

Original article

## Digital Accessibility in Libya: Reality and Aspirations

Salim Aloud<sup>1\*</sup> , Ali Wadi<sup>1</sup> , Abdulmunem Almuktar<sup>2</sup> <sup>1</sup>Department of Computer, Azzytuna University, Tarhuna, Libya<sup>2</sup>College of Computer Technology, Tripoli, LibyaCorresponding Email. [s.aloud@azu.edu.ly](mailto:s.aloud@azu.edu.ly)

### Abstract

The term "digital accessibility" is relatively new in Libya, as the Libyan state has yet to develop its own policies and legislation regarding digital accessibility. Furthermore, most people in Libya, whether officials or ordinary citizens, still lack a clear definition of digital accessibility. The term "digital accessibility" refers to enabling all individuals, including people with disabilities, to access and utilize digital services and platforms on an equal basis with others. This study aims to raise awareness about policies and initiatives related to digital accessibility, provide an overview of the current state of digital accessibility in Libya, compare it with regional and global contexts, and offer recommendations for steps to be taken to advance this area.

**Keywords.** Digital Accessibility, Disability, Human Rights, Digital Platforms.

### Introduction

1.3 billion People, or 1 in 6 people worldwide, live with some form of disability, and this number is constantly increasing due to traffic accidents, work injuries, and wars. These disabilities, whatever their type, create barriers for these individuals to meet their basic daily needs, including health, education, employment, and all fundamental human rights, including access to websites and digital platforms [1]. Websites and digital platforms are thought of much like open books online. The idea is that everyone can read these books, but some people have difficulty reading or understanding due to visual, motor, or physical impairments, or because of age. Digital accessibility is the design and enabling of access to digital services and platforms for all individuals without exception, including people with disabilities and older persons, in an equal and effective manner. This policy aims to build an inclusive society free of digital barriers and ensure that all segments of society benefit from the digital transformation. Achieved through adherence to international standards and best practices in the design and development of digital content and services [1].

In Libya, Law No. 5 of 1987 was issued, guaranteeing all the rights of persons with disabilities. Its first article stipulates the following: "Preventing disability is a duty incumbent upon the individual, the family, the community, institutions, organizations, and popular bodies in society." Its second article stipulates the following: "A person with a disability is anyone who suffers from a permanent deficiency that prevents them from working wholly or partially or from practicing normal behavior in society." [13]. Private companies and organizations have also begun issuing protocols for implementing digital accessibility, most notably the WCAG document. This document explains how to create more accessible web content for persons with disabilities and was developed by the W3C. Two editions of the WCAG are available. Additionally, 3Gict has developed a Digital Accessibility Assessment Index, which evaluates the extent to which countries adhere to digital accessibility standards as outlined in Article 9 of the Convention on the Rights of Persons with Disabilities [2]. Countries began early to work on issuing the necessary legislation to guarantee the rights of persons with disabilities. At the international level, in 2006, based on the efforts of the United Nations, the Convention on the Rights of Persons with Disabilities was adopted and opened for signature in 2007. It entered into force in 2008, and by 2020, 180 countries had signed it [3].

The Convention guarantees the right to access digital content through Article 9, which states: "To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure that persons with disabilities have equal access to the physical environment, transportation, information and communications, including information and communication technologies and systems, and other facilities and services open to or provided to the public, whether in urban or rural areas." This is essential for implementing digital accessibility [1]. It is worth noting that some Arab countries achieved first place globally according to this index in 2018 and 2020 [4]. Following this progress made by most countries worldwide in this field, it became necessary to conduct a study within Libya to assess the state of digital penetration and compare it with the global situation.

### Methods

Libya is one of the countries that signed the Convention on the Rights of Persons with Disabilities, which was adopted by the United Nations in 2006, but no legislation has been issued regarding Article 9 of the Convention, which concerns digital accessibility.

A comprehensive survey was conducted to assess the state of digital accessibility. The survey questions focused on having a clear and specific definition of the concept of digital accessibility, or participating in research, a study, or a workshop related to digital accessibility. The result majority of those surveyed did

not have any definition of the concept of digital accessibility and did not participate in any activity related to digital accessibility, even though a large percentage of those surveyed were faculty members in computer science and information technology disciplines, which are disciplines concerned with teaching curricula related to the design of websites and mobile applications. The survey questions also included information about the rights of persons with disabilities, information about the national policy for digital accessibility in Libya, the International Union of Accessibility Standards, and all matters related to international digital accessibility initiatives. No information about any activity related to digital accessibility, whether they were faculty members, employees, or students, which gives the impression that there is not enough awareness of digital accessibility at the level of individuals or public and private institutions [5-7]. As mentioned previously, research in the field of digital accessibility in Libya is still very limited.

After research, it became clear that there is no research or study to evaluate digital accessibility. This study considered the first in this field, and the first steps in this field began with the organization by the General Information Authority of a national consultative workshop on preparing the national policy for digital accessibility for persons with disabilities in Tripoli on June 25, 2024, in cooperation with the Economic and Social Commission for Western Asia (ESCWA). In this workshop, the first pillars for preparing the national policy for digital accessibility were laid [3].

