



# DIGITAL MATURITY in SMES

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# WHAT IS DIGITAL MATURITY?

A business's digital maturity comprises:

1. Technological intensity - the level of tech adoption and use.
1. Digital culture - the skills, leadership, and governance to successfully integrate and use the technologies.

Digital maturity reflects the use of technologies across all sectors - it isn't just about the tech sector, or other companies developing tech themselves.

# MAIN DIGITAL TOOLS USED BY CANADIAN ENTREPRENEURS

## CUSTOMER-FACING ACTIVITIES



### Communications tools

- Email
- Social media
- Mobile apps
- Instant messaging
- Websites (including blogs, live chat and forums)
- Extranets or electronic data interchange (ED)



### Digital marketing tools

- Ad banners on websites
- Search engine optimization
- Online video
- Email marketing
- Marketing automation software
- Online survey tools



### E-commerce tools

- E-commerce website builders
- E-commerce research tools
- Inventory tracking and shipping tools
- Email automation

# MAIN DIGITAL TOOLS USED BY CANADIAN ENTREPRENEURS

## BACK-OFFICE ACTIVITIES



### Business management and productivity tools

- Office software (e.g. Microsoft Office, Apple iWork)
- Project management software
- Online collaboration tools
- Management software, such as enterprise resource planning (ER), customer relationship management (CRM) systems
- Accounting and invoicing software
- Budgeting software
- Workforce management software



### Analytical, data storage and data management tools

- Web, social and video content analytics
- Predictive analytics, data mining and machine learning
- Cloud computing
- Online data backup services



### Digital production tools

- Computer-aided design (CAD), manufacturing (CAM), engineering (CAE) and so on
- Daily management systems
- Electronic work instructions
- Field service management software
- Digital dashboards
- Industrial Internet of Things (wireless sensors and analytics)
- Automation technologies
- 3D printing



# WHY SME DIGITAL MATURITY MATTERS

**99.8% of all Canadian Businesses are SMEs**  
and **they employ 10.8 million individuals**  
(88.5% of the total private labour force).

