers for the education and rehabilitation of persons with learning difficulties and parents of people with autism.

We were also able to increase the rate of inclusion of students with disabilities in the distance learning process, after we assessed the digital accessibility of the Microsoft Teams platform, prepared a report to review the digital access features of the platform, and shared this report with the Ministry of Education and Higher Education. In this report, we provided specific recommendations to support these students' use of the features built into this platform.

Advocacy of digital accessibility policies for persons with disability

Our efforts were not limited to providing services to partners in the education sector, as we also paid great attention to raising awareness about ICT accessibility through our active participation in many educational events and conferences in the period from 2019 to 2021. We participated in the "Virtual Education Forum" 2021 held by the Ministry of Education and Higher Education, and the "Teaching and Learning Forum 2020" held by the QF's Education Development Institute. Through our participation as an ICT access partner in the "Doha International Conference on Disability and Development" in 2019 held under the patronage of Her Highness Sheikha Moza bint Nasser, the "Education Conference 2019" held by the Ministry of Education and Higher Education, and the activities of the Summer Camp 2019. Our participations included presenting best practices in the field of inclusive digital education and digital access, in addition to holding several training workshops to build the capacities of teachers and providing inclusive customer services and AT. We also distributed more than 1148 awareness bags in many educational institutions.

Doha Declaration on the Implementation of the 2030 Agenda for Sustainable Development

13 We confirm our support for national and regional plans aimed at meeting the development needs of young people and groups that have been marginalized through force of circumstance, including children, the elderly and persons with disabilities.

14 We call for the employment of scientific and technological systems to identify methods and build national capacity to implement the 2030 Agenda, and for the development of a regional action plan for the achievement of aspects related to science, technology and innovation in the Arab region.

Culture & Community Sector

74%

is the achieved adoption rate of ICT accessibility in the culture and community Sector

On the other hand, our efforts in the culture and community sector have focused on creating an equal base for persons with disabilities and the elderly to live independently and participate in cultural life through accessible ICT. In this context, Mada succeeded in establishing strategic partnerships with 8 vital entities in the country, namely the Ministry of Transport and Communications, the Supreme Committee for Delivery and Legacy, Qatar Tourism, the Communications Regulatory Authority, Qatar National Library, Qatar Rail, Qatar Central Bank. and Qatar Museums Authority to colloabrate in four main areas: transportation, shopping experiences & customer service, culture, entertainment & sports, and accessible digital content, which rasied the adoption rate of ICT accessibility in the culture and community sector from 44% to 74%, with an improvement rate of 66%.

7 AT Stations

assistive technology stations

We were able to successfully build the capacities of 168 trainees in the culture sector within the customized training program that we held to build the capacities of partners, as we provided 139 specialized training hours in the field of digital access, inclusive culture, and assistive technology.

On the other hand, the strategic partners in the culture sector have benefited from the consulting service that we provided to them, as our experts held 51 consulting sessions directed to each partner separately in the culture sector in the field of best practices and international standards in ICT accessibility and inclusive culture. In addition to enabling the culture sector through assistive technology devices and solutions after our success in establishing 7 assistive technology stations with the aim of enhancing the accessibility of electronic, commercial, health and cultural services.

In the field of digital content, we succeeded in raising the digital accessibility score of our partners' websites in the culture and community sector to 87.2%, where 10 websites benefited from the center's ICT access services (evaluation, auditing, consulting, and reviewing). These services, provided as part of our strategic partnerships, have led 8 websites and 2 mobile applications to pass the digital access accreditation evaluation as a result of the implementation of WCAG 2.1 standards for digital access, and consequently obtain Mada's digital access accreditation.

87.2%

is the digital access score of websites in the culture and community Sector

In the opening session, the president of the Shura Council praised the application of digital access standards on the Shura Council's website, as he said:

> **"We are aware of the size of the aspirations that citizens attach to the work of the council, and our goal was and still is to increase communication with citizens, whether through the council's official website, which applies the highest international standards for digital access and ease of access to information for persons with disabilities."**
>
> **His Excellency, Mr. Ahmed bin Abdullah Al Mahmoud**
> Former President of the Shura Council

We have also been able to increase the number of important open sources that web developers use to develop accessible websites and applications by adding and publishing one of the main sources in this field, the UI Web Component library.

