ontario chamber of commerce

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Executive Summary

When businesses adopt technology, they tend to become more productive, competitive, and resilient. The business case for digitization took on new heights during the COVID-19 pandemic, as consumers moved online and employers were pushed to use technology in new ways – from e-commerce to remote working arrangements – as a means to stay afloat amid public health restrictions.

However, technology adoption can be an uphill battle and small businesses tend to be less digitally mature than larger businesses, given their limited access to **resources** and **skills**. Climbing that hill can be especially difficult for traditional brick-and-mortar businesses as well as rural and remote employers, among others.

This policy brief provides a snapshot of technology adoption among Ontario's small businesses and offers policy solutions to help them bridge digital divides. Select services and programs that exist to help address this challenge are also highlighted throughout the document to support small businesses across the province with their own digitization efforts.

Summary of Recommendations

Recommendations		Government of Ontario	Government of Canada
Access to Resources	1. Broaden eligibility for technology adoption programs to include non-profit organizations.	✓	✓
	2. Make it easier for small businesses to access digitization supports.	✓	✓
	3. Improve access to private capital and credit for small businesses.	✓	
Access to Skills	4. Develop and scale successful digital training programs for small business owners and employees.	✓	✓
	5. Build more inclusive digital training programs.	✓	✓
	6. Expand work-integrated learning programs and incentivize smaller employers to participate in them.	✓	
Broadband	7. Continue to prioritize and accelerate the rollout of broadband across Ontario.	✓	
	8. Address inefficiencies and barriers to private sector broadband investments.	✓	
	9. Explore “dig once” strategies, future-proofing of digital infrastructure, and opportunities for better data sharing around broadband gaps.	✓	

Introduction

Digital Maturity Among Small Businesses in Ontario

Technology adoption is a perennial issue for businesses. The right digital tools can help boost their productivity, improve customer engagement, reach new markets, compete, and grow. Yet digitization can be challenging, especially for small businesses with limited access to resources, digital skills, and/or high-speed Internet connectivity.

Digital maturity is not just important for small businesses, but also for the customers they serve. In Ontario, small businesses employ over 60 percent of Ontario's labour force. They breed competition, innovation, and choice for consumers, and their role in broader supply chains has a ripple effect across regional economies.

When small businesses adopt technology, it drives up labour productivity.[i] This is particularly important in Canada, where productivity (measured by GDP-per-hour-worked) lags behind that of the United States, the United Kingdom, Germany, and other comparable economies.[ii] Procurement of digital tools among small businesses also induces demand that helps the technology sector grow, creating additional jobs and tax revenue.

Most businesses in Ontario recognize the value of digitization and had been working towards it prior to the COVID-19 pandemic. The pressure to adopt technology came largely from customers, who were becoming increasingly accustomed to the convenience of online shopping and connecting with services and products through mobile apps, live chats, and other digital avenues.

The COVID-19 pandemic accelerated a significant uptick in technology adoption among businesses and households. In 2020, as non-essential businesses were forced to shut their doors temporarily, technology became a lifeline. Businesses found new ways to engage with both their customers and staff remotely. Since then, some businesses have permanently shut down their offices and moved to remote work full-time – making digital resilience vital to their operations.

Retail e-commerce sales jumped 127 percent from May 2019 to May 2021 in Canada.[iii] Many small businesses rushed to set up their own websites, join online marketplaces, and use social media channels to reach customers at home. Click-and-collect became popular. Ontarians became accustomed to faster, cheaper, and more convenient delivery options.

Digital payments also continued to climb – a trend that predated the pandemic. In 2020 alone, cash transactions dropped 10 percentage points as a share of total transactions in favour of digital wallets, credit, and debit options.[iv]

With the growth in digital interactions, cybercrime has become more prevalent. Small businesses are often targeted by cyber criminals, both because they tend to have weaker security measures and they can serve as entry points to larger businesses that they supply to.[v] In 2021, one in five small businesses said they had been affected by a cyber attack or data breach.[vi]

For small businesses, despite the challenges, digitization has become fundamental to their survival. Survey data suggest small businesses feel they are benefitting less from technology than larger ones, but the majority are open to digitization. In Ontario:

The majority of all businesses (64%) are open to new digital technologies.[vii]

54% of small businesses feel they are benefitting from new technologies, compared to 81% of large businesses.

