Regulating the Digital Domain:
Co-Design 2 Results

Accessibility barriers and regulatory approaches for digital technologies

Inclusive Design Research Centre

Accessibility Standards Canada

**September 2024**





OCAD University acknowledges the ancestral and traditional territories of the Mississaugas of the Credit, the Haudenosaunee, the Anishinaabe and the Huron-Wendat, who are the original owners and custodians of the land on which we stand and create.

# Contributors

This report is built on the contributions of our expert collaborators who formed the study group and the IDRC team. The 35 contributors include:

*Caren Watkins*

*David Dyer Lawson*

*David Pereyra*

*Geraldynn Lubrido*

*Geza Fenyo*

*Gina Kennedy*

*Graham K.*

*Haider Ali*

*Jalee Pelissier*

*James Kemp*

*Jamie Mcdonald*

*Jenny A. Leung*

*Ka Li*

*LaSonja Henry*

*Laura Hnatiw*

*Liam Shearer*

*Lisa Snider*

*Lorna Craig*

*Ramin Raunak*

*Richard Marion*

*Roxanne Tull*

*Sandra Bell*

*Sioux Lily Dickson*

*Vera Roberts*

# Re-use of the report

This report is licensed under the Creative Commons Attribution 4.0 International license. Below is a summary, not a substitute, of the license. The full licence can be reviewed in full at <https://creativecommons.org/licenses/by/4.0/legalcode>.

You are free to:

**Share:** copy and redistribute the material in any medium or format

**Adapt:** remix, transform, and build upon the material for any purpose, even commercially

The licensor cannot revoke these freedoms if you follow the license terms. Under the following terms:

**Attribution:** You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

**No additional restrictions:** You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

# Contents

[Contributors 2](#_Toc179378683)

[Re-use of the report 2](#_Toc179378684)

[Contents 3](#_Toc179378685)

[1. Project Overview 5](#_Toc179378686)

[1.1 Project goals and objectives 6](#_Toc179378687)

[1.2 Project challenge statements 6](#_Toc179378688)

[2. Co-Research: Digital Barriers and Regulations 7](#_Toc179378689)

[2.1 Co-research questions 7](#_Toc179378690)

[2.2 Co-researchers 8](#_Toc179378691)

[2.3 Co-research activities 9](#_Toc179378692)

[2.3.1 Session 1: Thinking and sharing 9](#_Toc179378693)

[2.3.2 Session 2: Discussing 9](#_Toc179378694)

[2.3.3 Session 3: Analysis and review 10](#_Toc179378695)

[2.4 Co-Research Results 10](#_Toc179378696)

[2.4.1 Meet diverse and complex accessibility needs 11](#_Toc179378697)

[2.4.1.1 Involvement of individuals with lived experience of disability throughout the technology development cycle 11](#_Toc179378698)

[2.4.1.2 Focus on the human aspect of accessibility 11](#_Toc179378699)

[2.4.1.3 Flexible and customizable designs and interfaces 11](#_Toc179378700)

[2.4.1.4 Standards Focus 12](#_Toc179378701)

[2.4.1.5 Application and web accessibility issues 12](#_Toc179378702)

[2.4.1.6 Live captioning challenges 12](#_Toc179378703)

[2.4.1.7 Generic help tools 13](#_Toc179378704)

[2.4.1.8 Misrepresentation in symbols 13](#_Toc179378705)

[2.4.1.9 Design suggestions 13](#_Toc179378706)

[2.4.2 Keep up with rapid changes in technology and prevent new barriers from emerging 14](#_Toc179378707)

[2.4.2.1 Provide rationale and implementation strategies for accessibility 14](#_Toc179378708)

[2.4.2.2 Strategic innovation and continuous improvement 14](#_Toc179378709)

[2.4.2.3 Comprehensive and flexible accessibility standards 15](#_Toc179378710)

[2.4.2.4 Software, network, and device limitations 15](#_Toc179378711)

[2.4.2.5 Specific guidance and practical implementation 15](#_Toc179378712)

[2.4.3 Support integration and interoperability of digital systems 15](#_Toc179378713)

[2.4.3.1 Lack of interoperability and built-in accessibility features 16](#_Toc179378714)

[2.4.4 Foster accessibility innovation 16](#_Toc179378715)

[2.4.4.1 Recognition and incentives for accessibility innovation and high standards 16](#_Toc179378716)

