

# ACCESS TO DIGITAL DEVICES FOR PEOPLE WITH DISABILITIES

*Nowadays people with disabilities meet barriers of all types. However, technology is helping to lower many of these barriers. By using computing technology for tasks such as reading and writing documents, communicating with others, and searching for information on the Internet, students and employees with disabilities are capable of handling a wider range of activities independently. Still, people with disabilities face a variety of barriers to computer use. It addresses the issue of access to digital devices for people with disabilities.*

## INTRODUCTION

According to the World Health Organization (WHO), approximately 15% of the world's population lives with some form of disability. Persons with disabilities can equally participate in society and make substantial contributions to the economy if the appropriate Internet tools are available. Moreover Information and Communication Technologies (ICT) can be a powerful tool in supporting education and inclusion for persons with disabilities. Technological development can enable people with disabilities to improve their quality of life. The successful application of such technologies can allow people to use all existing digital devices.

### I. RIGHTS OF PERSONS WITH DISABILITIES IN DIGITAL WORLD

Over 100 Governments have signed and ratified the UN Convention on the Rights of Persons with Disabilities. Obligations include implementing measures to design, develop, produce and distribute accessible ICT at an early stage, so these become accessible at minimum cost for persons with disabilities.

W3C's Web Content Accessibility Guidelines (WCAG) are increasingly mandated by governments and used by industry to make websites more accessible for people with disabilities.

More governments are starting to incorporate accessibility criteria in their public procurement policies. Popular companies now have progressive attitudes to accessibility. Firstly, the Governments incorporates accessibility criteria in its public procurement policy (through what are called Section 508 guidelines) thus stimulating industry to supply more accessible products to its agencies. Secondly, litigation under discrimination and telecommunications legislation has focused companies' attention on the possible consequences if accessibility needs are not appropriately addressed.

*Кармаз Алексей Михайлович, магистрант кафедры информационных технологий автоматизированных систем БГУИР, karmazct@mail.ru.*

*Научный руководитель: Гуринович Алеветина Борисовна, зам. декана факультета информационных технологий и управления БГУИР, канд. физ.-мат. наук, доцент, gurinovich@bsuir.by.*

## II. TECHNICAL COMMUNITY

There are new potential technical solutions that can benefit both persons with disabilities and the general community. Products like speech recognition (originally designed for people with limited hand movements) and the scanner (designed as part of a document reading device coupled with speech synthesis for blind people) are now mass market products.

There are internationally recognized accessibility guidelines developed by W3C on web content, authoring tools and user agents. These guidelines, especially the Web Content Accessibility Guidelines (WCAG), are used by many governments to build accessible websites.

Internet technologies have the potential to give persons with disabilities the means to live on a more equitable basis within the global community in a manner that previously was not possible. Apart from access to infrastructure and equipment, accessibility depends on making physical devices and online services useful to everyone, including persons with disabilities.

## III. CONCLUSION

Regardless of the challenges they may face, persons with disabilities can contribute to society like any other member of the community when barriers are removed. Increasing accessibility to the Internet can help to make that happen. Governments, industry and other key stakeholders need to make accessibility a priority in their ongoing work, individually and collaboratively. Internet community should work together to make change for both social and economic benefit. If we are to be successful we must commit to move forwards and make a difference, together.

1. Internet Accessibility: Internet use by persons with disabilities [Electronic resource]. – Electronic data: <https://www.internetsociety.org/resources/doc/2012/internet-accessibility-internet-use-by-persons-with-disabilities-moving-forward>