What is Digital ID and How Does It Impact Key Industries and Their Customers?

What is Digital ID?

Identity is a type of information about an entity (for the sake of simplicity, a person) that uniquely describes the entity within a given context. In other words, identity is a collection of indicators (or attributes) about a person (entity) that make that person unique. Digital identity (ID) is a set of attributes that links a physical person with their online interactions. Digital ID refers to one’s online persona - an online footprint. It touches important aspects of one’s everyday life, from financial services to health care and beyond.

This paper is the fourth in a series prepared by the Digital ID and Authentication Council of Canada (DIACC) highlighting the potential impact that digital ID could have on key sectors of the Canadian (and global) economy. In this paper, we focus on civic engagement.
The 2019 federal election faces various threats that are characteristic to the digital age - from misinformation spread on social media platforms, to abuses of voter privacy and hacking of political parties.

While participation in the electoral process is often seen as an important measure of democratic health, and one that is crucial for representative policy-making and a strong civic culture, declining rates of voter turnout has been a concern for several decades. With various hurdles, various demographics run the risk of exclusion from these conversations.

In the 2015 election, registration was an issue for Indigenous electors (First Nations, Inuit and Métis electors aged 18 and older who live on- and off-reserve). Identification was cited as an administrative barrier in the 2015 survey of electors - 4.6 per cent said that their main reason for not voting was the inability to prove their address or identity. 21 per cent of First Nations respondents listed ID requirements as a barrier to voting.

Some voters on reserves were even required to wait in a line ahead of the line to register and vote because they first had to receive a letter of Confirmation of Residence from their band office as proof of address. Having a secure digital ID that could be utilized across services for all Canadians would remove these barriers, as it would provide an easy way to verify one’s identity.

Additionally, many First Nations communities are in remote areas. Various efforts have been made to reach voters in these communities - such as a pilot project that has been launched in 87 remote communities.

Elector with disabilities face challenges with physical access to the polling locations, and many need to rely on family members for transportation. In the 2015 survey of electors, many individuals from this group were found to be significantly less likely to use a driver’s licence than electors with no disability.

Due to various socio-demographic and political factors, political participation among younger generations is in decline. With the advent of new communication technologies, there have been great strides to reach out to youth voters as much as possible to reverse this trend.

In 2015, the Canadian online voter registration service, which for the first time was available within the context of a general election, was used by more than 1.7 million Canadians, 70 per cent of whom were under the age of 45.

According to an October 2016 parliamentary information report, Canada’s youngest voters have failed to show up at the polls for federal elections in the same numbers as their older counterparts since the 1980s.

Governments are increasingly harnessing social media platforms to interact with citizens and crowdsource information in real-time. Former U.S. President Barack Obama held Facebook town halls and used Facebook Live Q&As to connect with young and tech-savvy audiences. In 2014, however, the social media giant revealed that up to 11.2 per cent of its users could be fake accounts.

Blockchain technology offers a potential solution to address security concerns surrounding electoral systems (a blockchain is a peer-to-peer network for exchanging anything of value, such as money, intellectual property and votes). Leveraging this technology could help to secure elections through its ability to centralize the management of voter identities.

In a blockchain-based system, trust in the voting process is gained through cryptography, code, as well as collaboration among citizens, government agencies, and other stakeholders. No longer does faith solely lie in one single institution (traditionally, the public has placed their trust in the hands of state and federal agencies and other civic institutions).

In such a system, citizens would use digital voter IDs to prove who they are, with each digital ID being unique to each person. These would be comprised of proofs of residence and citizenship, biometric data, and voter registration.

At the most basic level, a legal identity is required to vote. Creating an easily accessible and secure digital ID with blockchain technology could give people the ability to vote, resulting in greater voting participation.

Traditional forms of citizen engagement, such as town hall meetings and public meetings, are time-consuming and inaccessible for many.

By connecting with those who are less likely to attend a public meeting, such as young people, families with children, those in northern and remote communities, and people with physical disabilities, digital platforms can increase engagement, as more diverse groups can be engaged.
What This Means For Stakeholders

Digital ID has far-reaching impacts, for a variety of stakeholders.

Citizens

- In a 2017 DIACC white paper on citizen engagement, it was noted that: “By providing further assurance that a neighbour is who they claim to be, an accountable community of trust is enabled to grow. Authenticated participants may also choose to engage by connecting with their neighbours. This type of engagement encourages neighbours to interact on an ongoing basis, in between consultation topics.”
- In the online environment, having assurance on the validity of the identity of one’s peers will result in the growth in the community of civically-engaged and informed users who have a meaningful impact on their communities. Furthermore, digital ID authentication has proven to be an effective deterrent against online behaviour such as trolling and spamming.
- Electronic signatures are often used in sectors such as government institutions, banking, and real estate to safeguard the transmission of data across the internet.
- The opportunity to vote online would be transformative for those living in rural and remote areas, for whom it is difficult to travel to vote in-person.
- The inconvenience of voting - time and distance spent travelling to a polling station, and having to wait in long line-ups are other reasons for not casting a ballot.
- Attacks on voter registration databases can jeopardize people’s ability to vote. If their identity has been removed from the database, they would be unable to check in at the polls.
- With digital technology, online communications and connections between citizens can help to mobilise existing communities and create new ones.
- A secure digital ID would help to strengthen trust in the political system, as citizens would have confidence that their vote will be accurately recorded.
- Younger Canadians express less confidence in Elections Canada than do older Canadians, which reduces their likelihood to vote.
- The following practices contribute to a lack of trust in the voting system: ‘Astroturfing’ refers to falsifying the identity of participants. Usually part of the decision-making organization, this makes it seem as if there is a great amount of grassroots or community support. ‘Ballot-stuffing’ occurs when people create multiple accounts to participate more than once, creating the illusion of a false majority.

