Guide to Accessible Banking

Contents

Introduction

The purpose of this supplemental report is to identify how the specified standards, guidelines, and best practices can be applied to support accessible banking within Qatar.

The focus of banking accessibility is to afford customers with disabilities the same level of service as other customers, that is, a means to perform functions and access information. This provides a framework for addressing legal compliance issues required under the United Nations Convention on the Rights of Persons with Disabilities (CRPD) and international standards.

This report will continue with a special focus on a framework for accessibility in banking services.

Functional Limitations to Consider When Using ICT

- Accessible electronic communications and technology must provide alternative modes of access to users with specific disabilities such as:

- Blindness (without vision) – by providing an alternative to visual access

- Limited vision – by providing magnification, a reduction of the field of vision required, or user control of contrast

- Without color perception – by providing a mode of operation or communication of information that is not dependent on color

- Deafness (without hearing) – by providing a mode of operation or comprehension of content that is not dependent on sound

- Limited hearing – by providing a mode of operation that reduces background noise, one that improves clarity, or one that allows user control of volume

- Without speech – by providing at least one mode of operation that does not require user speech

- With limited manipulation – providing that, where a manual mode of operation is used, at least one mode does not require fine motor control or operation of more than one control at the same time

- With limited reach and strength – providing that, where a manual mode of operation is used, at least one mode with limited reach and strength is operable

These functional limitations are not specific to singular disabilities, but, in varying degrees, often a part of the aging process, and therefore a consideration in serving all customers. When coupled with resistance to technology adoption, they become significant barriers to access to new and existing services for older customers.

Barriers to Banking Accessibility

As with overall ICT accessibility, banking, too, may have technical and organizational barriers.

The technical challenges may include inaccessible legacy products and platforms, the absence of accessible procurement policies and practices, and/or technology gaps due to the omission of accessibility criteria during the development of new ICT.

Organizational barriers may include:

- Lack of awareness about accessibility and the relevant technical standards;

- The view that accessibility is unnecessary or optional;

- Recognition of accessibility needs or requirements late in a program or project;

- A shortage of local experts with the necessary technical skills, tools, or training in accessibility practices;

- The absence of policies or objectives related to ICT accessibility; and,

- An absence of responsibility or accountability for accessibility in the organization.

Accessibility Implementation Strategy

The best approach to creating a truly accessible user experience is to integrate accessibility into the design and development process and integrate accessibility into the culture and processes. Although the end goal of accessibility remains the same, the ways to achieve this may need to adapt to the demands and the culture of rapid development. When accessibility is a component of every phase of the product development lifecycle, and when accessible features and functionality are built into design, content, and code, the result is a product that is accessible and enjoyable for everyone.

A generalized model of policy-driven adoption was incorporated into the strategy recommended to implement ICT accessibility standards. This model is recommended also for application to banking and financial services, with some additional specificity.
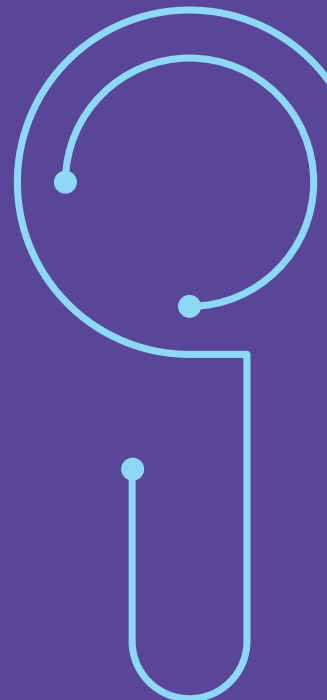
1. Have the leaders of the accessibility compliance project meet with Executive and Call Center Management to draft an Accessibility Roadmap.

2. Develop an organizational policy that articulates a commitment to accessibility, and builds an "accessibility-first" mindset across the organization.