[2.4.4.2 Consideration of previous technology 17](#_Toc179378717)

[2.4.4.3 Cultural change and investment 17](#_Toc179378718)

[2.4.5 Remove disincentives for accessibility compliance 17](#_Toc179378719)

[2.4.5.1 Government mandates and corporate accountability 18](#_Toc179378720)

[2.4.6 Empower people with disabilities 18](#_Toc179378721)

[2.4.6.1 Inclusive design and active involvement of people with disabilities 18](#_Toc179378722)

[2.4.6.2 Increase understanding 19](#_Toc179378723)

[3. Strategies for Regulations 19](#_Toc179378724)

[4. Next Steps 20](#_Toc179378725)

# Project Overview

The Regulating the Digital Domain (RtDD) project (the project) is committed to advancing digital inclusion and ICT accessibility for people with disabilities. This ambitious endeavor is achieved by convening a multidisciplinary team of advisors and co-researchers, each bringing valuable insights from their respective fields. The team’s collective expertise spans lived experiences of disability, regulatory design, digital systems, policy, cultural change, communications, complex adaptive systems, and compliance.

The project addresses several critical questions: How can we do this differently? How can we actually impact what is released, sold, designed, regulated, and procured to ensure accessibility work has a meaningful impact? Despite existing regulations and standards, there has been limited impact. An industry has emerged that depends on compliance issues to test and repair. This large accessibility industry in the digital domain makes its livelihood by evaluating, certifying, testing, and repairing issues. Unfortunately, this industry has an influence on creating the standards and regulations, leading to a conflict of interest. The standards are becoming increasingly complex, requiring specialized expertise to understand and implement, which creates barriers for smaller producers.

RtDD also examines the systemic issues with current standards and regulations. These include their slow nature, which cannot keep up with technological changes, and their simplicity, which fails to cover the diverse needs of all potential users, especially those with disabilities. As a result, the standards often benefit those who need them the least, rather than those who need them the most. This indicates that the current ecosystem is not functioning as it should.

One of the project’s goals is to explore alternative ways to achieve greater digital inclusion that do not rely solely on legislation, guidance, or standards. Instead of an industry focused on finding and repairing issues, the project seeks to find innovative solutions that prevent barriers in the first place. This approach aims to move away from a specialized, professional strategy towards more inclusive and understandable standards.

Together, the team tackles six pivotal challenges and will develop the groundwork for a regulatory system that effectively governs the digital landscape. The project aims to approach standards that include the disability community in their development and are flexible and adaptable to the changing landscape of ICT. The work done so far has explored regulatory issues, digital barriers, and possible new approaches with individuals with lived experience of disability over two co-research activities, but there is still a need to explore other methods and legal instruments to achieve better digital inclusion.

The project findings will inform Accessibility Standards Canada on approaches for greater accessibility to digital tools, content, transactions, and computer-mediated processes.

## Project goals and objectives

Regulating the Digital Domain focuses on addressing the persistent challenges and disparities that people with disabilities face in accessing information and communication technologies (ICT) and digital tools. The RtDD team will:

* Work to uncover the root causes of barriers
* Focus on systemic issues that support digital exclusion
* Identify potential ways to interrupt and eliminate, improve or prevent barriers from becoming worse
* Enhance the accessibility of digital tools, content, transactions, and computer-mediated processes (using two or more electronic devices for a process) for people with disabilities

The goal of RtDD is to significantly improve digital inclusion and ICT accessibility; the team will iteratively design a regulatory system that addresses challenges identified in prior work.

## Project challenge statements

In our work on accessibility standards research and development, as well as our engagement with the disability community in these activities, we became aware that there was potential for change in the regulatory process for the digital domain; this includes but is not limited to how standards and regulations are conceived, developed, implemented, and enforced. As a result, this project was developed to address six challenges that had emerged. The goal is to reimagine and redesign accessibility standards so that they:

1. Address the diversity and complexity of accessibility needs, including the needs of small minorities and outliers
2. Are suited to the exponential rates of change of ICT and designed to proactively prevent emerging barriers
3. Support and require integrated accessibility approaches over segregated approaches to support interoperability and benefits to all users
4. Support rather than constrain accessibility innovation
5. Do not create incentives for the perpetuation of the problem
6. Engage and empower people with disabilities and their communities to shape regulatory requirements, inform methods of meeting requirements, identify regulatory gaps, and continuously refine the regulatory system.