We have made remarkable progress in improving the accessibility of shopping experiences and customer service, as there are now 11 accessible ATMs that allow persons with disabilities to use banking services independently. This achievement was the result of our efforts to conduct a comprehensive evaluation process for 78 ATMs (the machines which were previously classified as accessible by PWDs) in collaboration with Qatar Central Bank.

11

Accessible ATMs

> **"My experience in using an accessible ATM in one of the malls was excellent because it made a significant change for me in dealing with ATMs. I no longer need to ask someone else to carry out my banking operations such as withdrawals, deposits or checking my account details. I thank Mada Center for the effective role they play and I hope this experience is universalized across all banks in the State of Qatar."**
>
> **Rashid Al-Marri**
> Person with visual impairment

In a distinguished achievement that facilitated the independent identification of the new Qatari banknotes by persons with visual disabilities, the blind, and the elderly, we provided the necessary support to develop the Qatari Money Reader application and release its updated version within the framework of the Mada Innovation Program.

We have also succeeded in providing an independent shopping experience for PWDs and the elderly in shopping exhibitions through the establishment of inclusive customer service stations and equpping it with assistive technology solutions under the supervision of a specialized team that we trained to provide the necessary technical support for PWDs and the elderly in the exhibitions "Heya Arabian Fashion Exhibition 2020 and 2021 alongside the Doha Jewelry & Watches Exhibition 2020 in cooperation with the Qatar Tourism.

Moreover, in the tourism sector, we were able to assess the visitors' accessible experience in 3 hotels, 2 restaurants, and 1 commercial mall in order to enhance digital access in this sector. We shared the recommendations report with Qatar Tourism to benefit from it in preparing policies and regulations supporting inclusive tourism.

> **I am one of the persons who use the Money Reader application in their daily activities, and it is very beneficial for the elderly and the visually impaired.**

Abdulaziz Al-Marri
Person with visual impairment

Inclusive transportation

Our strategy did not overlook the importance of the transportation sector, as our consulting sessions and capacity-building programs in the field of ICT access for Qatar Rail contributed to improving the implementation of ICT accessibility standards and provisions (including registration, communication, and complaints services). In addition, the level of digital accessibility in the Doha Metro has immproved after we assessed visitors accessible experience in two metro stations (Msheireb and Exhibition Center) and shared the recommendations report with Qatar Rail in order to benefit from it in providing accessible services at all stations.

A more inclusive museum through 5 accessible technology innovations

Persons with disabilities and the elderly can now take an accessible tour of the Arab Museum of Modern Art, a (more inclusive museum), as a result of our collaboration with Qatar Museums in the implementation of 5 technological innovations in this museum (virtual museum tours, accessible wayfinding system, 3D masterpieces, and the QR Codes to describe some of the artifacts in the museum in sign language, navigation robot).

> **I participated in evaluating the wayfinding solution in the museum with Mada Center. It was a very good experience, as the internal navigation system that was chosen was effective and would enable me to move around museums independently. This is a qualitative leap in the culture sector.**

Faisal Al Koohaji
Chairman of the Qatar Social and Cultural Center for the Blind

Library services made available to persons with disabilities

In order to ensure that persons with disabilities and the elderly enjoy cultural activities and events and benefit from library services equally and independently, we have succeeded in providing assistive technology services by establishing and launching an inclusive customer service station at Qatar National Library and providing it with a group of devices and solutions to support library visitors with disabilities and the elderly and enable them to obtain information and resources in an accessible manner. Qatar National Library also benefited from our guide on best practices in accessible libraries by providing assistive technology and accessible solutions to library visitors with disabilities and the elderly.

On the other hand, in collaboration with the Supreme Committee for Delivery and Legacy we have developed accessible versions of the schedule of the World Cup 2022 and the Arab Cup 2021 matches and coordinated with the Supreme Committee to publish them on their website, where these versions became available to everyone, especially to fans with disabilities.

We have also succeeded in significantly promoting digital access level in the field of electronic games and entertainment activities, as the guides of international best practices that we have prepared played a major role in this. The guides include; "Best Practices Guide in Access to Entertainment through Assistive Technology" and "Best Practices Guide in Accessible Electronic Games", which were of great benefit to professionals, policymakers, online game developers, and innovators.

Moreover, in collaboration with the Communication Regularity Authority, we launched the Accessible Telecommunications International Best Practices report, which was developed to be a source of information for service providers and competent entities in this field.

Qatar National Library – Announced the availability and accessibility of all its resources to everyone so that they may effectively reach their full potential and achieve their goals, through an introductory session that discussed assistive technology solutions, services, and resources available to persons with disabilities."