3. Develop code Plugins. Managing an accessible code repository for common user interface components (such as menus, tabs, and date pickers) is a worthwhile investment. It streamlines development time and provides a better, more consistent, and more accessible user experience. There is a range of publicly available examples of accessible user interface design patterns, such as the Accessible jQuery User Interface Components Demonstration, which can be incorporated into internal repositories (remediate CSS Frameworks, remediate JS Libraries HTML forms, and other elements).

4. Document User Experience (UX) Style Guides. Rules and conventions that support best practices help teams produce better products. Integrating accessibility into style guides facilitates accessibility compliance by following established and shared best practices. It is helpful to recognize the importance of digital or content strategy, including accessibility, in an overall content strategy that makes accessibility a strategic priority.

5. Provide essential training. Ideally, role-based training is the best approach, but if the entire organization cannot be trained, begin with Designers, Content Editors, Developers, Quality Assurance Testers, and Call Center Analysts.

6. Define a strategy for maintenance and sustainability. Content and development tools can make accessibility a struggle, or something that is baked in. Look for content management software that supports accessible templates and promotes accessible content production, for example, adding equivalent text to images and marking up content using semantic markup. Look for development tools that support standards-based markup and code validation.

7. Create checkpoints in project lifecycles. To monitor and ensure accessibility, include three or four accessibility checkpoints throughout the project lifecycles (one or two design checkpoints, one or two prototype and pre-production checkpoints, and at least one quality assurance checkpoint).

The previously identified standards for accessibility (in the initial document) will be addressed through the lens of customer interaction for banking services at physical locations, whether branch, automated teller machines (ATMs), or kiosks, through websites, by accessing electronic documents, using mobile applications, or through telecommunication to customer service or call centers.
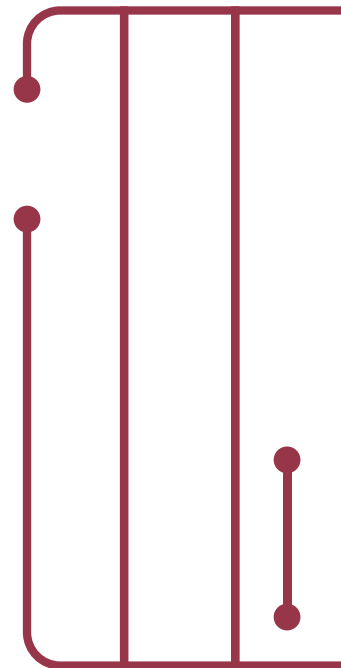
Accessible Banking

1. Accessible Physical Locations:
Banks, Branches, and Atms

The growing array of services available through the Internet or mobile apps has minimized the need to visit physical banking facilities, but some activities still require in-person encounters. These sometimes include opening the initial account, initiating loans, establishing retirement or investment plans, or withdrawing significant sums of cash. Even visits to traditional banking locations may be overwhelmingly dominated by access through ICTs at kiosks and ATMs both inside and outside the facility. But these locations are also subject to the standards for physical accessibility.

The accessibility of in-person banking at bank locations is dependent on several factors:

1. Physical access to the environment. This includes access accommodations from parking to curb cuts, automated doors, non-slip surfaces, the availability of elevators if needed, and customer access points (counters or ATM machines) positioned at ergonomic heights.

2. Access to information. Signage should be provided in alternative formats including braille, large print, and tactile signs.

3. Documents should be made available in alternative formats. Standard customer literature or marketing collateral about services should be available (upon request) in braille, large print, plain language, and audio alternatives.

4. Developing accessible manuals that take people through the various steps involved in withdrawing cash or using an ATM would greatly assist customers with disabilities who are using a new format or type of bank machine for the first time.

5. Accessibility at ATMs and kiosks can be improved for some categories of customers with disabilities through the use of a user-defined, personalized interface that can be accessed on demand.

6. Provisions should exist to assist customer communication with bank employees: sign language interpreter or text communication links, for example.