These six challenges are addressed, in part, through a series of co-design research activities with experts who have lived experience of disability.

# Co-Research: Digital Barriers and Regulations

Accessibility standards for digital technology are meant to ensure that everyone, including people with disabilities, can use products and services. These standards are applied across various digital platforms, including websites, software, banking and government kiosks, and mobile apps. One example is Canada’s CAN/ASC - EN 301 549:2024, a voluntary standard for organizations that applies to all entities under federal jurisdiction. The standard sets requirements for information and communication technology products and services to be accessible (<https://accessible.canada.ca/en-301-549-accessibility-requirements-ict-products-and-services-1>).

While accessibility standards aim to make digital technology inclusive, their application and enforcement can be inconsistent and may not keep up with emerging technologies. Emerging technologies pose new challenges for accessibility standards because technological advances can outpace the development of new standards and guidelines, leaving these technologies inaccessible to many individuals. Emerging and innovative technologies may also change the requirements that individuals want to enable accessibility. Standards that cannot be adapted easily leave those complying with them as well as those they are intended to benefit anchored to older technologies. We set out to explore accessibility barriers and regulations with members of the disability community.

Between April and May 2024, the RtDD team co-researched with individuals with lived experience of disability ways that accessibility standards for digital technology have worked, failed, or are likely to fail, as well as how they can be improved.

## Co-research questions

We created three questions that addressed all six challenges. These questions were used to stimulate the thinking, sharing, and discussions that occurred during the co-research activities. The questions and our intention in creating them are described in the following sections:

1. What specific accessibility challenges have you encountered while using digital tools or systems?

People with disabilities have needs that are more varied than people without disabilities. Regulations tend to simplify and generalize these needs. This simplification leads to one-size-fits-all thinking (like all blind people read braille—they don’t). It can also limit the ability for digital systems to adapt to individual needs. If we know the kinds of accessibility challenges you've encountered, it can help us understand where standards may be failing.

We are working from barriers identified by people with disabilities when using technology to understand how standards may be failing or are inadequate. Our goal is to consider ways to improve accessibility standards for technology by rethinking them and trying new approaches to writing, implementing, enforcing, monitoring, and updating them.

1. What rules or regulations do you think should have been in place when the technology was developed to make sure the technology was designed with your needs and accessibility in mind?

As technology evolves at a rapid pace, standards and regulations need to be revised to keep up. Unfortunately, accessibility compliance can sometimes be sacrificed for speed and novelty. Our challenge is to prioritize accessibility in this ever-changing digital landscape and prevent new barriers from emerging.

In this question, we take a different approach to understanding how accessibility standards for technology may have gaps or be failing. We take an “I wish” approach, where people with disabilities think about what they wish had been in place when the technology they were using was developed. Our goal is to consider ways to improve accessibility standards for technology by rethinking them and trying new approaches to how they are written, implemented, enforced, monitored, and updated.

1. Can you see any problems with rules to make things accessible that don’t say how to do it?

New ideas benefit people with disabilities. But sometimes, rules about accessibility can prevent new and helpful ideas. We want rules that say what needs to be accessible, but we want creators to find the best way to do it.

We want to understand the benefits and risks of performance-based standards. We asked people with disabilities to think about how this approach might not work well for them. We had been wondering if there were concerns about this approach for community members. Did they trust an approach that did not seem to have checklists or prescriptive instructions for achieving accessibility?

## Co-researchers

We recruited co-researchers from our community and co-research list. We identified 16 co-researchers out of 149 applicants who would provide a variety of access needs, experiences, languages experience, language, regions, and ages. Co-researchers were compensated $250 CAD for their expertise.

## Co-research activities

The co-research activities were both synchronous and asynchronous online activities. The process was divided into three sessions:

1. Thinking and Sharing: asynchronous activities through the Canvas learning management system (LMS)
2. Discussing: online synchronous activities through Zoom video communication software
3. Analyzing: asynchronous activities through Canvas LMS for co-researchers to review the contributions and analysis of sessions 1 and 2

Each session is described more fully in the following sections.

### Session 1: Thinking and sharing

In the first week, co-researchers joined RtDD’s Canvas community. We used the discussion forum in Canvas for an asynchronous exchange of ideas, where co-researchers answered questions about digital barriers and regulations that were not prescriptive in how to achieve accessibility. There were three discussion areas:

1. Flexible Standards: What specific problems have you faced using digital tools or systems like computers, things with screens and buttons or apps on the phone?
2. Inclusion and Accessibility: Think about new technologies or apps that didn’t work well for you. What rules should have been in place to make them more accessible?
3. Supporting Innovation: Can you see any problems with rules to make things accessible that don’t say how to do it?