24% of small businesses have plans to adopt new or additional digital technologies this year, compared to 39% of medium-sized and large businesses.

Rural businesses are significantly less likely to have plans to adopt new technology (only 17%).

Digital Technologies

Technology is a broad concept. This brief focuses on digital technologies, i.e., online tools that can help businesses improve their operations or engagement with clients, customers, and/or staff. E-commerce is a prime example of a value-add that has gradually evolved into a baseline expectation from consumers over the past two decades. Whether a business operates in the retail, food, accommodation, personal care, or other sector, an online presence can help them attract more customers at a lower cost.

Examples of digital technologies commonly used by small businesses include:

- E-commerce websites/ platforms
- Digital payments systems
- Cloud computing services
- Search engine optimization
- Project management software
- Inventory management software
- Digital collaboration tools

A closer look within the small business community reveals that experiences with technology vary considerably. Businesses in rural regions are significantly less likely to have technology adoption plans (as observed in the survey results above). Sectors exposed to international trade tend to be more digitally mature, as competition breeds innovation.[viii]

A business owner's demographics may also shape their experience with technology. For example, only 13 percent of businesses owned by persons with disabilities have plans for technology adoption this year (compared to 23 percent of all businesses). Age also matters as software usage is more common among businesses with younger owners, on average.[ix]

Despite these differences, there are shared challenges many small businesses encounter. The OCC's 2021 Business Confidence Survey reveals the main barriers to digital maturity among small businesses were capital costs, access to skilled workers, and broadband connectivity.[x] The remainder of this document will primarily focus on the first two challenges – resources and skills – while recognizing that no level of digitization can occur without broadband connectivity, which must remain a priority for all levels of government.

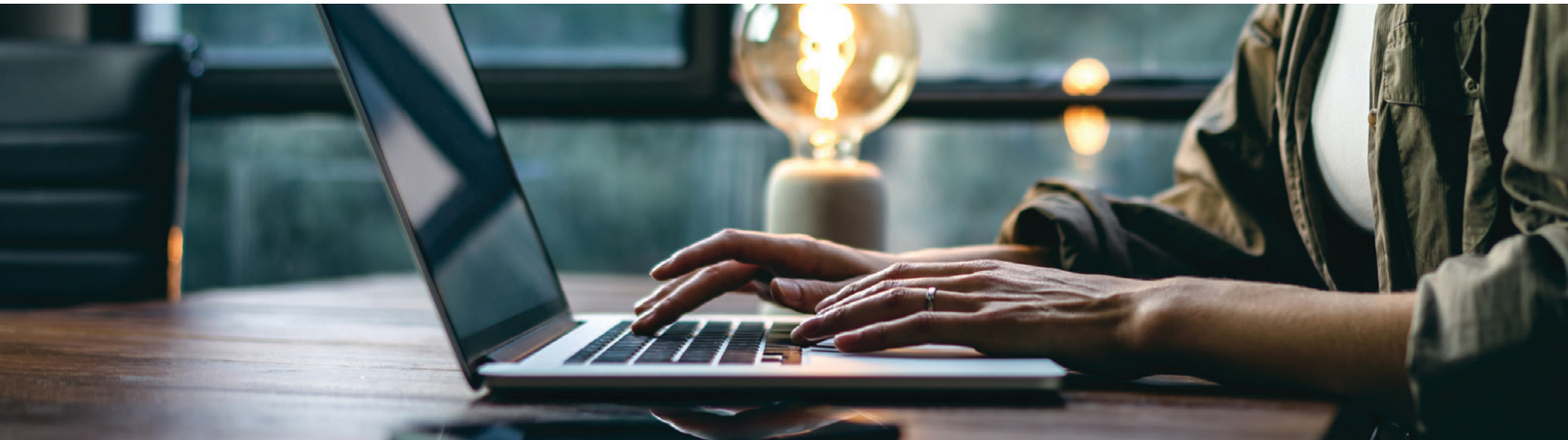
Barriers to technology adoption	Small business
Capital costs required	51%
Access to technically skilled workers	42%
Broadband connectivity	35%