2. Banking Via the Internet

According to the Web Accessibility Initiative (WAI), web accessibility means that "people with disabilities can perceive, understand, navigate, and interact with the web, and that they can contribute to the web".

Access to the expanding array of banking services requires that the bank website, any additional software applications used on the site, informational media, and posted documents be accessible to persons with disabilities of all kinds, and users of assistive technologies of many kinds. Access requires that the customer has some control of the use of (or choice not to use) some of the features and functionality of this new digital service center, and that the use of the services be compatible with the use of widely available assistive technology, especially screen readers.

The bank can enhance the Internet user experience with ancillary support and a focus on some of the general provisions requisite for accessibility:

1. Make documentation, including statements, available in print formats as well as digital formats such as HTML or RTF, so that they can easily be read by screen readers and any other assistive technology or aid, and offer accessible and alternative formats such as audio, large size fonts, accessible e-text or DAISY formats, and printable in Braille.

2. Ensure independent login access without the use of a mouse, and through assistive technology such as screen readers and voice recognition software.

3. Offer alternatives to CAPTCHA codes (such as audio codes or math questions) and virtual keyboards for security and privacy measures.

4. Make multimedia optional, with a clear possibility of turning the music or animation off, so that users can use assistive devices such as screen readers without any problems.

5. Allow sufficient time for users with disabilities to enter passwords or other authentication codes sent through SMS or email.

6. Offer real-time access to customer service representatives through instant chat, video conferencing with captions, or video relay services that enable real-time sign language interpretation.

7. Provide accessible guides and tutorials to help customers in navigation and use of websites as well as other forms of banking, including transactions at a branch or through their mobile devices.

8. Provide a hotline or chat service to assist customers with navigation and use of Internet banking facilities.

9. Ensure that error messages are provided through text and audio formats.

10. Use simple language and design to avoid confusion and enhance clarity.

3. Accessible Electronic Documents in Banking

While most banking activities are transacted through Web pages, some information, whether general or customer-specific, may be presented through electronic documents. In the ICT banking environment, these documents are not likely to appear in native formats, but some will be in Portable Document Format (PDF).

Over the years, Adobe has worked to retrofit and develop the Acrobat programs to allow assistive technologies such as screen readers and refreshable Braille devices to utilize the products. Even with these changes, the true accessibility of a PDF document depends on how it is developed, converted, or edited. Based on that, specifications for PDF files were standardized.

Other Electronic Document Formats
The basic applications of Microsoft's Office Suite (Word for text documents, Excel for spreadsheets, and PowerPoint for presentations) have become ubiquitous around the globe and particularly on the Internet. But, as previously noted, these file formats usually are converted to PDF formats.

Media (video and audio)
The barriers to accessibility of audio and video media for those with hearing and vision disabilities make it important to provide the information in alternative formats. Short audio or video files are frequently used to promote new products or services. Some users will prefer to turn off audio and video to use screen readers.

Video content can be made accessible for individuals with hearing or visual limitations by captioning and audio description of content.

4. Accessible Mobile Banking

Mobile devices and applications represent a domain of extraordinary opportunity for improving accessibility for all individuals, not just those with disabilities, and simultaneously, perhaps the most challenging domain for the identification and application of standards. That is because the domain requires addressing a complex matrix of hardware, operating systems, applications, and user needs.

While these afford more flexibility for some persons with disabilities, they also require built-in accessibility design to serve all users.

User Needs

Mobile devices – most commonly mobile phones and tablets – must accommodate the entire spectrum of disabilities: visual, hearing, physical, cognitive, and those related to aging. The challenge of addressing all of those needs in a device of limited size is compounded by the breadth of functionality afforded by mobile phones. Product designers, manufacturers, systems designers, and applications developers must consider the entire range of user needs when designing mobile device and applications. Mobile phones assist in meeting the requirements of CRPD and accessibility standards with features helpful to each category of disability, but they also present challenges to developers.