### Session 2: Discussing

The approach of a 1-2-4-All format was to start activities with small groups and increase the group size gradually until everyone was together, building out thinking and ideas as the group grew. For this co-design, we asked co-researchers to individually think about the three discussion questions individually and document their thoughts on Canvas. We then met synchronously on Zoom and in Zoom breakout rooms for co-researchers to share their thoughts in pairs, groups of four, and finally, all together in a group of approximately 16 co-researchers. During the synchronous sessions, facilitators took notes to capture added information and evolving ideas.

### Session 3: Analysis and review

The asynchronous and synchronous activities produced a great deal of written notes and responses. The RtDD team summarized these texts so that they were organized into themes and recommendations. The final session had co-researchers review and offer feedback on:

* Summaries the team made from the contributions of all co-researchers from Sessions 1 and 2.
* Draft recommendations for Accessibility Standards Canada (ASC) created by the IDRC team from co-researcher contributions. A plain-language version of the recommendations was also provided.

The tasks took the form of a survey. Each section had an introduction that reminded the co-researchers of the question discussed and the reason for asking it. Then, each theme was presented one at a time, along with a response field. Co-researchers were prompted to consider whether their perspective was included and accurately represented. If not, we asked them to let us know what they think should change or be added in the response area.

## Co-Research Results

Over twenty themes surfaced from the discussion content generated by the co-researchers. We have organized these themes under the project’s six major challenges. Each of the [six challenges](#_Challenge_statements) highlights a critical area where accessibility efforts must be concentrated to ensure an inclusive and adaptive digital environment for people with disabilities. For simplicity, we have reduced the challenges to statements, but the full description can be reviewed in section 1.2:

1. Meet diverse and complex accessibility needs
2. Keep up with rapid changes in technology and prevent new barriers from emerging
3. Support integration and interoperability of digital systems
4. Foster accessibility innovation
5. Remove disincentives for accessibility compliance
6. Empower people with disabilities

By aligning these themes with the challenges, we aim to offer a clear pathway for developing effective strategies and solutions that can be implemented to overcome the barriers faced by people with disabilities in the digital world.

### Meet diverse and complex accessibility needs

People with disabilities are far more diverse than people without disabilities. Accessibility regulations and standards are designed to be simple and, in doing so, reduce the spectrum of needs addressed. Reductive standards give the impression that this most diverse group of individuals has a single set of needs, and everyone has access when the checklist of needs is met. This approach further marginalizes people whose needs are not included and reduces the choices for all. Current accessibility standards may restrict the potential of digital systems to address the spectrum of individual differences by defaulting to a one-size-fits-all design.

#### Involvement of individuals with lived experience of disability throughout the technology development cycle

Developers should actively engage people with disabilities throughout the development process to support inclusion. Co-researchers have expressed a strong desire to directly collaborate with developers to guarantee that products effectively meet their needs.

Action Items:

* Make sure that accessibility is seamlessly woven into the design and development process at every stage, with input from experts who have firsthand experience.

#### Focus on the human aspect of accessibility

This theme focuses on humanizing accessibility to promote empathy and understanding among developers and stakeholders and address common misconceptions about people with disabilities. By understanding the real-world impact of accessibility and inaccessibility, designers and developers may create digital solutions that truly cater to diverse needs.

Action Items:

* Prioritize inclusive design principles.
* Implement training programs that promote empathy and understanding among developers and stakeholders.
* Encourage a human-centred approach to accessibility.
* Involve people with disabilities early in the technology design and development process.

#### Flexible and customizable designs and interfaces

The access needs of individuals with disabilities may not conform to preconceived checklists of need. Needs may also vary depending on the context or episodic nature of a disability. The concept of “fully accessible” and compliance with it are determined by the individual.

Action Items:

* Develop adaptable technology with customizable interfaces to accommodate the fluctuating needs of individuals with varied and invisible disabilities.
* Avoid definitions of “fully accessible” that do not consider a diversity of disabilities and individualized nature of access needs.