**Small enterprises represented 70% of  
hours worked in Canada in 2008 versus  
56% in the United States.**

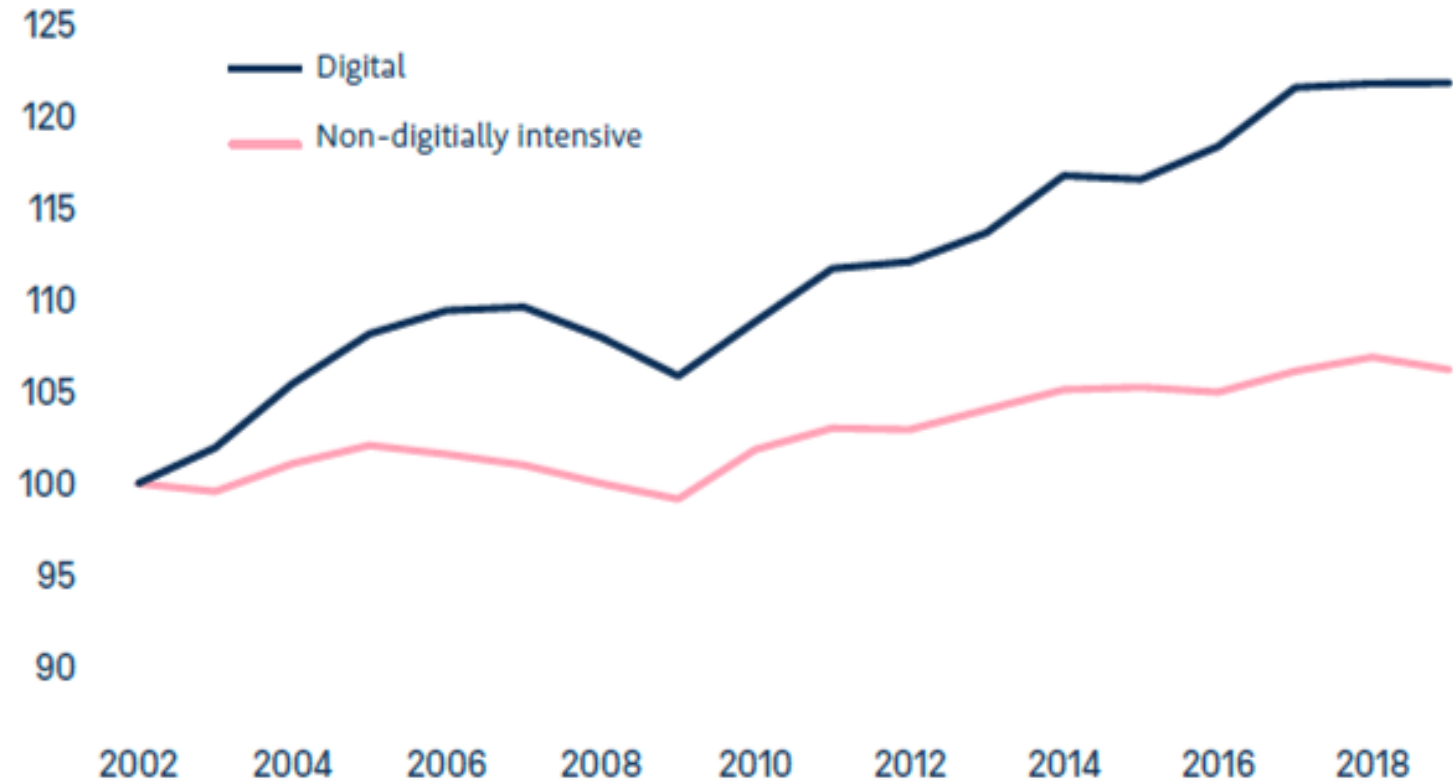
## FIRM GROWTH

**Digitally mature businesses** as of 2018 were **62% more likely than their peers to have enjoyed high sales growth** and **52% more likely to have more profit.**