Part 1: Resources

Resource limitations can hinder technology adoption for any organization. However, this tends to be a bigger challenge for small employers, especially brick-and-mortar businesses with smaller margins and limited access to external capital. Particularly in the current high-inflation environment, there is often very little left over for digitization.

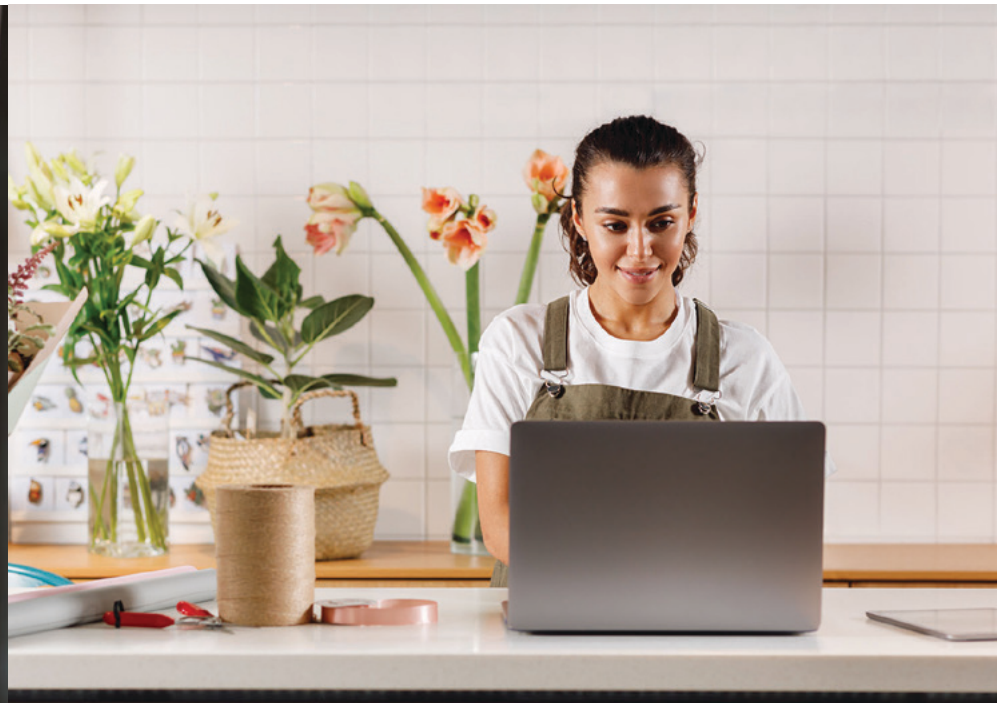
Governments stepped up during the pandemic as technology became essential for business continuity.

Ontario's **Digital Main Street** (DMS) program was launched in 2018 as a joint initiative between the Governments of Canada and Ontario aimed at helping small businesses improve their digital capabilities through grants, workshops, service squads, and training. The program builds on the success of a City of Toronto program and leverages partnerships between technology startups and Business Improvement Areas across the province. By April 2022, DMS had already helped more than 41,000 Ontario businesses, with additional funding announced to double its reach. Among businesses, the program has been mostly perceived as a success. Funding and services have been easy to access and effective in delivering their intended objectives.