#### Standards Focus

This theme emphasizes that accessibility efforts should focus on ensuring a positive and inclusive experience, not just meeting minimum requirements, and should span all interfaces and include educational resources.

Action Items:

* Focus on creating digital tools that are user-friendly and effective and go beyond minimum levels of compliance with standards.
* Set industry-wide standards for captioning and interface design.
* Raise awareness among developers.

#### Application and web accessibility issues

Although Web Content Accessibility Guidelines (WCAG) have been in place for decades, web accessibility is still a problem. Also, updates to apps and websites can “break” accessibility. Co-researchers identified issues such as form timeouts, poor error handling, and lack of standards enforcement. The action items address approaches to improving issues that co-researchers face in their everyday life.

Action Items:

* Improve enforcement of accessibility standards.
* Offer affordable training on web accessibility.
* Optimize websites for screen readers.
* Regularly conduct accessibility audits.
* Ensure accessibility is maintained in updates, test updates with users with disabilities, and develop mandatory guidelines for updates.

#### Live captioning challenges

This theme addresses the importance of live captioning and its related challenges, such as accuracy and availability.

Action Items:

* Ensure full access to live captions, improve training for accuracy, and support policies for open captioning in public spaces.
* Set industry-wide standards for captioning, support ASL integration through incentives, and provide clear instructions and caption review options.

#### Generic help tools

Co-researchers expressed frustration with generic help tools and instructions that fail to address their specific needs or questions.

Action Items:

* Customizable help tools in all digital platforms
* Improved touchscreen sensitivity in kiosks.
* Step-by-step guides and enhanced digital assistance.

#### Misrepresentation in symbols

This theme addresses the need for clear and universally understandable visual cues, particularly for people with cognitive disabilities.

Action Items:

* Use clear, intuitive emojis and symbols that are easily understood.

#### Design suggestions

This theme focuses on specific, practical solutions raised by co-researchers and reflects the daily barriers that they encounter.

Action Items:

* Implement password management tools with inclusive features.
* Create customizable help tools.
* Implement auto-save features in web forms.
* Design accessible documents.
* Provide technical support for users with disabilities.
* Design websites with adjustable fonts and contrast.
* Allow adjustable volume and Bluetooth connectivity in self-service checkouts and involve users with sensory processing disorders in design and testing.
* Design adjustable point-of-sale systems and provide accessible cubicles that accommodate various heights and ensure privacy.

### Keep up with rapid changes in technology and prevent new barriers from emerging

The rapidly changing nature of technology presents challenges for static accessibility rules. This section discusses the need for regulations and standards that adapt to the rapid pace of technological advancements and prevent new barriers that emerge from becoming entrenched before they can be addressed.

#### Provide rationale and implementation strategies for accessibility

Despite accessibility legislation, practices fail to prioritize accessibility requirements and the reasoning behind the requirements is not conveyed. Co-researchers are aiming to shift the focus towards understanding the “why” behind accessibility initiatives to promote greater comprehension and, therefore, commitment.

Action Items:

* Advocate for legislation that adapts to technological changes and clearly explains the importance of accessibility.
* Prioritize accessibility in procurement contracts to drive market demand.

#### Strategic innovation and continuous improvement

There is a need to balance creativity and innovation with standardization, ensuring that updates and new features maintain or improve accessibility. Innovation in accessible technology is crucial and requires input from individuals who face accessibility barriers not only at the initial development but also after it is released. There should be continuous improvement cycles and opportunities for feedback from individuals using the design. This ensures that new technologies do not introduce new barriers, and that accessibility evolves alongside technological advancements.

Action Items:

* Encourage continuous innovation in accessibility supported by user feedback.
* Establish mechanisms for ongoing evaluation and improvement of accessibility in technology.
* Balance creativity with accessibility in design guidelines and standardize accessibility across apps.
* Regularly review and update accessibility features based on user feedback.
* Reward and recognize innovative accessibility solutions.
* Encourage developers to find innovative accessibility solutions.

#### Comprehensive and flexible accessibility standards

Accessibility standards must be robust, flexible, and adaptable to keep pace with technological advancements. Regularly updated standards ensure that accessibility remains effective even as technology evolves.

Action Items:

* Establish and uphold dynamic accessibility standards focused on performance.
* Regularly review and update standards to incorporate technological advancements and user feedback.

#### Software, network, and device limitations

Co-researchers brought up frustrations with software, networks, and devices, including slow performance, lack of accessibility features, and lack of access.