Al Sharq Newspapper

Built the capabilities of 2014 trainees through the Open Training Program

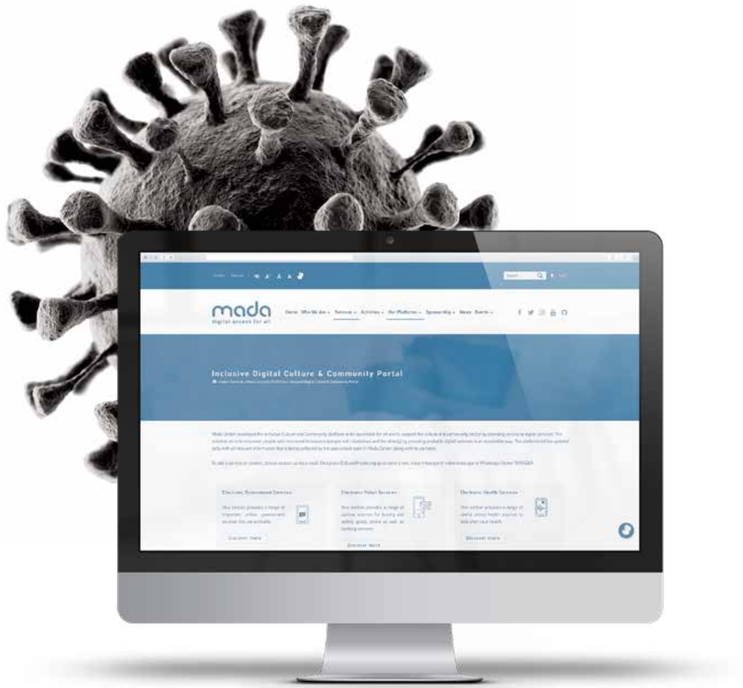
On the other hand, we succeeded through the Open Training Program in building the capacities of 2014 trainees from various governmental and private entities by providing 485 training hours. The training workshops aimed to raise the quality of services provided for PWDs and the elderly, where the training topics covered three essential areas; ICT accessibility, policies and ICT accessibility international best practices, and assistive technology.

The emergency response to the COVID-19 pandemic in the culture and community sector

We succeeded in developing and publishing a special, accessible portal to support culture and community in response to the COVID-19 pandemic and to reduce the impact of the pandemic on PWDs and the elderly and their participation in cultural life. This portal contains the necessary information, resources, and electronic services in the culture and community sector. It has succeeded in enabling the access of all people, including persons with disabilities and the elderly, to electronic resources and services in one place. The number of resources available on the platform is 65, and the number of visits to the platform is 14108.

To ensure the continued provision of services and that our target groups can still communicate with our experts and specialists during the Covid-19 pandemic, we activated many electronic services remotely through the center's website, the Mada Innovation Program website, and the Mada Assistive Technology portal.

mada.org.qa/services/inclusive-platforms/digital-inclusive-culture-portal/



Innovation

47 technology solutions were supported by MADA INNOVATION PROGRAM

As the world's center of excellence in digital access in arabic, we have always attached great importance to investing in innovation, as we worked according to 2019-2021 strategy to develop innovative technological solutions in Arabic for the Arab world and increase the number of freely available resources for developers, innovators, start-ups, and entrepreneurs in the field of ICT. We managed to facilitate the development of new assistive technology solutions for PWDs and the elderly in arabic and develop an innovation ecosystem in this field.

With the aim of increasing the number of digital access and assistive technology solutions, and based on case studies with PWDs and the elderly to identify innovations that use cutting edge technologies, we designed the Mada Innovation Program as an integrated ecosystem in accordance with international best practices. The ecosystem consists of seven basic foundations that stem from the needs of PWDs and the elderly.

By working with local and international partners and providing effective support to innovators and entrepreneurs, we have been able to develop solutions that support the Arabic language.

Our successful efforts in supporting innovative technological solutions formed the successful basis for building an innovation ecosystem. This system supports access to ICT, research, and innovation by evaluating the technology market in the education and culture sectors and providing a supportive environment for innovators that includes funding opportunities, technical advice, modern laboratories, consulting, and marketing, in a way that contributes to the development of their emerging access solutions to suit the needs of this market. The Mada innovation ecosystem consists of multiple components that include innovation and entrepreneurship, access to community and markets, policy and best practices, collaborations, innovation lab / Mada lab, research data, and scientific evidence.