Similarly, the **Canada Digital Adoption Program** (CDAP)[1] was launched in 2022 by the federal government to help Canadian small and medium-sized businesses. Through CDAP, eligible businesses can access two forms of funding:

- *Grow Your Business Online* – micro-grants of up to $2,400 to help pay for costs related to adopting digital technologies. In response to stakeholder feedback, the federal government recently expanded eligibility for this program to include businesses with no employees (other than the owner) as long as they have at least $30,000 in annual revenue.
- *Boost Your Business Technology* – grants to help pay for the services of a digital advisor, who supports with the development of a digital adoption plan. Businesses also have the opportunity to secure zero-interest loans of up to $100,000 from the Business Development Bank of Canada to help implement those plans.

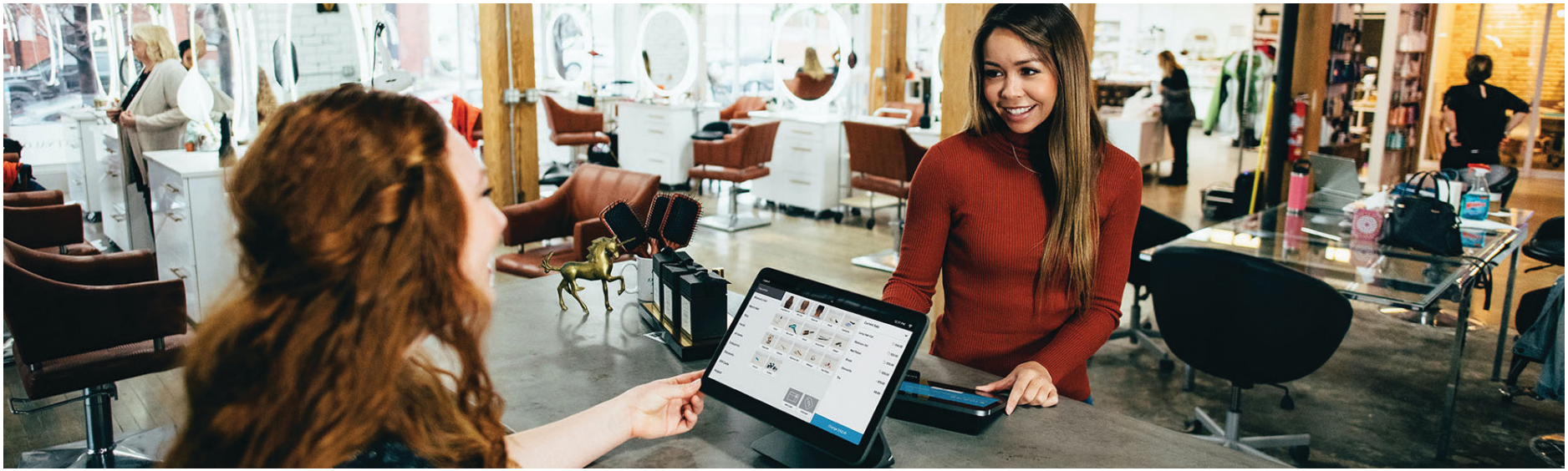


1 The Ontario Chamber of Commerce is a delivery partner for the Grow Your Business Online grant.

In November 2022, the Government of Ontario launched a **Digitalization Competence Centre** that will provide advisory services, funding, and other resources to help small and medium-sized enterprises adopt digital technologies.[xi] The Centre will be led by the Ontario Centre of Innovation.

Meanwhile, the barrier to entry for small business digitization has been mitigated by growth in **e-commerce marketplaces** (such as Google, Shopify, Amazon, and Pinterest), which have transformed the retail landscape for small businesses. Consumers benefit from more convenience and optionality, while businesses can attract and acquire more customers at a lower cost.[xii] Some technology companies also offer affordable services, software, and guidance to help small businesses adopt and use technology effectively. For example, **Google for Small Business** offers a free Digital Essentials Guide, business profile, marketing channels, and other services to help businesses get started with their online presence.

Despite the range of programs and services already available, 37 percent of businesses surveyed by the OCC in Fall 2021 said they would like to see governments prioritize technology adoption programs, making it their fourth highest policy priority overall.[xiii]



Recommendations:

1. Broaden eligibility for technology adoption programs to include non-profit organizations.

Technology adoption programs will continue to be critical for small businesses in an era of post-pandemic recovery. Eligibility criteria should be extended to employers that may have previously been excluded, recognizing that digitization has a positive ripple effect on supply chains and productivity across the economy more broadly.