Action Items:

* Optimize software for faster performance, better zoom options, and dark mode accessibility.
* Expand technology infrastructure in remote areas through partnerships to improve access.

#### Specific guidance and practical implementation

While flexibility within standards is crucial, developers also require clear and specific guidance to implement accessibility features effectively. Practical and actionable guidelines are instrumental in translating standards into tangible accessibility solutions in real-world scenarios.

Action Items:

* Provide developers with specific, actionable guidelines and best practices to implement accessibility effectively.
* Ensure that practical resources are available to help developers understand and apply standards.

### Support integration and interoperability of digital systems

Assistive technologies (AT) and digital domain are complexly connected and interdependent. Functionality is reliant on interoperability. Accessibility regulations have supported a segregated market for specialized assistive technologies (AT) to address needs not addressed by mainstream products, making interoperability almost impossible, thereby degrading functionality for individuals reliant on alternative access. This drives up the cost of digital access for individuals, removes responsibility for accessible design from the companies most capable of providing integrated access, and deprives the general population of the innovations brought about by accessible design.

#### Lack of interoperability and built-in accessibility features

Co-researchers often discussed the barriers to accessibility in kiosks, point-of-sale systems, ABMs, and websites, emphasizing the crucial need for improvements to the user-friendliness of digital platforms and interoperability with their personal and assistive technologies.

Action Items:

* Regularly review and standardize coding practices to ensure compatibility with adaptive technologies.
* Include Bluetooth options in kiosks and point-of-sale systems.
* Improve camera technology in self-checkout systems.
* Design kiosks and point-of-sale systems with adjustable fonts and features for better accessibility.
* Add tactile buttons and voice output to ABMs.
* Regularly conduct accessibility audits.
* Provide clear instructions and alternative formats.
* Support Bluetooth hearing aids in banking devices.
* Add visual interaction features such as a virtual assistant or face on the screen to improve communication for users with hearing impairments.
* Enable font size and contrast adjustments across all screens.

### Foster accessibility innovation

If any population requires innovation, it is the disability community. Yet, legislated prescriptive, testable, technical standards effectively prevent innovation, even accessibility innovation. While it is essential to follow accessibility guidelines, it is also vital to empower developers with the creative freedom to uncover innovative solutions to accessibility challenges. Successful innovation involves the continuous generation, testing, and evaluation of ideas with the population they are designed to support.

#### Recognition and incentives for accessibility innovation and high standards

Embracing innovation in accessibility while continuously striving for improvement is essential. By fostering creative solutions and regularly evaluating their impact, organizations and developers who demonstrate exceptional accessibility innovation can be recognized and rewarded.

Action Items:

* Establish formal recognition programs to honour organizations that demonstrate exceptional efforts in promoting accessibility.
* Showcase best practices for setting benchmarks that inspire others to follow suit.
* Maintain a balance between innovation and ongoing evaluation.
* Encourage and reward innovative accessibility solutions.
* Allow developers creative freedom while ensuring they meet core accessibility objectives.

#### Consideration of previous technology

In pursuing innovation, it is essential to evaluate how individuals using earlier technologies could be impacted or even excluded by the new approaches.

Action Items:

* Design new technologies to be interoperable with existing systems or have a plan for deprecation of old systems that does not overburden individuals with disabilities.
* Integrate familiar features with new advancements to maximize accessibility and success.

#### Cultural change and investment

Accessibility innovation is more likely to flourish when there is a cultural shift within organizations to prioritize accessibility.

Action Items:

* Foster an inclusive organizational culture by promoting awareness and understanding of accessibility issues.
* Encourage investment in accessibility through incentives and research funding.

### Remove disincentives for accessibility compliance

Digital technology accessibility legislation has birthed an accessibility industry that is dependent on the persistence of the problem and boosted by the difficulty of compliance. This same industry is shaping accessibility standards, leading to disincentives to develop a model for standards that would eliminate the need for an ICT accessibility assessment and repair industry.

#### Government mandates and corporate accountability

Co-researchers emphasized the importance of strong government mandates and procurement requirements to drive widespread accessibility. Holding companies accountable would help move accessibility efforts beyond mere compliance and would push accessibility compliance earlier in the delivery chain, removing the need for summative accessibility audits and repairs when technologies are already implemented.