Over the course of three years, through the first component of the Mada Innovation ecosystem "financing and support mechanisms", we have successfully invested in 20 specialized accessible technology solutions to become available in the Qatari and Arab market through the Mada Innovation Program tracks that include support for entrepreneurs, grants & localization, competitions and endorsement with the aim to meet the needs of PWDs and the elderly and support their independence. As a result, 47 technological solutions are now in our innovation portfolio supported by the Mada Innovation Program.

Entrepreneurs Support

The entrepreneurs support track was a great success in the 2019-2021 strategy, as we were able to develop and support 4 emerging innovations in the field of digital access in the Arabic language by providing training and expertise advise necessary for entrepreneurs and emerging companies, through establishing distinguished partnerships with business incubators that constitute an important platform for launching the ideas of entrepreneurs and innovators, to ensure the maximum benefit from these innovations for PWDs and the elderly.

Localization & Grants

On the other hand, our efforts in the grants & localization track have resulted in the localization of 3 devices and technological solutions, in addition to the translation of Web Content Accessibility Guidelines WCAG 2.1 to improve digital access for PWDs in the Arabic language.

9 innovators and developers benefited from receiving prizes to support their innovations within the competition track of the Mada Innovation Program

Competitions

As for the competitions track, 9 innovators and developers of ICT access solutions benefited from cash prizes to support their innovations across 8 competitions that we successfully organized on a local, regional and international level. Our competitions were well received by more than 2,000 participants.

> **The Mada ICT Access Award is a great recognition to us, and we believe it will be key to our expansion in the MENA region.**
>
> **Rene Espinosa**
> Founder and CEO, Lazarillo, Chile

Endorsement Program

In addition, as for the Mada endorsement track, it has successfully contributed to enabling 5 companies to open new markets in Qatar and the world and to promote their technological innovations that serve PWDs and the elderly.

Establishment of the Mada Innovation Club for innovators with disabilities

Our efforts to promote the "access to community and markets" track culminated in the establishment of the Mada Innovation Club, which aims to consult, support and encourage innovators with disabilities to develop their skills in programming, and develop assistive technology solutions to contribute to improving the quality of life for PWDs and the elderly.

> **My participation in the assessment of accessible games within the Mada Innovation Program increased my passion for innovation as I began working on developing an application called "Protect My Health" that would benefit those who spend a long time working on computers.**
>
> **Abdullah Al-Kuwari**
> University student with a mobility disability

70 members in the first Arab ICT Access Experts Group

For the first time in the Arab world, we succeeded in establishing and activating the "Arab ICT Access Experts Group" (AIAEG), a group of experts whose aim was to unify efforts in the field of ICT access and includes 70 members. This group comes as an initiative by Mada Center to enhance digital access in the Arabic language, provide consulting services, and develop impactful researches.

aiaeg.mada.org.qa

The first inclusive Fab Lab

As for the "Innovation Lab" component, which constitutes one of the most important components of the innovation ecosystem, we were able to attract 13 companies from all over the world to promote investment in the field of ICT access and to present the latest ICT solutions and assistive technology in Mada Lab, which is the first hub in the region that Allows local and international ICT providers to showcase the latest assistive technology solutions.

In a distinguished and unique achievement, and within Mada Lab, we inaugurated the first accessible manufacturing laboratory around the world, "Mada Fab Lab" is the first accessible lab accredited by the International Fab Lab Foundation, which contributes to achieving sustainable economic and social development, whereby PWDs, inventors, entrepreneurs, and students can turn their ideas into real innovations.

Research

Unified Arabic Braille

As part of our strategy, we have given great importance to ICT access research. Consequently, we have succeeded in completing several research and technology projects in accordance with the latest trends and international best practices that are consistent with the 2030 Sustainable Development Goals and support the achievement of the goals of the National Development Strategy. According to PWDs, these projects were greatly impactful, especially the Unified Arabic Braille portal, which we developed to be the main resource for persons with visual disabilities, parents, and academics in Qatar and the Arab world to learn Braille, access digital resources, and develop writing and reading skills. This portal contributed to reducing the Braille illiteracy rate among the blind and allowed them to learn, have intellectual freedom, and have equal opportunities.

