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Accessible Government Services

- Defining Vulnerable and Underserved Populations
- Common Accessibility Risk Factors
- Leveraging Modern Approaches and Technologies
- Efforts in Government
- Guidelines to Improve the Accessibility

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JOINT COUNCILS' EXECUTIVE MONTHLY REPORT

Developed by the Research Committee

February 2022

1. Introduction

The Research Committee recently published a report titled, "Omni-Channel Service Delivery in Government." One important consideration highlighted in the report is the importance of ensuring that omni-channel strategies do not create new barriers to accessibility for vulnerable and underserved populations (i.e. persons with disabilities, seniors, rural communities, Indigenous peoples, and those with lower socio-economic status).[1]

In this Executive Report, the Research Committee takes a deeper look into the importance of digital accessibility in government. The report also offers guidelines that can be leveraged to help governments take a more proactive approach to ensure the services they design and deliver meet the diverse needs of the population.

Digital accessibility occurs when a digital medium (i.e. a government website, application or electronic tool) can be utilized and understood by users that are vulnerable and/or underserved. According to the Government of Ontario, **"building accessible, digital products and services means users can easily get the service and information they need, regardless of their individual abilities, devices used or environment".[2]**

The COVID-19 pandemic ("the pandemic") accelerated digital transformation efforts across all levels of government. While digital transformation has the power to create a more inclusive society for vulnerable and underserved groups, it also comes with the risk of increasing disparities if those same groups are not given equitable access.[3] There is a risk that rapid advancements in data and technology result in a one-size-fits-all approach that meets the needs of only few clients, leaving many further disconnected from government – both physically and attitudinally.

1. Omni-Channel Service Delivery in Government — Joint Councils' Executive Report January 2022
2. Making government services accessible
3. The Importance of Accessible and Inclusive Public Service Tech in Times of Crisis
4. Ten digital trust challenges
5. COVID-19 exposes why access to the internet is a human right

Why is this Report Important?

- During the pandemic, physical distancing requirements forced clients to rely heavily on digital channels to access essential public services and information. While the adoption of new technologies made government services more user-friendly for some, for others it made services less accessible. The pandemic has demonstrated the importance of designing and delivering truly inclusive and accessible services that can be used for all segments of the population, especially those that are most vulnerable and at-risk of experiencing accessibility barriers.
- Jurisdictions across Canada are committed to ensuring that a high level of accessibility is applied uniformly across its service delivery channels. Technologies and standards are constantly evolving and accessibility plays a major role in making governments more effective and inclusive.[4] A more consistent, convenient, clear, and easy client experience when using government services online is key to building trust.
- In 2016, the UN General Assembly passed a non-binding Resolution that declared digital access as a human right.[5]

What is Covered in this Executive Report?

This report includes the following:

- Introduction
- Defining Vulnerable & Underserved Populations
- Common Accessibility Risk Factors
- Leveraging Modern Approaches and Technologies
- Efforts in Government
- Guidelines to Improve the Accessibility

2. Defining Vulnerable & Underserved Populations

Specific groups within the population have been shown to be especially vulnerable to experiencing accessibility barriers related to government services. These groups include (but are not limited to):

- **Persons with a disability:** The UN Convention on the Rights of Persons with Disabilities defines persons with disabilities as those who have long-term physical, mental, intellectual and/or sensory impairments.[6] Not all people with disabilities encounter barriers in digital accessibility, and those with different types of disabilities encounter different forms of barriers. For example, a person in a wheelchair may not encounter barriers at all when accessing digital content. However, a person who is blind is likely to experience a number of barriers given the visual nature of most digital content (i.e. the inability to navigate within a page of content, time limits to complete an application, etc.).
- **Seniors (age 65+):** Many seniors may experience accessibility barriers due to challenges using technology (i.e. difficulty using a mouse, and/or reading small text, etc.).[7] Although many seniors are frequent users of the internet, many lack access due to limited means and ability.
- **Recent newcomers:** When services are offered in a language newcomers are not proficient in (i.e. clients with limited English proficiency [LEP]), they may experience communication barriers. For some newcomers, it may be difficult to understand and/or provide informed consent, as well as communicate their needs effectively.[8]
- **Indigenous peoples:** Many Indigenous communities (First Nations, Inuit and Métis peoples) living in rural and remote areas face accessibility challenges due to the lack of digital literacy, the high costs of online access, and the ack of connectivity.