**Increased levels of digital maturity** are associated with significant productivity gains in business.

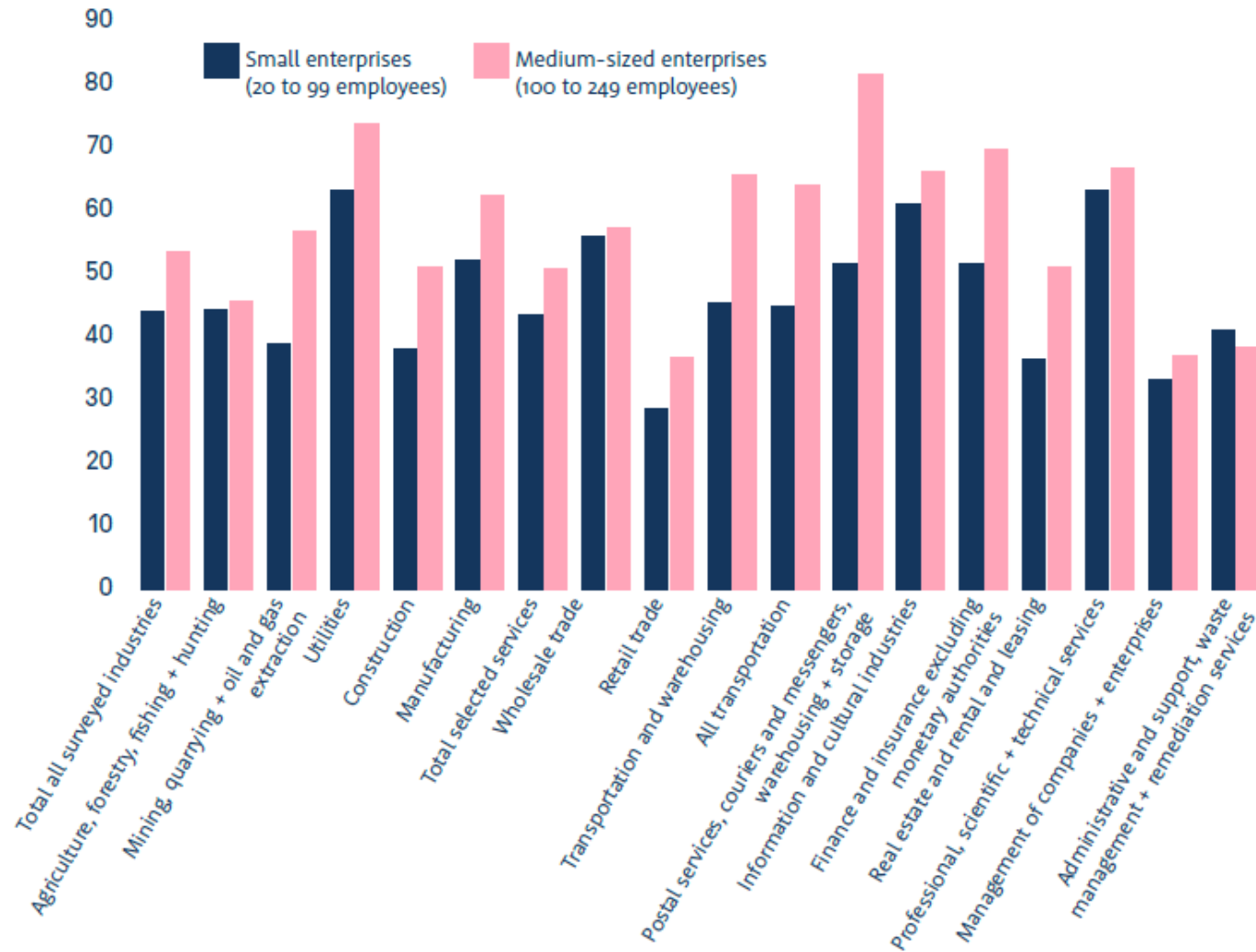
# DIGITALLY POWERED PRODUCTIVITY GAINS

Labour Productivity Growth in the Digitally Intensive and the Non-Digitally Intensive Sectors (2002=100)



Source: Statistics Canada, *Economic performance associated with digitalization in Canada over the past two decades*. Tables 14-10-0202-01 and 36-10-0434-03.  
DOI: <https://www150.statcan.gc.ca/n1/pub/36-28-0001/2021002/article/00001-eng.htm>

Use of any advanced or emerging technology by industry (SIBS, 2017)

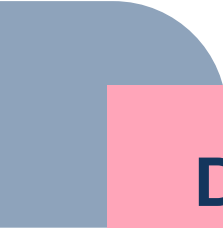
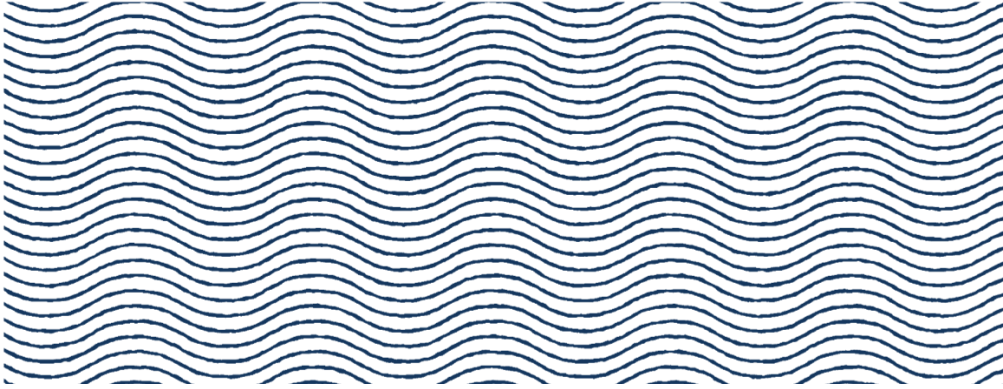


Source: Statistics Canada. Table 27-10-0367-01 Use of advanced or emerging technologies by industry and enterprise size  
 DOI: <https://doi.org/10.25318/2710036701-eng>

*All sectors are using advanced technologies - not just high tech ones*



# RESILIENCY



**Digitally mature companies have had higher levels of resiliency** – helping them maintain higher levels of revenues and employment during the pandemic

# MISSING LEVEL PLAYING FIELD

**SMEs face many barriers to digitization like knowledge and skills shortages** that hamper their digital maturity.

**SMEs owned or run by systemically underserved groups such as women, Black, Indigenous peoples, and recent immigrant entrepreneurs** all face systemic discrimination, including racism and sexism, that create barriers to improving the digital maturity of their businesses.