Although manufacturers of mobile device platforms have provided native application developers and designers with documents on interface design for their platforms and navigation to contribute toward achieving a satisfactory user experience, the differences among mobile operating systems remain a barrier for persons with disabilities.

While mobile apps for banking and point-of-sale (POS) purchasing eliminate some of the card-based and device interaction that posed potential physical and ergonomic barriers, the apps themselves may pose new and different barriers. The newest of mobile apps has not reached the point of universal acceptance and implementation.

Best Practices for Mobile

Because of the multidimensional structure of mobile devices and applications, there is no singular standard or set of guidelines covering all mobile accessibility issues. Rapid developments in mobile technology have outpaced standards development, but in 2015, W3C released Mobile Accessibility: How WCAG 2.0 and Other W3C/WAI Guidelines Apply to Mobile.

The WAI defines mobile accessibility as making applications and websites accessible to persons with disabilities when they are using mobile phones.

WCAG 2.0, User Agent Accessibility Guidelines (UAAG), and Authoring Tool Accessibility Guidelines (ATAG) are being used together to address mobile accessibility. WCAG 2.0 covers web pages and web applications, including content used on mobile devices, and WAI developed a reference document for how WCAG 2.0 and other W3C/WAI guidelines apply to mobile.

Most current mobile devices (including smartphones) have technical capabilities similar to those of a desktop device. This further supports the use of WCAG 2.0 along with the techniques defined in Mobile Web Best Practices as the best standard for Web browser-based access to content on mobile devices.

5. Procurement for Accessible Banking

The design and manufacturing of accessible hardware and the development of accessible software for banking and financial services are key to a completely accessible banking environment. This movement to accessibility involves significant investment on the part of the banks, but the accountability required by CRPD, by legislation, and international standards are powerful incentives for compliance.

Just as IT departments need to revamp policies and practices to include accessibility in the design process, purchasing departments and procurement officers need to devise policies to ensure that new hardware and software applications purchased are compliant. This may seem a daunting task, but highly specific guidance is available.

Recommended Standards

Overall Accessibility Standards

ISO/IEC TR 29138-2:2009 Information technology — Accessibility considerations for people with disabilities — Part 2: Standards inventory (ISO/IEC, 2009) identifies a collection of documents that provides guidance on meeting the needs of people with disabilities.

ISO-IEC Guide 71 (Second edition, 2014-12-01). Guide for Addressing Accessibility in Standards.

Retrieved from:
http://www.iso.org/iso/catalogue_detail?csnumber=57385
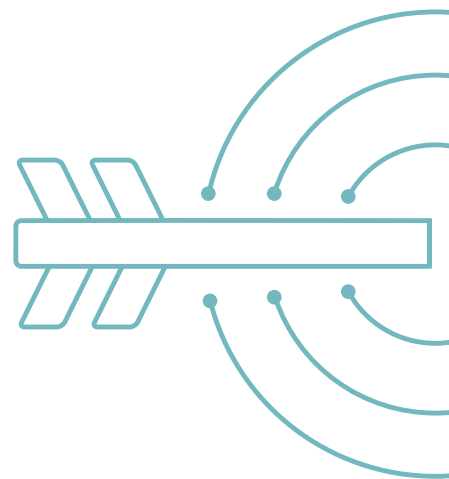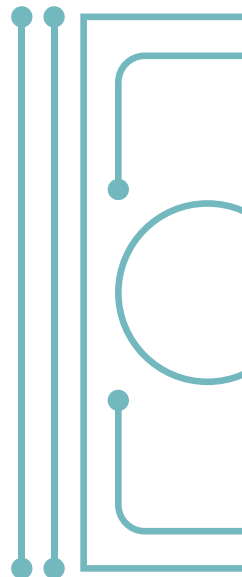
Websites

Web Content Accessibility Guidelines (WCAG 2.0)

For the complete guidelines and implementation guidance, see:
https://www.w3.org/TR/WCAG20/