6. The United Nations Convention on the Rights of Persons with Disabilities: An Overview
7. How can we ensure digital inclusion for older adults?
8. ISSofBC launches resources to help newcomers overcome digital literacy barriers
9. Digital divide: Improving Internet access in the developing world through affordable services and diverse content

Common Accessibility Risk Factors

Vulnerable and underserved populations are more likely to experience one or more of the following risk factors when accessing digital government services:[9]

Affordability
Lower income, expensive devices and high telecommunication fees are all factors that predict lower levels of accessibility. Lacking disposable financial resources makes it difficult to purchase devices and gain access to digital services. Users must cover the device, connection fees, call costs, text messaging expenses, and broadband access. This puts access out of the range of many individuals.

Reachability
Weak infrastructure (i.e. fiber optic lines, cell towers, reliable electricity, etc.) is a major barrier to digital access. Those living in rural and remote regions are more likely to experience limitations accessing digital services due to disproportionate broadband connectivity issues. The pandemic highlighted the connectivity gap between urban, rural and remote communities as people across the country were mandated to stay home and access essential government services online.

Digital Literacy
Digital literacy is having the knowledge, skills and confidence to keep up with changes in technology. People are under pressure to remain up to date for civic and social participation, to access government services, and to succeed in a digitizing economy. However, vulnerable and underserved populations lack digital literacy due to the inability to find, evaluate, and clearly communicate information through typing and other media on various digital platforms.

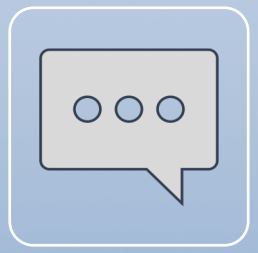
Lack of Digital Trust / Preference
Clients may resist accessing digital services due to concerns about the role technology plays in their lives, as well as fears regarding cybersecurity threats and their data privacy. As a result, some clients may prefer to access public services through traditional (in-person) channels rather than online. In order to ensure products and services are accessible to these clients, it is critical that alternative and non-digital delivery channels (i.e. in-person) remain available to meet their needs.

3. Leveraging Modern Approaches and Technologies to Address Accessibility Barriers

Digitization is critical to deliver the rapid transformation of public services that will provide clients with the same level of service they receive from the private sector. However, this must be done in a way that ensures that no groups are left behind. To do this, digital strategies must think beyond websites and PDF forms. There is an opportunity for governments (at all levels) to leverage modern approaches and technologies that can be instrumental to meet the changing needs and expectations of various segments of the population. These modern approaches and technologies are highlighted below:

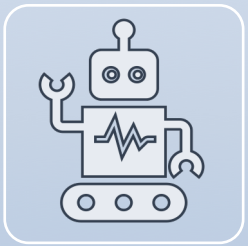
Design Thinking

- The design thinking methodology provides a process for creative problem solving. It encourages organizations to focus on the people they are creating for, which leads to better products, services, and internal processes.[10] A key technique in design thinking is client journey mapping – a detailed visualization that reveals how a user-based persona is feeling throughout the process of using a particular product or service. Journey maps enable organizations to better understand the unmet needs clients.



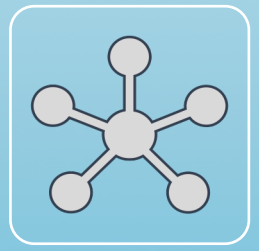
Chat

- Chatbots are software applications that use artificial intelligence (AI) and natural language processing to understand what a client wants and guides them to their desired outcome with minimal effort from the end user.[11] Chatbots provide a "personal touch" when navigating a service. It can be helpful for lower-literacy users who are often overwhelmed by a page full of text. AI-powered chatbot can better serve clients by addressing questions regarding government services.



Virtual Assistants

- This technology goes beyond chat for navigation, a virtual assistant service walks a user through accessing a service as if they had a government employee sitting next to them. A virtual assistant uses advanced AI, robotic process automation (RPA), natural language processing, and machine learning to extract information and complex data from conversations to understand needs and process them accordingly.[12]

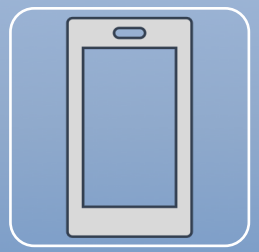


Omni-channel

- An omni-channel experience allows clients to interact with government across multiple channels as part of one seamless client journey. A true omni-channel experience implements a "tell us once" service so clients (especially those experiencing accessibility barriers) do not have to refill their personal data online for different government transactions.[13]

Web Apps

- Web applications are a powerful, intelligent way to deliver digital government services and information to users in an accessible format.[14] Web accessibility standards and reactive design ensures that users can access these services using anything from screen readers, phones, and dual monitors.