**A further barrier to digital maturity** is limited access to high-speed and reliable connectivity.

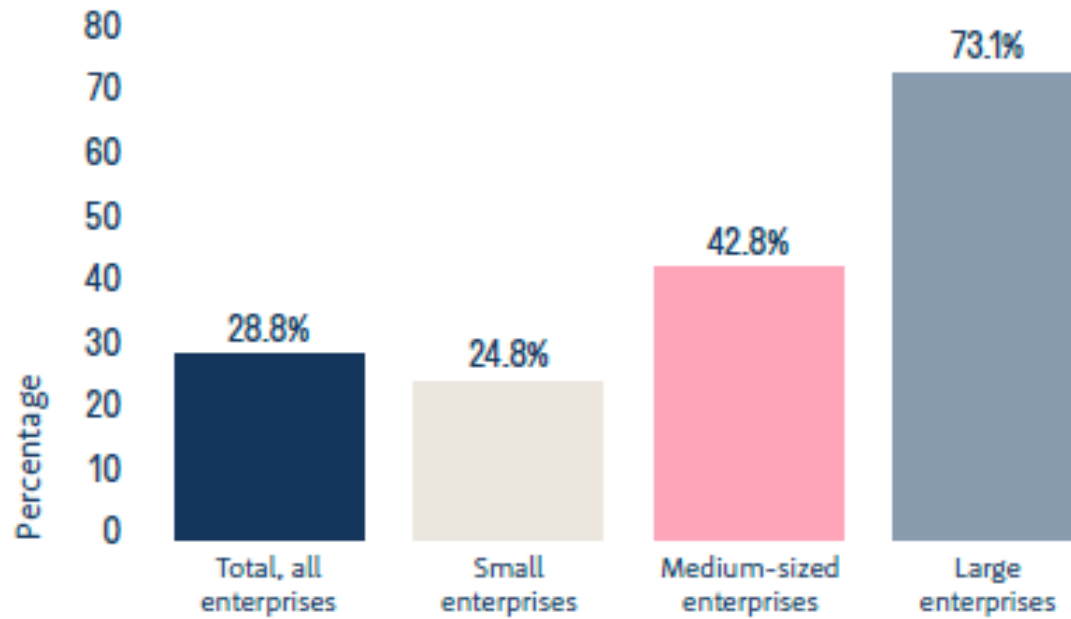
# CHALLENGES FOR BUSINESSES

What are the biggest challenges in implementing Industry 4.0 solutions? (BDC, 2017)



Source: Pierre-Olivier Bédard-Maltais, "Industry 4.0: The New Industrial Revolution", BDC, May 2017, p. 11, [https://www.bdc.ca/EN/Documents/analysis\\_research/bdc-etude-manufacturing-en.pdf?utm\\_campaign=manufacturing-2017--Studies--EN](https://www.bdc.ca/EN/Documents/analysis_research/bdc-etude-manufacturing-en.pdf?utm_campaign=manufacturing-2017--Studies--EN) Respondents were able to pick multiple responses.

Enterprises that have a fibre optic line Internet connection (SDTIU, 2019)



Source: Statistics Canada, *Survey of Digital Technology and Internet Use*, Table 22-10-0116-01 Internet access by type of internet connection, industry, and size of enterprise  
DOI: <https://doi.org/10.25318/2210011601-eng>