Policymakers

- A secure digital ID can improve the legitimacy of data in decision-making, as it would decrease the frequency of such deceptive practices outlined above.
- By facilitating the generation and communication of data, digital technologies can assist with building knowledge and inform timely decision making and action, both by citizens and policymakers.
- Concerns surrounding election security have led to individuals resorting to manual processes.
- With concerns surrounding the role that false news and hackers may have played in the U.S. election, the Dutch government decided to count all ballots by hand in 2017 - a time consuming, costly and error-prone method.
- Electronic processes will result in increased time savings, freeing civil servants to do more meaningful work.
Real-Life Applications

Secured with smart biometrics, Voatz is a mobile election voting platform. On the app, authentication is a three-step process: the voter scans their state driver’s license or passport, takes a live facial snapshot and touches the fingerprint reader on their smartphone, which links their device to the individual. The system also enables voters to verify their own votes - by scanning their QR code after casting their ballot, they are able to see that their vote was properly recorded. The app was piloted by West Virginia for deployed voters (military members and their families living overseas), and in the 2018 U.S. midterm elections, nearly 140 West Virginians living abroad in 29 countries voted via mobile device. This year, Utah County tested the app, and saw a higher percentage of voter turnout for overseas voters than those residing in the County.

The small Baltic nation of Estonia is a world leader in electronic voting (i-Voting). After logging onto the system using an ID-card or Mobile-ID, the voter casts a ballot. The voter’s identity is removed from the ballot before it reaches the National Electoral Commission for counting, which ensures anonymity. In the recent parliamentary elections, almost half of the counted votes were cast online (247,232 out of 561,131), a 40 per cent increase from the previous election. A study found that Estonians have a trust in i-Voting, which is on the rise, and is also 50 per cent cheaper than conventional paper-based voting. Additionally, the i-Voting process saves more than 11,000 working days per election.

While not a replacement, digital engagement is another technique that can be used to engage communities, and serves as a complement to in-person tools to reach audiences that are harder to reach. There still remains a digital divide between those with access to digital tools and those without, and there are challenges of not having an ID. Due to the fact that they can’t prove who they say they are, there are 1.1 billion people on the planet who lack access to vital services. With a focus on social purpose and doing good, DIACC member Yoti has introduced Yoti Keys, which provides people a way of identifying themselves even if they do not have a smartphone or official identity documents.
Where do we go from here?

“Rebuilding trust in democracy starts with digital identity verification,” argued Vinny Lingham, CEO and co-founder of secure ID platform Civic. “When there is an inability to prove who you are, it creates a ripple effect, leaving a wake of disinformation and distrust.” Democracy and strong citizen engagement are the underpinnings of our society, and trust is central to this. Digital ID can help to establish that trust.

So now the question becomes: how can you take action to progress digital ID?

• Examine the physical and paper-based transactions and consider what could be automated if that person could be digitally verified. When considering new technologies, consider the risks.

• “Election technology must be introduced very carefully, it must be tested to fulfill its functional role, and more importantly, that it wouldn’t do things it is not supposed to do,” warned Liisa Past, cyber security expert on election technology.

• Explore current transactions that your business conducts online - how much assurance do you have that your customer is who they say they are?

• Start interacting with digital ID partners to discover how their tools and services could help you incorporate the benefits of digital ID into your organization.

• Collaboration is essential. Working together across the public and private sectors is key to creating a successful approach to the implementation of digital ID systems. Stakeholders must work together to strengthen and maintain civic engagement in the digital age.

Finally, join DIACC to have a seat at the table where frameworks and strategies are being developed so that they work for your organization. With members from both the public and private sectors, strong collaboration is intrinsic to the work that we do.

Reinforcing Key Values

Providing Canadians with control, consent and convenience, as well as transparency in governance and operation are the core components of a digital ID system - these same values are set out in the DIACC’s Digital Identity Ecosystem Principles.

Ensuring that privacy is exchanged on a need-to-know basis will improve consumer security, and enhances trust in their provider of digital transactions. DIACC holds that digital ID is critical to the growth and efficiency of the digital economy, and there is the potential to generate more than C$15 billion of value to the economy.

Furthermore, privacy and user control are crucial components of DIACC’s Pan-Canadian Trust Framework, the goal of which is to enable and support the establishment of a secure and privacy-enhancing Canadian digital identity ecosystem.