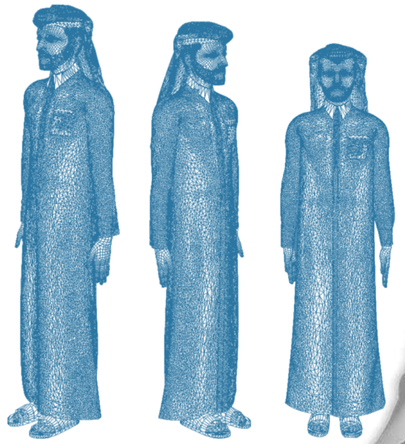
In a remarkable achievement, Mada was able to develop an eight-dot braille table for the first time in the Arab world, which was approved by providers of screen reader systems and programs used in computers and smartphones to enable the blind to learn mathematics and computer science easily.

The first Qatari virtual 3D interpreter for Qatari sign language

We have also succeeded in creating the first integrated technological environment for automated processing of Qatari and Arabic sign language through the " Jumla" Sign Language Research Project. This project included the design of the first Arabic sign language coding system, in addition to the design and development of the first virtual Qatari sign language interpreter "Bu Hamad" with an artificial intelligence rate of 35%, which is considered great progress in the development of the ecosystem that accompanies the development of assistive technology solutions for the deaf. This project also provided multiple resources for researchers, developers of software and mobile applications, in addition to experts, teachers, students, and sign language interpreters in the State of Qatar and the Arab world to further understand and learn sign language for the deaf.

بوحمد
BuHamad by Mada

Jumla Sign Language Research Project



Mada's Glossary is the first glossary of its kind, which includes terms related to ICT accessibility and AT in the Arabic language.

On the other hand, Mada's glossary of Digital Access and Assistive Technology Terms has become a specialized reference for PWDs, experts, innovators, researchers, teachers, therapists, and stakeholders in both Arabic and English in the field of ICT accessibility.

> **"The Accessibility and Assistive Technology Glossary will serve as an important tool for its users. It will not only contribute to speeding up the translation process for professionals within the field, but will also ensure a consistent style, voice, and establish a 'common language' for use in spoken and written content related to accessible and assistive technology."**
>
> **Nada Al Mahmeed**
> Director of the Translation and Training Center,
> Institute of Translation Studies, College of Humanities and Social Sciences.

1300 symbols in the dictionary of Tawasol symbols are available for free

As part of our distinguished research efforts, we at Mada were able to develop more than 1,300 Tawasol symbols for the benefit of people who face difficulties in communicating, reading, or writing. Through these symbols, they can quickly communicate with their families and friends and have access to information. The symbols were designed in line with the Arab and Qatari cultures, which contributed to their better integration into society. Our launch of the "Tawasol Symbols Portal" provided a key resource for innovators and developers for designing relevant solutions and applications. The portal is licensed in accordance with the International Creative Commons License, which increased the number of technological products and solutions in the Qatari and Arab markets.

Our efforts in the field of research for the benefit of persons with disabilities resulted in having research centers at Hamad Bin Khalifa University, in cooperation with Mada, obtain research funding grants to develop research related to autism and the elderly.

> **Collaboration plays an essential role in achieving impactful and pioneering research and the College of Science and Engineering is delighted to be partnering with the Mada Center on several projects. We believe this long-term relationship will play a significant role in supporting Qatari and Arab families by creating inclusiveness through innovation in technology.**
>
> **Dr. Dina Al-Thani**
> Assistant Professor, College of Science and Engineering, Hamad Bin Khalifa University

Access to websites for persons with disabilities is now more possible

Research and studies conducted by our experts following international best practices resulted in the development of the Mada tool for monitoring and measuring digital access, which is the first of its kind in the region that monitors and measures the percentage of digital access based on accessibility evaluation results and usability with high accuracy in accordance with WCAG 2.1 standards. Through this tool, the digital access to 62 websites on the digital government list is measured, and monitored.

monitor.mada.org.qa

أداة مدى للرصد و القياس
Mada Web Accessibility Monitor

As for publications, "Nafath", a specialized periodical published by Mada that deals with the latest trends and innovations in the field of ICT access, has become the main source of information for specialists in the field of digital access. The periodical discusses the pioneering work that is being done in the field of ICT access and assistive technology in Qatar, the Arab region, and the world. We have published 18 issues of the "Nafath" periodical.