*The digital divide hits small companies hardest*

# LEADERSHIP MATTERS

**Investing in technology alone isn't enough** to reap the benefits of digital maturity.

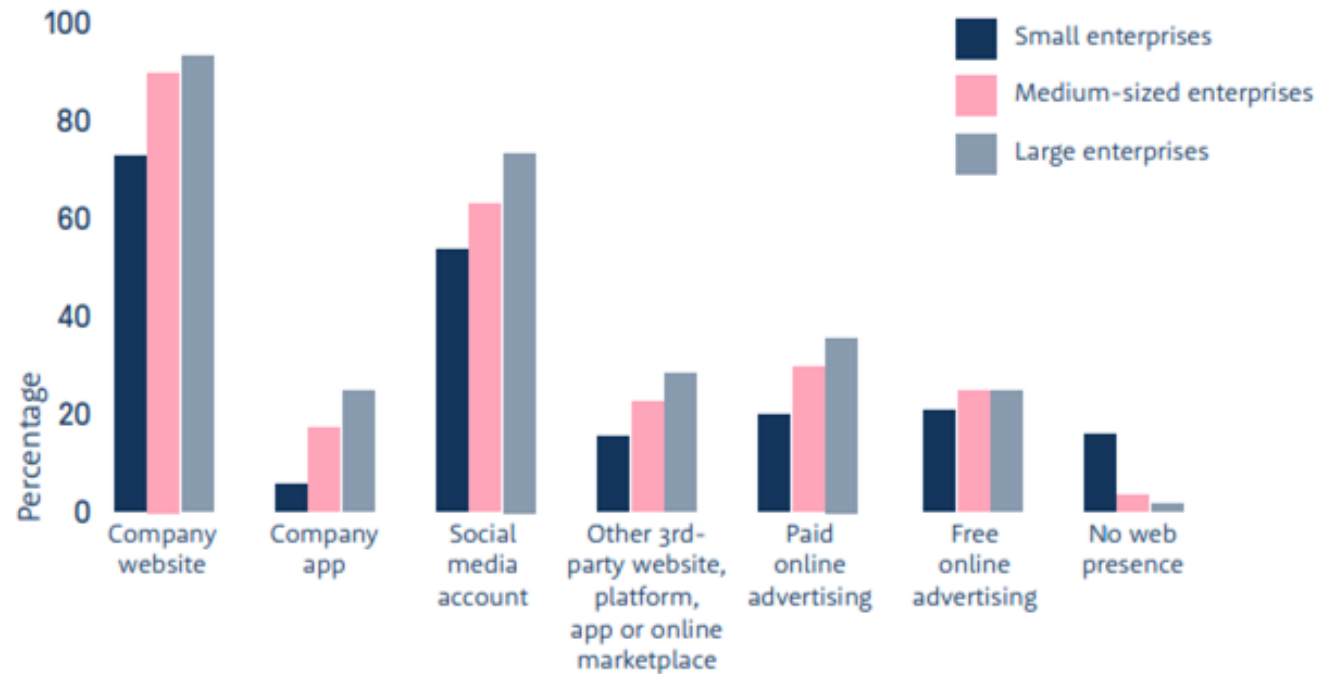
# FALLING BEHIND LARGE FIRMS

**SMEs still significantly lag behind larger firms in foundational technologies** such as social media use and e-commerce, and not enough small businesses are taking advantage of the internet to make sales.

**Cloud computing reduces the need to spend on infrastructure, computing power and software,** yet SMEs lag behind larger companies in their cloud usage.

**SMEs fall behind larger companies in adoption of all types of cybersecurity** despite cyber attacks often being fatal to small businesses.

Types of web presence (SDTIU, 2019)