Notably, non-profit organizations have been excluded from Digital Main Street (as well as other business support programs), yet their economic contributions are just as important as those of small businesses. The non-profit sector includes social service providers but also Business Improvement Areas and local chambers of commerce and boards of trade. According to the Ontario Nonprofit Network, 74 percent of non-profit organizations reported an increase in demand for services in 2022, coupled with inflation, growing labour shortages, and decreased revenues.[xiv] While they are not a panacea, digitization supports can help many organizations in the not-for-profit sector raise more funds and continue operating when faced with difficult economic headwinds.

In some cases, it may be more appropriate to develop distinct technology adoption programs for the non-profit sector to reflect their unique needs. For example, Canada's Special Senate Committee on the Charitable Sector recommended establishing a distinct funding stream for non-profit organizations to invest in shared technologies to manage their human resources and/or other administrative requirements.[xv]

Recommendations:

2. Make it easier for small businesses to access digitization supports.

As a relatively new area of programming, it is important that policymakers evaluate the outcomes of digitization supports and ensure they are benefitting small businesses that would not otherwise have the internal resources and capacity to digitize.

Ultimately, it needs to be as easy as possible for busy entrepreneurs to apply, access, and trust the supports offered to them. This involves:

- **Clarity of communications**: Small businesses need simple, consistent, and transparent information around eligibility and timelines. Information should be provided in multiple languages for non-anglophone audiences. Programs should be advertised widely as smaller employers are often unaware of what is available to them.
- **Proportional funding and minimal administrative burdens**: The time and effort required to access funds should be minimal and proportional to the amount of funds being disbursed. For example, businesses are concerned about the requirements around the CDAP's micro-grant of $2,400, and some have asked the federal government to increase the amount to ensure it is sufficient to drive digital adoption in a meaningful way.
- **Reliable recourse**: Should any issues arise with a program's application or delivery process, small businesses should have confidence in their ability to receive support from a dedicated channel. This also means they need a timely appeals mechanism that would give applicants an opportunity to contest decisions.
- **Inclusivity**: While most digitization programs are intended to support the general small business community, policymakers should consider carving out a portion of available funds for underserved entrepreneurs with specific technology needs. For example, businesses owned or operated by people with disabilities are less likely to adopt technology and may benefit from targeted supports that would help bridge the gap.

Recommendations:

3. Improve access to private capital and credit for small businesses.

Small businesses often do not have the kinds of patient capital required for technology and other growth-enabling investments. In Canada, this has resulted in a persistent gap in small business growth relative to the United States and other peers.[xvi]

Policymakers can use a suite of tools to improve their access to capital and credit. For example, Ontario's 2021 Capital Markets Modernization Taskforce Report outlines several opportunities to improve the small business community's access to a broader range of investors through capital markets.[xvii] Recommendations include reducing the reporting burden on small public companies and introducing a fund structure that makes it easier for retail investors to put their dollars towards small businesses.[xviii]

In parallel, the Ontario government can consider offering tax incentives to private investors that choose to invest in small businesses, such as New Brunswick's Small Business Investor Tax Credit. Assuming businesses use the extra capital to adopt technology, they should see productivity improvements that yield a good return for their investors.

Capital can also be unlocked through loan guarantees, developed in partnership with financial institutions. With government support, these programs allow lenders to offer loans to small businesses for targeted purposes with lower collateral requirements. Loan guarantees are less expensive for government than grants, allowing them to reach more businesses in need.

The common thread between these solutions is that they provide upfront capital. By contrast, other solutions – such as tax credits for digital investments – may encourage businesses to invest more towards technology, but they will likely be less effective at helping the businesses that lack capacity for digitization and are most at risk of falling behind.