Mobile Apps

- Developing a mobile application (app) with accessibility in mind can drastically improve client experience for all users. Both Android and iOS platforms offer various tools to help incorporate accessibility solutions in mobile apps. UX designers and developers can leverage the accessibility features that are available (i.e. custom text sizing, voice feedback, etc.) to develop a software product that is accessible for everyone.[15]

10. Design Thinking, Empathy Maps, Journey Maps, and how they are interconnected
11. The Ultimate Guide to Chatbots
12. Five things you need to know about AI virtual assistants
13. What is an omnichannel customer experience?
14. Web application (Web app)
15. How to create an accessible app (and why you should)

4. Accessibility Efforts in Government

Digital service delivery is increasingly becoming an integral part of daily life. The pandemic accelerated digital transformation efforts in government and the use of digital channels to help clients access essential services and information. For this reason, it is critical that digital technologies are accessible and can be used by everyone, including vulnerable populations at-risk for experiencing digital exclusion.

Government organizations globally are currently working towards making public products and services more inclusive and barrier-free. The following are some examples of accessibility efforts around the world:

Additional Accessibility Resources and Services:

- 18F Accessibility Guide
- Center for Medicare & Medical Services — Accessibility and Compliance with Section 508
- EU directive on accessibility
- The A11y Project
- NASCIO Accessibility in IT Procurement Part 1
- NASCIO Accessibility in IT Procurement Part 2

16. New French Digital Accessibility Requirements in Effect and On the Horizon
17. Web Accessibility Observatory Tracker
18. Section 508 Testing
19. DWP Accessibility Manual

Examples of Accessibility Efforts in Government

France

In 2020, the French government issued a new law and corresponding technical order (known as the General Accessibility Reference for Administrations, or RGAA) that imposed a range of accessibility obligations on businesses earning more than €250 million in annual revenue in France.[16] The RGAA requires covered businesses to make websites, mobile apps, and other online services in France to be accessible to people with disabilities.

Spain

The Ministry of Territorial Policy and Public Service of Spain developed the OAW (Observatory of Web Accessibility) Tracker to improve the accessibility of the country's government websites. The OAW Tracker automatically generates reports on the accessibility of web content, and provides recommendations on how to resolve the problems detected. The online diagnostic service analyzes more than 60,000 government-run pages annually.[17]

United States

The Department of Homeland Security (DHS) Office of Accessible Systems & Technology (OAST) has a mission to provide strategic direction, technical support, and training to ensure agency employees and clients with disabilities have equal access to information and data.[18] Section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d), requires all federal departments and agencies to ensure that their information and communications technology (ICT) is accessible to people with disabilities.

United Kingdom

The DWP Accessibility Manual offers an overview on the different laws and standards that impact accessibility in the UK. The manual also provides guidance for the most common job roles that encounter the topic of accessibility day-to-day (i.e. content designers, software engineers, front-end developers and user researchers). In addition, the manual includes shared best practices on tools, testing methods and a "how to" guide to set-up effective teams that deliver accessible services.[19]

5. Guidelines to Improve the Accessibility of Government Services

Governments must implement digital inclusion policies, programs and tools. This will help plan digital service delivery mechanisms that cater to and meet different and specific needs. By doing so, governments can become more effective, efficient, and address digital exclusion to help build a more equitable and better government for all.

The Web Content Accessibility Guidelines (known as WCAG 2.1) is an internationally recognized set of recommendations for improving web accessibility.[20] The design principles highlighted in the guideline aim to ensure that digital services, websites and applications are accessible to everyone, including clients experiencing accessibility barriers. By focusing on principles, and not technology, WCAG 2.1 emphasizes the need to think about the different ways in which clients interact with content. WCAG 2.1 is based on four design principles:

Tools and Training from the World Wide Web Consortium (W3C):

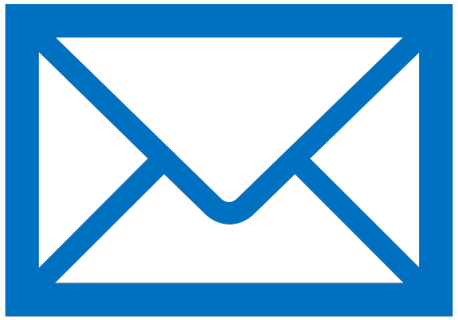
- How People with Disabilities Use the Web: Overview
- Web Accessibility Perspectives: Explore the Impact and Benefits for Everyone
- Web Content Accessibility and Mobile Web: Making a Website Accessible Both for People with Disabilities and for Mobile Devices
- WAI-Tools Project
- Accessibility features in Story Map Journal and Story Map Series