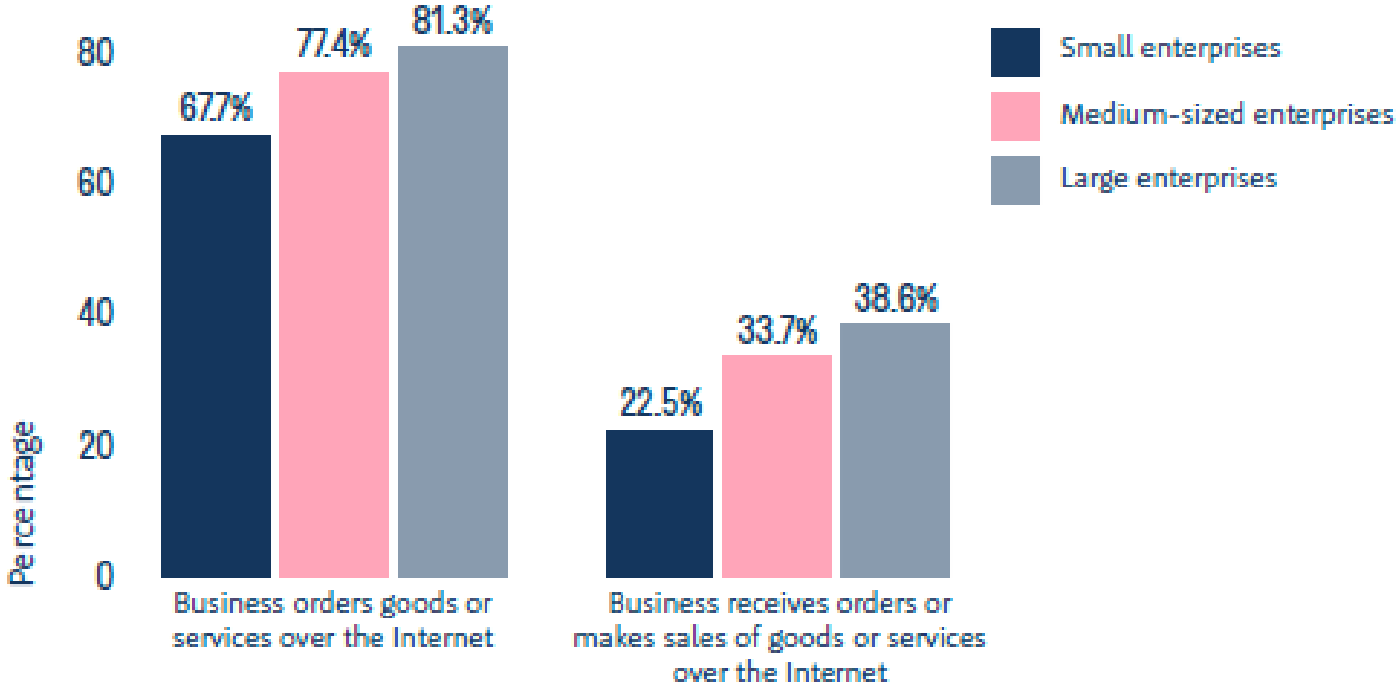


Source: Statistics Canada, Survey of Digital Technology and Internet Use, Table 22-10-0120-01 Types of web presence by industry and size of enterprise  
DOI: <https://doi.org/10.25318/2210012001-eng>

**Small  
Businesses  
still lag  
Medium and  
Large Firms in  
their web  
presence**

# THE SME E-COMMERCE GAP

Online Orders received and purchases made for goods and services (SDTIU, 2019)