Part 2: Skills

While capital resources are necessary for technology adoption, digital skills are equally important. Attracting and retaining workers with digital literacy can be particularly challenging for small businesses in a tight labour market.

Globally, there is intense competition for talent. The accelerated pace of technology adoption during the pandemic has only exacerbated the shortage of digitally savvy workers and made it more expensive for employers to recruit them.[xix] Businesses seek to compete in this market by offering higher wages and/or upskilling their own employees, but those options are not always available to small businesses with tight margins and employees juggling multiple roles.

The types of skills that are required will vary across job functions. Digital skills are sometimes understood to mean advanced capabilities such as coding, software engineering, artificial intelligence, and cybersecurity. However, these skills may not be relevant to many small enterprises, especially as third-party service providers continue to improve their small business offerings.

Rather, at the small business level, technology adoption often requires basic digital skills such as data entry, word processing, social media, web-based communications, and research. According to a 2020 survey, digital skills were the most sought-after skill among employers in Ontario and 75 percent said basic Microsoft Office competencies were the main skills they required.[xx]

For most employers, digitization requires making a cascading set of choices. What is the right kind of technology for our specific business needs? Should we build a solution or select an off-the-self product? Which off-the-shelf product makes the most sense? Each of these decisions requires some level of experience or expertise.

Soft or hybrid skills are equally important to ensure digital tools are being deployed productively, ethically, and cost-effectively. At the management level, there needs to be a fundamental understanding of how technology can benefit the company to ensure there is buy-in and sufficient resource allocation towards digitization.

Over the long-term, smart immigration policies and investments in the education system will help fill digital skills gaps across the economy. In the meantime, several programs and pilots have been launched to help upskill mid-career workers. For example, the federal government's **Digital Literacy Exchange Program** supports initiatives aimed at teaching digital literacy skills to Canadians who face barriers to participating in the digital economy. The **Future Skills Centre** works with non-profit organizations and post-secondary institutions across Canada to advance local approaches to skills development and employment training. Evidence from their pilot programs can help inform future programs designed for small businesses.

Some digital training programs focused on small businesses do already exist. Digital Main Street and Canada Digital Adoption Program (discussed above) both include a training component. Previously, Ontario funded a Small Business Digitization Initiative, a work-integrated learning program that provided digital skills training to post-secondary students and connected them with small businesses looking to digitize – though this program is no longer offered.[xxi] Co-op programs and other **work-integrated learning** models are known to be effective at bridging the gap between the supply and demand for job-ready skills, particularly within small businesses without the resources for internal training.

The federal government's **Digital Skills for Youth Program** connects post-secondary graduates with small businesses – helping both youth and small businesses build digital skills, including cybersecurity, the automation of knowledge tasks, big data, and artificial intelligence, among others.

More specifically on the cybersecurity front, there are several resources available to help small businesses build their internal awareness and capacity to deal with threats. These include the federal government's **CyberSecure** certification program and free Get Cyber Safe Guide for Small and Medium Businesses, and the Rogers Cybersecurity Catalyst's **Simply-Secure.com** microsite with best practices and insights for small organizations. In October 2022, the Government of Ontario announced new funding through the Retail Council of Canada to build retail business leaders' capacity to prevent and respond to cybercrime.

Recommendations:

4. Develop and scale successful training programs for small business owners and employees.

Partnerships between training providers and the business community have been shown to help improve digital literacy, particularly in targeted areas such as cybersecurity and digital marketing. Federal and provincial governments should invest in initiatives that are built around best practices, to ensure they can continue to be a source of lifelong learning for small business owners and their employees.

Best practices include:

- **Bundle skills training with other digitization supports.** Employers that need financial support to digitize will typically need skills training as well to support implementation. Programs that support capital acquisition should include a training component to equip businesses with a more comprehensive set of tools. As mentioned above, training has been embedded successfully in existing programs like Digital Main Street and the Canada Digital Adoption Program.