20. Understanding WCAG 2.1
21. Web Content Accessibility Guidelines (WCAG) 2.1

The Web Content Accessibility Guidelines: Design Principles

Note: The list below is an overview and does not replace the WCAG 2.1 guidelines, which provides a full explanation of all four principles and requirements.[21]

Principle 1: Perceivable	Ensure users can recognize and use your service with the senses that are available to them. For example: • Provide transcripts for audio and video • Ensure content is structured logically and can be navigated and read by a screen reader • Ensure the service is responsive (i.e. to the user's device, page orientation and font size they prefer).
Principle 2: Operable	Ensure users can find and use your content, regardless of how they choose to access it (i.e. using a keyboard or voice commands). For example: • Use descriptive links so users know where a link will take them • Use meaningful headings and labels • Allow users to play, pause and stop any moving content
Principle 3: Understandable	Ensure users can understand your content and how the service works. For example: • Use plain English • keep sentences short • do not use words and phrases that people won't recognize (provide an explanation if this cannot be avoided) • Explain all abbreviations and acronyms, unless they are well known and in common use - for example UK, EU, VAT • Make it clear what language the content is written in, and indicate if this changes
Principle 4: Robust	Ensure your content can be interpreted reliably by a wide variety of user agents (including reasonably outdated, current and anticipated browsers and assistive technologies). For example: • Use valid HTML to allow user agents (including assistive technologies) to accurately interpret and analyze content • Allow users return to what they were doing after they've interacted with the status message or modal input



For Further Reading

- When we design for disability, we all benefit
- Study: Digital literacy doesn't stop the spread of misinformation
- Government testing identifies accessibility issues on 99% of public sector websites
- Rural communities risk catch-22 situation as shift to online gathers pace but poor connectivity still leaves many behind
- Low-income seniors can get TELUS high speed internet starting at $9.95 per month across British Columbia and Alberta
- For Equity in Government Services, It's Time to Change the Paradigm

Other noteworthy articles:

7 steps to undertaking a Privacy Impact Assessment

Prioritizing customer experience in government

Why cloud computing providers must comply with data protection principles

Council Post: Collaborating with the government—Lessons & experiences

Research Repository

Access the Citizen First Research Repository.

Recent entries on the research repository:

Omni-Channel Service Delivery in Government — Joint Councils' Executive Report January 2022

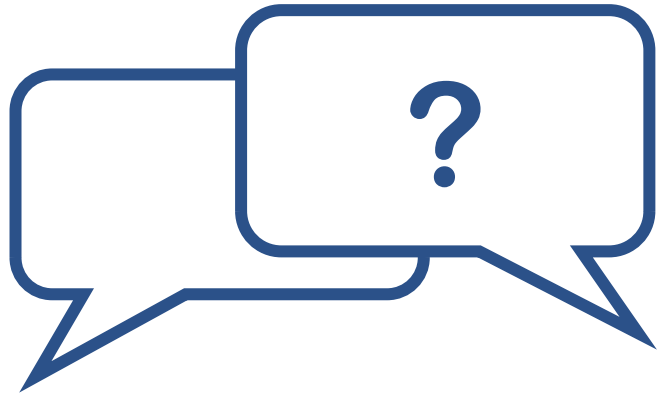
This report includes the following: Introduction, Benefits of Omni-Channel Service Delivery, Key Considerations, Omni-Channel Strategies in Government, Strategies to Implement Omni-Channel Service Delivery in Government

Trends in the Daily Newsletter

As the impact of the Omicron variant is being felt worldwide, digitization and surveillance efforts are expected to continue across all levels of government. According to Digital Journal, this will create more privacy issues and breaches in 2022. To mitigate this risk, organizations and their data processors/intermediaries need to be clear with their respective roles under data protection laws.

According to Federal News Network, designing and delivering equitable customer experiences requires an analytics platform that integrates disparate data, making analytics accessible to users for a full understanding of your customers and your performance. Providing real-time views of key metrics and incorporating predictive analytics can identify service gaps, improve outcomes, increase operational efficiencies and optimize workforce productivity, leading to a better customer experience at every touchpoint.

Canada's children and youth are growing up at a time of unprecedented technological change that carries with it ever-increasing risks for their privacy. It is therefore vital that they be equipped with the critical thinking tools and awareness of online pitfalls. The Office of the Privacy Commissioner of Canada (OPC) is launching a number of resources in time for Data Privacy Week to help teach children the value of protecting their privacy, and develop the skills to do so.



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