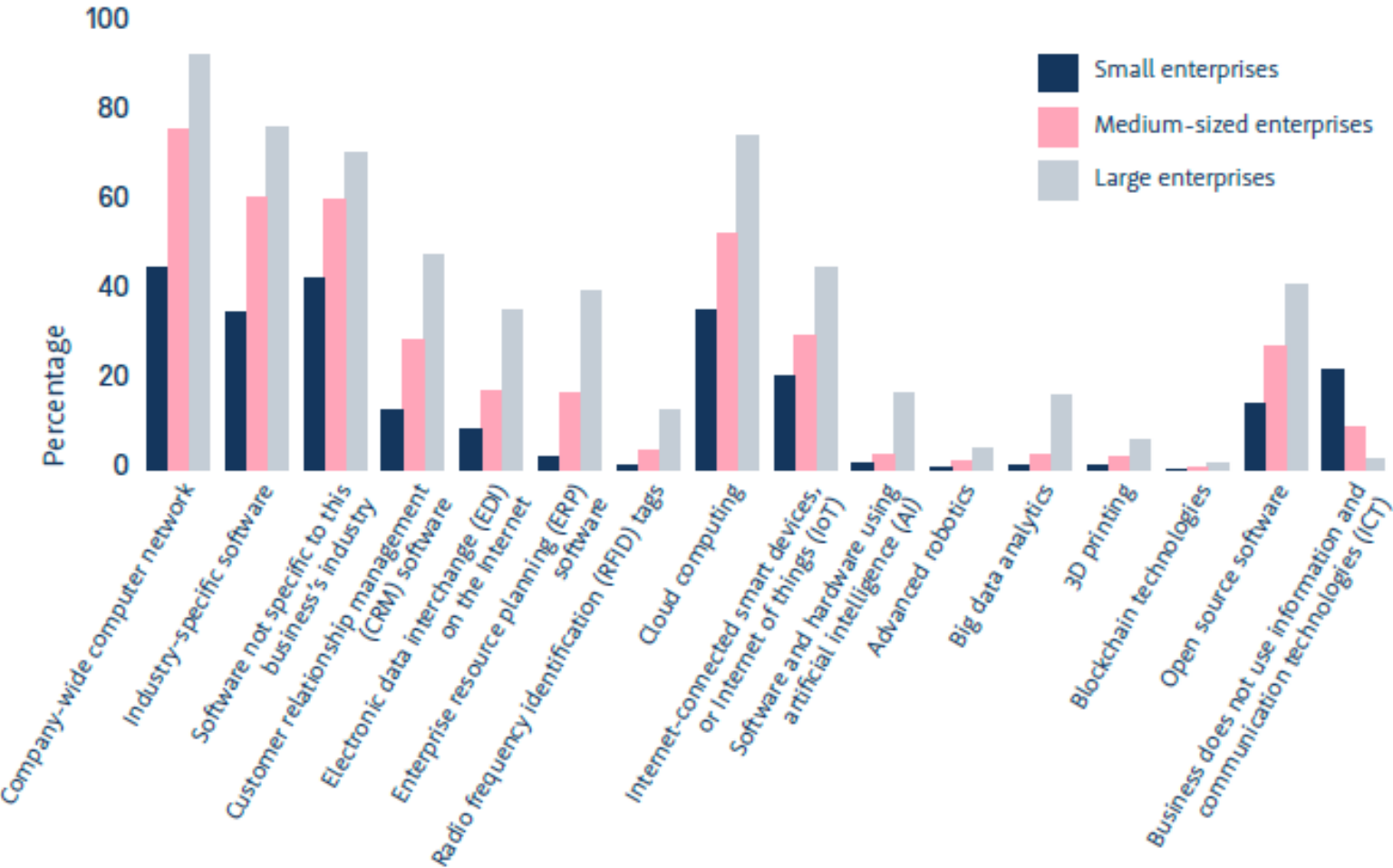


Source: Statistics Canada, Survey of Digital Technology and Internet Use, Table 22-10-0123-01 Online orders received and purchases made for goods and services, by Industry and size of enterprise  
DOI: <https://doi.org/10.25318/2210-012301-eng>