- **Co-designing programs with employers.** Programs are more effective when they are designed with input and ongoing feedback from employers and workers, to ensure they focus on delivering in-demand digital skills, especially as those needs evolve over time. Working closely with employers is also critical to overcome logistical challenges (see the Canada Training Program discussed below).

- **Cluster employers with similar needs.** Working individually with small businesses to design and deliver skills training can require significant time and resources. Training providers should consider forming groups of employers that share similar skills challenges in specific sectors or regions as a means to gather intelligence and administer programs more efficiently. Although customization can be more difficult with larger cohorts, training providers should seek to tailor content to their audiences as much as possible. Additionally, clusters of small businesses can be matched with larger organizations that are willing to offer skills-related support.

- **Offering flexibility around timing and format.** Training needs to be convenient, particularly for mid-career workers who are balancing employment and other responsibilities. Asynchronous learning programs – in which students can complete work on their own schedules – can be helpful. Businesses can also help inform where, when, and how programs should be delivered based on the needs of their respective sectors.

- **Leverage partnerships with business networks.** Membership associations with strong ties to their communities can help encourage greater uptake and confidence in skills training programs by communicating their value to the appropriate individuals within an organization. Partners can include local chambers of commerce, industry associations, and other stakeholder groups such as the Black Business and Professional Association (see recommendation #5). Involving partners in every stage from design to outreach is important for achieving good engagement and outcomes.

Redesigning the Canada Training Benefit

The Canada Training Benefit (CTB) gives workers money to help pay for in-demand skills training, provides income support during training, and offers job protection so they can take time off to undertake that training.

Since implementation, employers have expressed some challenges with the program, including identifying and demonstrating in-demand skills and allowing time off for their employees to pursue training.

In 2021, Minister Qualtrough's mandate letter asked her to prioritize redesigning and implementing the Canada Training Benefit.[xxii] It is critical that small businesses be involved in this redesign. Training providers and institutes like the Future Skills Centre should be engaged to identify program models that successfully address the needs of both employers and workers.

Recommendations:

5. Build more inclusive digital training programs.

The costs and time commitments associated with skills training and upskilling opportunities can be prohibitive for equity-deserving communities. As the premium on digital skills grows, there is a risk that labour market inequities worsen. The Ontario government should work with training providers to expand access to digital literacy training among entrepreneurs and workers with disabilities, Indigenous peoples, racialized people, and other diverse communities.

Subsidizing the cost of training, transportation, childcare, and other expenses can directly address financial barriers, and situating programs in communities where access remains a barrier can make them more convenient.

As noted above, strong partnerships with community organizations are important to program uptake and success. A good example is the **Black African and Caribbean Entrepreneurship Leadership program**, which delivers training to Black entrepreneurs over a 20-month period. This program is led by the Black Business and Professional Association in collaboration with the Future Skills Centre, the Diversity Institute, and other community partners. NPower Canada's Junior IT Programs is another example in which engaging closely with disadvantaged communities on program design and outreach has translated to positive outcomes.

NPOWER CANADA – UPSKILLING YOUTH FOR TECHNOLOGY CAREERS[xxiii]

NPower Canada's Junior Information Technology Program is focused on providing equity-deserving youth with digital skills for in-demand technology careers. With funding from the Future Skills Centre, the program has seen outstanding results; 82 percent of program graduates have secured employment or enrolled in higher education within 12 months of completing training. By September 2023, the training will have reached 7,835 young adults.

The program's success offers several lessons for designing effective digital literacy programs. For one, the agile, hybrid learning model allows for virtual skills training in Indigenous, Francophone, and Northern communities that may be more difficult to reach with in-person delivery. Further, partnerships with the private sector – including Google and Microsoft – result in a more seamless translation of skills between training and the workplace.