User Agent Accessibility Guidelines (UAAG)
https://www.w3.org/WAI/intro/uaag.php

Authoring Tool Accessibility Guidelines (ATAG)
https://www.w3.org/WAI/intro/atag.php

Section 508 Guidelines
Section 508 of the Rehabilitation Act: Application and Scoping Requirements,
508 Chapter 1: Application and Administration
https://www.section508.gov/summary-section508-standards

Mobile Applications

Web Content Accessibility Guidelines (WCAG 2.0)
https://www.w3.org/TR/WCAG20/

Mobile Web Best Practices
https://www.w3.org/TR/mobile-bp/

Electronic Documents

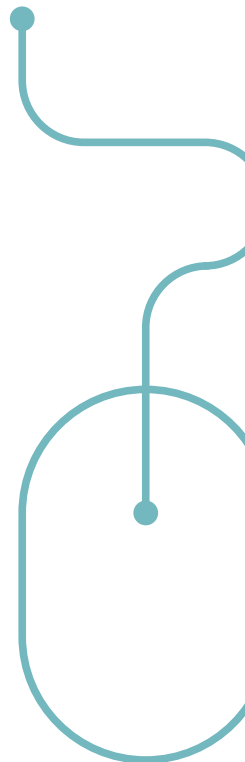**ISO 14289-1:2014 PDF/UA Format**
http://www.iso.org/iso/catalogue_detail?csnumber=64599

Section 508 Standards for Electronic Documents
https://www.access-board.gov/guidelines-and-standards/communications-and-it/
about-the-section-508-standards/section-508-standards#subpart_d

Microsoft Office Documents: Word, Excel, PowerPoint
[URL HERE]

Media (Video and Audio)

WCAG 2.0, Time-Based Media, Guideline 1.2
http://www.w3.org/TR/UNDERSTANDING-WCAG20/media-equiv.html

Electronic Kiosks and Automated Teller Machines (ATMs)

Accessibility Checklist, February 2014 Edition.
Based on the 2010 ADA Standards for Accessible Design
https://www.ada.gov/2010ADAstandards_index.htm

E-Accessibility Policy Toolkit for Persons with Disabilities.
A Joint ITU/G3ict Toolkit for Policy Makers Implementing the Convention on the Rights of Persons with Disabilities. ITU/G3ict.
http://www.e-accessibilitytoolkit.org/

Functional Accessibility Requirements
http://mandate376.standards.eu/standard

Purchases

EN 301 549: Video 1 (June 6, 2016). Instruction videos on the European standard for accessibility requirements in public procurement of ICT products and services. These videos are sponsored by Microsoft and produced by Funka.

http://mandate376.standards.eu/standard
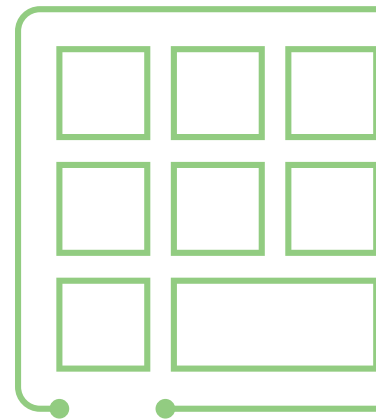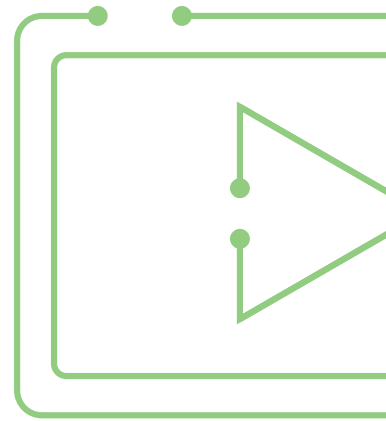
For more information, please contact us at Info@mada.org.qa

or visit www.mada.org.qa