Mada's website was also a rich source of knowledge that made it possible for researchers, interested parties, specialists, and stakeholders to benefit from our publications, guides to international best practices, and various researches in the field of ICT access.

nafath.mada.org.qa

Awareness Platforms

More than 500,000 visits to Mada Center's website, the center of knowledge and expertise in the field of ICT access in arabic

As part of our efforts to achieve all the objectives of the 2019-2021 strategy, we have succeeded in developing accessible online portals to enhance access to information by persons with disabilities and the elderly in Qatar. Our awareness campaigns have also resulted in a high level of awareness of partners and target groups of the impact of ICT and accessibility, encouraging them to take qualitative measures to take advantage of the great role of ICT in facilitating the digital inclusion of persons with disabilities and the elderly, which leads to their economic and social empowerment.

Our website ranked first in the search engines as a specialized source in the field of ICT access in Arabic with more than 500,000 visits from all over the world. On the other hand, and through an initiative that is the first of its kind, we have developed 7 accessible specialized portals. These portals have been promoted at the regional and international levels through our social media channels. The portals aim to serve professionals and those interested in ICT access, as well as PWDs and the elderly in Qatar and the Arab world. We have succeeded through these portals to provide the public with applications, resources, information, and services.

mada.org.qa

MADA AT PORTAL

Mada Assistive Technology Portal is the first portal of its kind in the Arab world that allows PWDs, their families and specialists to view and learn about the latest assistive technology solutions in Arabic and English. The average number of the portal visitors is 4000 per month.

madaportal.org

MADA DIGITAL ACCESSIBILITY PORTAL

Mada Digital Accessibility Portal is the first repository that provides a wide range of information and resources about ICT accessibility in Arabic and English, directed to web developers and content creators in various sectors to ensure the design of accessible digital platforms for all, especially persons with disabilities and the elderly. The average number of the portal visitors is 3,000 per month.

ictaccess.mada.org.qa

MADA INNOVATION PROGRAM

Mada Innovation Program website provides the link between innovators, entrepreneurs, stakeholders, the specialists in the field of ICT accessibility and the services and resources of the Mada Innovation Program, aiming to encourage the development of technological solutions for PWDs, and thus increase the availability of these solutions in Arabic in the region through a variety of tracks including grants, localization projects, competitions, and endorsement. The average number of the portal visitors is 3,500 per month.

mip.mada.org.qa

قـامـوس مـدى
Mada Glossary

Mada Accessibility and AT Glossary is the first dictionary of its kind in the Arabic language that deals with ICT accessibility terms technology and assistive, as it is considered a reliable and vital source of concepts and terms that serve the target groups, innovators, researchers, and others. The average number of the portal visitors is 400 per month.

glossary.mada.org.qa

AIAEG
by Mada

The Arab ICT Accessibility Expert Group Portal "AIAEG" was established to unify Arab efforts in the field of digital access and establish the first specialized forum in the Arab world.

aiaeg.mada.org.qa

رموز تواصل
Tawasol Symbols
by Mada

Tawasol Symbols Portal is the main resource for persons with communication and language difficulties that provides a free Arabic communication symbols dictionary that contains a set of culturally, linguistically, and environmentally appropriate symbols that were developed as a service for users of alternative and augmentative communication in Qatar and the Arab countries. The average number of the portal visitors is 550 per month.

tawasol.mada.org.qa

بوّابة برايل العربي الموحّد
Unified Arabic Braille Portal
by Mada

The Unified Arabic Braille Portal constitutes an important and unique resource in the Arab world for specialists, teachers, the blind, and the deaf-blind. This portal contains the first eight-dots Arabic computer braille table in addition to the Arabic Braille table for symbols of mathematics and various sciences.

braille.mada.org.qa

These efforts were credited with introducing the Arabic language to the 8-dot Arabic Braille. The idea of using the seventh and eighth dots to represent more symbols, shapes, and braille codes will result in many symbols being represented in one cell instead of two or more cells. On the other hand, many scientific and mathematical symbols were not represented in the old braille system, and now, with the developed 6-dot or the 8-dot computer braille system, it can be said that all mathematical, engineering, and computer symbols will be represented in the Arabic Braille table.

Badr Al-Adwani
Person with visual impairment - Kuwait

Raising and Building Awareness

On the other hand, awareness of the important role and distinguished position of Mada Center globally has increased significantly, as we have obtained 4 important international memberships; the World Wide Web Consortium (W3C), the International Telecommunication Union (ITU), the Global Initiative for Inclusive ICTs (G3ict) and the Assistive Technology Industry Association (ATIA).