Action Items:

* Advocate for stronger government mandates that require accessibility in technology products and services.
* Implement accountability measures to ensure companies prioritize genuine accessibility improvements.
* Require all levels of government to include accessibility in service and procurement contracts.
* Require a detailed accessibility plan and demonstrate measurable progress in improving accessibility in governmental and private companies’ facilities and products.

### Empower people with disabilities

This section is dedicated to empowering individuals with disabilities to become active participants in the digital world. Standards, with the exception of the Authoring Tool Accessibility Guidelines, often implicitly assume that individuals with disabilities are consumers and not producers of digital products. Accessible coding tools and inclusion in the standards process will empower the disability community.

#### Inclusive design and active involvement of people with disabilities

Co-researchers stress the importance of actively involving people with disabilities in the design and development process of anything that affects their lives. This enables them to influence the creation of technologies that cater to their needs, ultimately enhancing their independence and inclusion in the digital realm.

Action Items:

* Ensure that coding tools are accessible.
* Require accessibility in all standards.
* Use inclusive processes to develop standards.
* Cover the costs incurred to enable full participation by individuals with disabilities.

#### Increase understanding

Co-researchers discussed the importance of creating platforms for open discussions about disability to bridge the gap in understanding of different perspectives and experiences.

Action Items:

* Create platforms for open discussions about disability and accessibility, and encourage honest, respectful communication and involvement of the disability community and other stakeholders.

# Strategies for Regulations

In this section, we consolidate the themes and action items into strategies that may be used to develop new approaches for accessibility standards and ways to regulate the digital domain. The fourteen strategies are as follows:

1. Include guidelines for advisory boards composed of individuals with various disabilities to actively participate in all phases of product development.
2. Implement structured workshops and direct engagement opportunities for developers to work alongside individuals with disabilities.
3. Develop dynamic standards that can adapt to technological changes while maintaining core accessibility principles.
4. Establish a regular review process for updating standards to reflect the latest advancements and feedback.
5. Encourage creative freedom and establish dedicated programs that support the development and testing of new accessibility approaches and establish their compliance with accessibility standards.
6. Require user feedback loops and continuous improvement processes to ensure ongoing evaluation and enhancement of accessibility features.
7. Support standards compliance with public awareness campaigns that highlight the importance of digital accessibility.
8. Support compliance with standards by providing comprehensive training programs on accessibility for developers, designers, and policymakers.
9. Set guidelines for interoperability of digital systems, devices, and assistive technologies.
10. Encourage the integration of assistive technologies with mainstream products and/or customizable interfaces and settings, allowing users to tailor their experience according to their needs.
11. Recognize or provide financial incentives for companies that invest in innovative accessibility solutions and consistently exceed accessibility standards.
12. Implement accountability mechanisms, including penalties for non-compliance.
13. Ensure that new innovations do not exclude individuals reliant on older technologies.
14. Require transition plans for updates and innovations that support continuity and avoid unnecessary disruption for individuals with disabilities.

# Next Steps

The Regulating the Digital Domain (RtDD) project is a pioneering initiative aimed at enhancing digital inclusion and ICT accessibility for people with disabilities. By assembling a multidisciplinary team of advisors and co-researchers, the project tackles six pivotal challenges to develop a regulatory system that effectively governs the digital landscape. The project’s multi-pronged approach includes engaging individuals with lived experiences of disability, addressing systemic issues with current standards, and exploring innovative solutions to prevent barriers.

Through extensive co-research activities, the RtDD team identified over twenty themes aligned with the project’s six major challenges. These themes highlight the need for diverse and flexible accessibility standards, the importance of keeping pace with technological advancements, and the necessity of fostering innovation while ensuring interoperability of digital systems. The findings emphasize the critical role of involving people with disabilities in the design and development process, promoting empathy and understanding among developers, and creating adaptable and user-friendly digital tools.

The strategies proposed for regulations thus far consolidate these themes into actionable steps, such as establishing advisory boards, implementing dynamic standards, encouraging creative freedom, and ensuring continuous improvement through user feedback. These strategies aim to create a more inclusive digital environment by supporting compliance with standards, promoting accessibility innovation, and empowering people with disabilities.

Moving forward, the RtDD project will continue to work with stakeholders to build on the strategies from the first co-designs and reimagine and iterate on regulatory approaches that address the identified challenges. By doing so, the project aspires to significantly improve digital inclusion and ICT accessibility, ultimately informing Accessibility Standards Canada on alternative practices for creating a more accessible digital world.