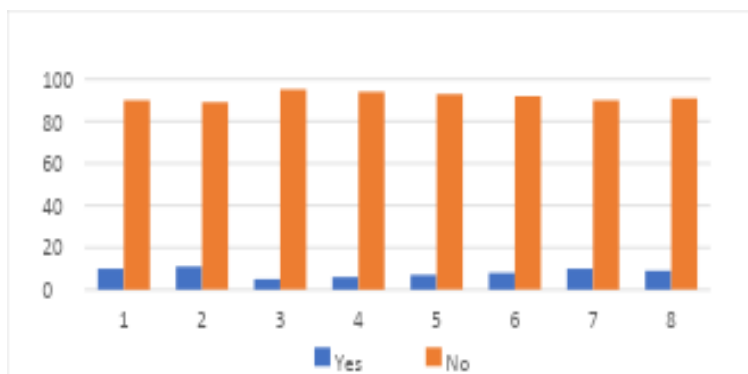
## Results and Discussion

To promote inclusive societies by building digital communities that allow everyone to access information and participate effectively. To provide easy and effective access to digital services for people with disabilities and older adults to enhance their well-being and quality of life. To contribute to achieving government goals in digital transformation projects.

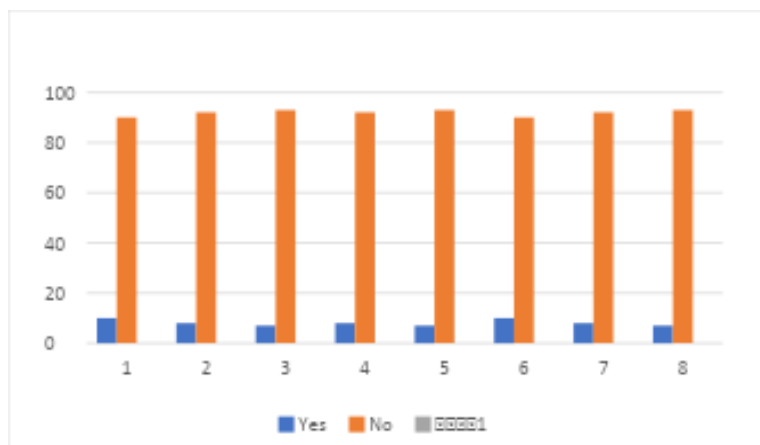
To adhere to international standards by designing websites, applications, and digital content in accordance with global digital accessibility standards such as the WCAG (World Wide Web Accessibility Initiative). It is a set of rules that website creators should follow. The goal of these rules is to make websites accessible and usable for everyone, even those who may have difficulty reading, hearing, or clicking buttons. In other words, it aims to make websites open and easy to use for everyone, regardless of their abilities. It is based on four fundamental principles: 1. Perceivable - Information and user interface components must be presentable to users in ways they can perceive. This means that users must be able to perceive the information being presented (it can't be invisible to all of their senses). Operable - User interface components and navigation must be operable. This means that users must be able to operate the interface (the interface cannot require interaction that a user cannot perform). Understandable - Information and the operation of the user interface must be understandable. This means that users must be able to understand the information as well as the operation of the user interface (the content or operation cannot be beyond their understanding).

Robust - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies. This means that users must be able to access the content as technologies advance (as technologies and user agents evolve, the content should remain accessible). If any of these are not true, users with disabilities will not be able to use the web. Under each of the principles are guidelines and success criteria that help to address these principles for people with disabilities. Many general usability guidelines make content more usable by all people, including those with disabilities. However, in WCAG 2.1, we only include those guidelines that address problems particular to people with disabilities. This includes issues that block access or interfere with access to the web more severely for people with disabilities.[2].

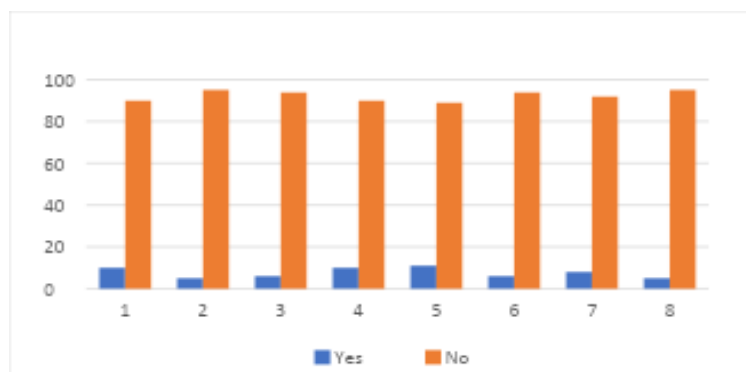
(Figure 1) shows a chart of the questionnaire results for the first category, (Figure 2) shows a chart of the questionnaire results for the second category, and (Figure 3) shows a chart of the questionnaire results for the third category. The horizontal axis represents the seven questionnaire questions, and the vertical axis represents the percentage of yes/no responses.



**Figure 1. a diagram of the results of the first category survey.**



**Figure 2. Results of the second category survey**



**Figure 3. Results of the third category survey**

## Conclusion

A comprehensive questionnaire consisting of seven questions was designed, and the target groups were divided into three categories: the first category represented faculty members, students, and teaching assistants in computer science and information technology; the second category represented faculty members, students, and teaching assistants in disciplines other than computer science and information technology; and the third category represented administrative staff and officials at the targeted universities. At the individual level, we recommend immediately developing and adapting curricula related to website and mobile application design to align with digital accessibility standards, without waiting for legislation. At the institutional level (ministries, universities, and higher education institutions), we recommend raising awareness among staff about the importance of digital accessibility through workshops, scientific conferences, and encouraging specialized research in this field. At the legislative level, we recommend enacting the necessary legislation on digital accessibility and learning from other countries' experiences in this area.

*Conflict of interest.* Nil

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