In terms of awareness campaigns and international participation, our success in organizing 9 major awareness-raising campaigns on various social media platforms and our active participation in many conferences at the local, regional and international levels have led to an increase in public awareness of the importance of the role of ICT and accessibility in the lives of persons with disabilities and the elderly. The campaigns targeted more than 8 million PWDs, the elderly, parents, specialists, innovators, researchers, and others.

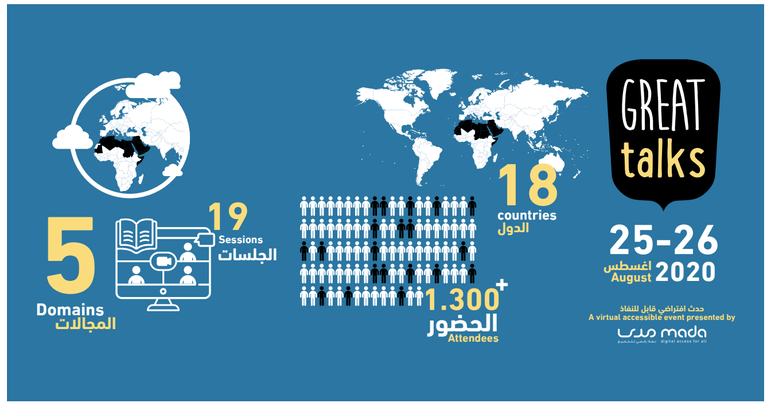
13 strategic partnerships signed during QITCOM 2019

Our activities resulted in raising awareness of the center's position as a strategic enabler in the region. The importance of our role was proven by our effective and distinguished participation as the ICT accessibility partner in the QITCOM 2019 conference and exhibition, whose opening was attended by His Highness Sheikh Tamim bin Hamad Al Thani, Emir of Qatar, and many High-level persons. Our pavilion at the exhibition received a great turnout, as it received many ministers and ambassadors who wished to learn about the center's latest digital access solutions and innovations in order to empower persons with disabilities and the elderly through ICT access in the fields of education, culture, and innovation. On the other hand, our participation in QITCOM 2019 culminated in signing several strategic partnership agreements with the most prominent local and international institutions to enhance Mada's role as the Center of Excellence in digital access on the local scene.

The first accessible virtual event in the region

The third edition of the "GREAT" conference successfully hosted 1,300 people from 18 countries who participated in over 19 sessions. Despite the challenges posed by COVID-19 and the current circumstances in the world, Mada organized the event virtually 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. 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.



Showcase and share Qatar's successful experience in digital accessibility

As the Center of Excellence in digital access in the Arabic language in the world, and given the importance of our continuous work to understand and meet the needs of PWDs, and provide consultations and the best international practices in the field of digital access policy-making, our participation in a number of the most prominent local, regional and international events and forums were so successful, which is an important indicator of the international recognition of the distinguished role and position that we have reached regionally and internationally in the field of ICT access. These participations raised awareness of the most important achievements of the State of Qatar in the field of ICT access and shed light on our efforts in Mada to support the autistic community and persons with disabilities during the COVID-19 pandemic.

We participated in the virtual event organized by the International Telecommunication Union in partnership with ESCWA within the framework of the Digital Inclusion Week in the Arab Region 2021 under the title "Digital Accessible Arab Region - Information and Communication Technologies for All", and in the virtual event "Digital Access Opportunities and Gaps: Indicator for Assessing Rights of Rights Digital Access 2020, Good Practices in 137 Member States of the Convention on the Rights of Persons with Disabilities, which was held by the Global Initiative for Inclusive Information and Communication Technology (G3ict) in partnership with the International Organization of Persons with Disabilities (DPI) on the sidelines of the thirteenth session of the States Parties to the Convention on the Rights of Persons with disabilities.

In cooperation with the ITU in 2020, we succeeded in organizing the Digital Inclusion Week event under the slogan "How digital accessibility has served persons with disabilities in times of crisis: leaving no one behind", in addition to providing important observations and recommendations during our participation in the consultative meeting organized by the United Nations Economic and Social Commission for Western Asia (ESCWA) on " National Policies and Technical Guidelines Templates for e-Accessibility in the Arab Region" 2020.

In 2019, our most prominent participations included The W3C Technical Plenary & Advisory Committee, the opening of the twelfth session of the Conference of States Parties (COSP) to the Convention on the Rights of Persons with Disabilities, presenting a distinguished working paper at the side event organized by the State of Qatar's mission to the United Nations in New York on the role of assistive technology in helping people with autism, and presenting 4 working papers at the 7th International Conference on ICT & Accessibility ICTA - 2019 under the auspices of the Arab League Educational, Cultural and Scientific Organization (ALECSO).