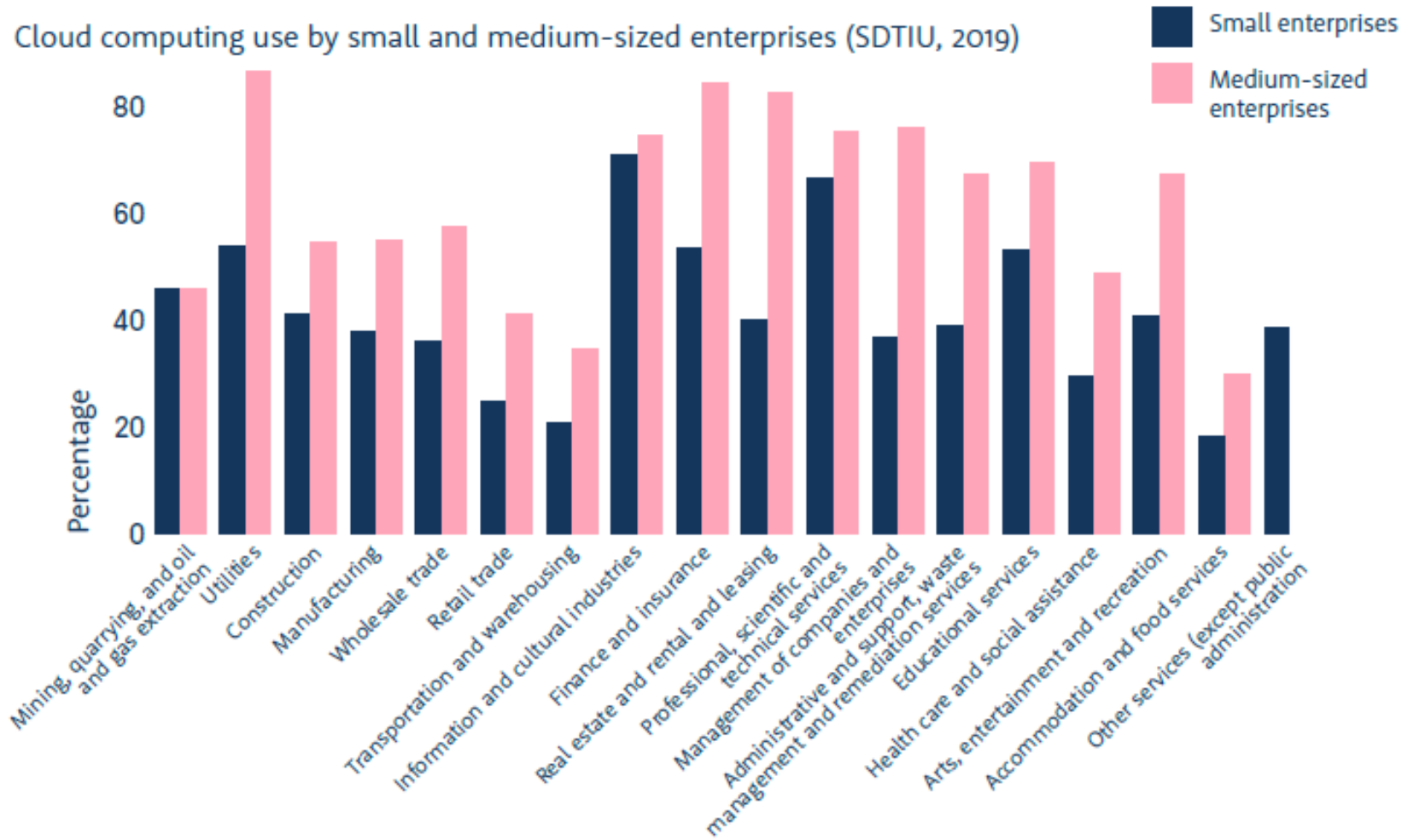


# THE THIN EDGE OF THE CLOUD

Information and communication technologies used by size of enterprises (SDTIU, 2019)



Cloud computing use by small and medium-sized enterprises (SDTIU, 2019)

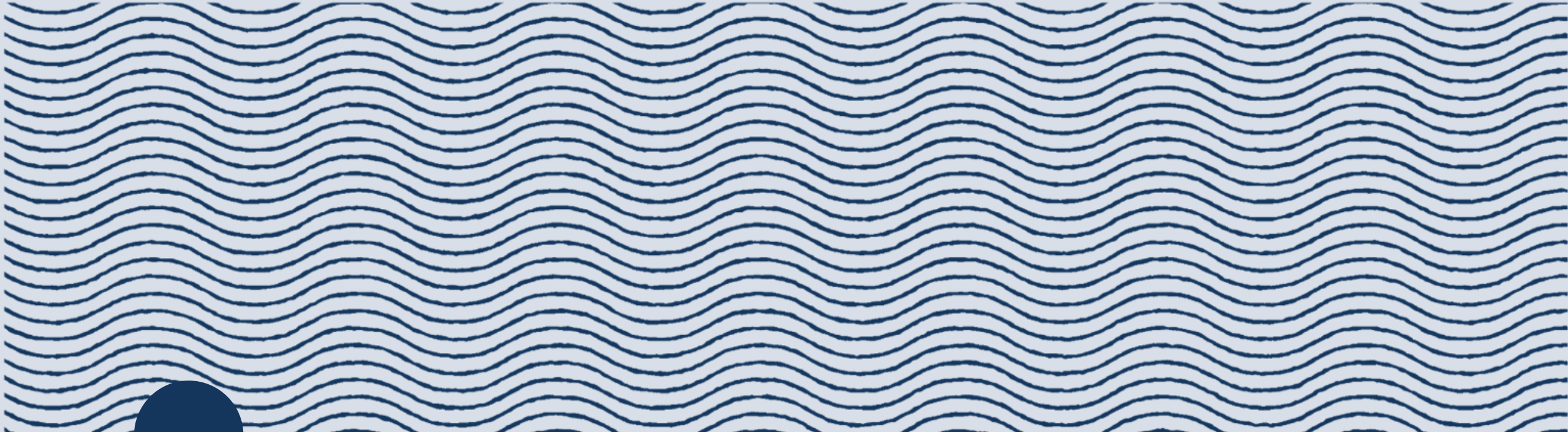


*Some sectors have large gaps in cloud use*



# RESEARCH TAKEAWAYS

- + A key barrier to technology adoption by SMEs is the uncertainty around these investments and what they will mean for their organization.
- + A range of supports need to be available to help SMEs at different stages in their digital transformation journeys.
- + It is worth considering and further researching the wider range of policy levers that could be used to incentivize technology adoption by SMEs.
- + Particular action needs to be focused on removing systemic barriers that hold back systemically underserved entrepreneurs and that further serve to restrict their ability to increase the digital maturity of their companies.



# Thank You