Recommendations:

6. Expand work-integrated learning programs and incentivize smaller employers to participate in them.

The Ontario government should work with colleges and universities to expand work-integrated learning programs focused on supporting small businesses, such as previously available Small Business Digitization Initiative noted above. Further programming in this space should also seek to fill gaps for mid-career workers by coupling work-integrated learning with micro-credentialing opportunities.[xxiv]

However, on the employer side, small businesses often face barriers that limit their engagement with these programs, including administrative burdens and the cost of student training and compensation. The Province can help address those barriers by expanding the co-operative education tax credit, wage subsidies, and similar incentives for small business participation in such programs focused on digital skills. For example, the OCC administers a federally funded **Talent Opportunities Program**, which offers wage subsidies to employers that hire college and university students on work-integrated learning placements.

In some cases, simply improving communication around existing programs and incentives would help busy small business owners better understand what is available to them and the value of engagement. This information sharing can be facilitated through local chambers of commerce and boards of trade, small business centres, industry associations, and other business networks.

The Missing Link – Broadband Connectivity

Fast, affordable, and reliable broadband connectivity is a fundamental prerequisite for businesses of any size to access digital resources and talent.

Unfortunately, for many small businesses located in rural, remote, northern, and First Nations communities, a lack of reliable high-speed internet is a major barrier to technology adoption. Despite sizable investments from the private sector and governments, **up to 700,000 businesses and households across Ontario still do not have access to minimum high-speed internet services** of 50/10 Megabits per second (Mbps).[xxv]

Poor internet connectivity has significant implications for businesses – it hinders their online market presence (e-commerce, click-and-collect, social media, etc.), limits their access to labour, disincentivizes migration and tourism in their communities, and suppresses regional economic growth, development, and competitiveness.

Beyond the basic benefits, internet connectivity and telecommunication services provide a critical link for rural, remote, and far north communities to access a host of services, including virtual education, healthcare, greater opportunities to engage with government, and business-to-business and business-to-consumer support, while promoting better operational efficiency and productivity.

In response to the pandemic and subsequent surge in remote work and virtual services, both the provincial and federal governments committed new funding towards a number of investments, projects, and initiatives, with a new mandate to accelerate broadband rollout to help connect all Ontarians to high-speed internet by 2025. Existing projects and initiatives include:

- Improving Connectivity for Ontario (ICON) program
- Up to Speed: Ontario's Broadband and Cellular Action Plan
- Accelerated High Speed Internet Program (AHSIP)
- *Building Broadband Faster Act, 2021*
- *Getting Ontario Connected Act, 2022*
- Southwestern Integrated Fibre Technology (SWIFT) project
- Eastern Ontario Regional Network (EORN) project
- Northern Ontario Heritage Fund Corporation

Meanwhile, it is equally important that municipalities and the Ontario government work with internet service providers, telecommunication stakeholders, and local distribution companies to urgently address inefficiencies and barriers to private sector broadband deployment. Other important considerations include exploring "dig once" strategies,[2] future-proofing infrastructure to adapt to changes in population growth and technology requirements, and identifying opportunities for better data sharing to enable households and businesses to report issues with internet services and broadband infrastructure.

The OCC will explore and address policy recommendations around broadband connectivity further in the coming months.

2 "Dig once" strategies involve coordinating multiple infrastructure projects that require excavations simultaneously to reduce costs and disruption. For example, digging for the construction or expansion of a highway would be coupled with laying of new broadband cables.

Conclusion

Businesses across Ontario are grappling with inflation, supply chain challenges, labour shortages, and continued uncertainty from years of the COVID-19 pandemic and resulting economic crisis. Many are turning to technology as a solution to productivity, cost-savings, and relevance in an increasingly digital world. In this context, it is imperative for small businesses to digitize and for governments to support them, as their survival leads to more innovation, competition, value, and jobs across the economy.

This paper offers policy recommendations to help address two of the key barriers small businesses face in adopting and implementing technology: access to resources and skills. Within those categories, there is more work to be done at a systemic level to improve capitalization of small businesses (resources) and build a stronger digital talent pipeline from early learning onwards (skills). At the same time, it is equally important to address the other major barrier to technology adoption, broadband connectivity. We encourage policymakers to think about the interconnected challenges and opportunities for small business digitization and take a comprehensive, long-term approach to addressing them.

Endnotes

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