Thanks and Gratitude

At the conclusion of Mada's 2019-2021 strategy, which we are very proud of its impact and achievements, we are pleased to extend our thanks in particular to the persons with disabilities who contributed to enriching this strategy, as we were keen to include them in its implementation by approving all phases of its projects. We believe that we cannot achieve any progress without consulting with them and involving them in the process of decision-making, as we are committed to listening to their needs in order to best meet them.

We would also like to extend our sincere thanks and appreciation to our strategic partners, Ministry of Transport and Communications, Ministry of Education Higher Education, Qatar Central Bank, Qatar Museums Authority, Qatar Foundation, Qatar Tourism, Communications Regulatory Authority, Qatar Rail, Supreme Committee for Delivery and Legacy, Qatar National Library, Hamad Bin Khalifa University, Community College, Carnegie Mellon University - Qatar, Qatar Center for Career Development, Microsoft - Qatar, Kotra, Seedstars, The institute for Information technology – Taiwan and all sponsors for their cooperation that effectively contributed to our exceptional and distinguished success in implementing this strategy.

As we look towards the future, we are certain that Mada Center has helped significantly and successfully to overcome the consequences of the COVID-19 pandemic as the leading regional and international center in the field of ICT access in the Arabic language. The Center has a clear futuristic vision based on solid scientific foundations to keep pace with the best international standards and embody the advanced international rank of the State of Qatar in various fields.

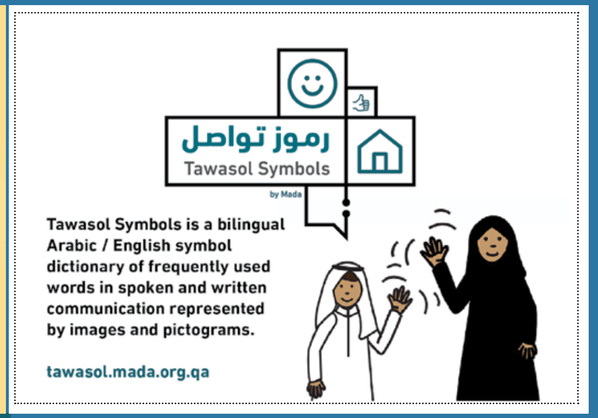
Maha Al-Mansouri
CEO - Mada Center

Innovation Partners

財團法人資訊工業策進會 INSTITUTE FOR INFORMATION INDUSTRY · kotra · seedstars · Microsoft

Strategic Partners

Join Us
Mada Innovation Club supports innovative ideas and empowers creators with disabilities.
نادي مدى للابتكار
Mada Innovation Club
mip.mada.org.qa


رموز تواصل
Tawasol Symbols
by Mada
Tawasol Symbols is a bilingual Arabic / English symbol dictionary of frequently used words in spoken and written communication represented by images and pictograms.
tawasol.mada.org.qa

Qatar has ranked 1st
worldwide in the Digital Accessibility Rights Evaluation Index 2020

I am the first Qatari 3D avatar for Qatari sign language interpretation
You can visit me in my virtual work site by visiting the Mada Center's website and clicking on the deaf version icon.
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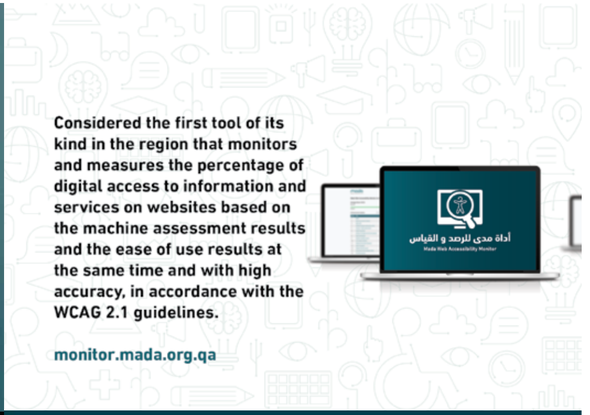

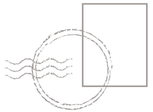

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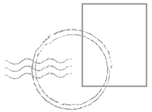

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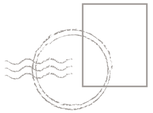

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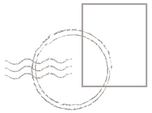

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