Study
May 2022

Seize the Technological Advantage

Why Digitally Mature Companies Perform Better

bdc

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On the cover
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Message from the Chief Economist

Canadian small and medium-sized enterprises (SME) are investing significantly in digital technologies; in 2021, 91% of these businesses invested in technology, with an average investment of $118,430. But will these investments influence their performance?

To answer this, we surveyed more than 1,500 Canadian small and medium-sized businesses to update our 2018 study on digital maturity.

In spite of the important progress we’ve seen, there is still a long way to go. Only slightly over half (60%) of companies have a website, and only one-third (34%) analyze their customer data. In fact, we estimate that only one in twenty business uses digital technologies effectively.

These digitally advanced businesses perform better; they are more likely to grow quickly, be resilient, export and get the financing they need. In other words, they are more competitive.

The study also confirms that a digital divide is emerging among Canadian businesses. Many companies are slow to digitize despite the proven benefits. Their performance is worse, and they have more difficulty growing. As a result, they find it harder to finance their growth projects, especially those that would allow them to get started on their digital shift.

For entrepreneurs who still lack a digital strategy: Now is the time to act. I invite you to learn more about the Canada Digital Adoption Program. You may find that there is something in it for you: grants for digital planning and interest-free financing are available.

Pierre Cléroux
Vice President,
Research and Chief Economist, BDC

Highlights

Nine out of 10 small and medium-sized businesses invested in digital technology in 2021.

$118,430

Average investment in technology by Canadian businesses in 2021

Only 5% of companies are digitally advanced

Characteristics of businesses with greater digital maturity

- Stronger growth
- More resilient
- Export more
- Have less difficulty accessing financing
- Invest more
- Focus more on innovation

Some small and medium-sized businesses are more likely to be digitally advanced

- Largest companies
- Technology and retail businesses
- Indigenous- and youth-owned businesses

Majority women-owned businesses are more likely to show a digital delay

A digital divide is emerging

Businesses that lag behind

- Perform worse
- Have more difficulty financing their growth projects

The longer they take to fix this situation, the more difficult it will be to catch up digitally.

The main challenges of digitization

42% cost

32% cybersecurity

27% uncertain benefits

27% technology integration

Focus on cybersecurity

- 18% of small and medium-sized businesses experienced at least one attack in 2021
- Average damage of $49,470
- Only 55% of businesses train their employees

The key to success? Good planning:

99% of digitally advanced businesses have a digital plan

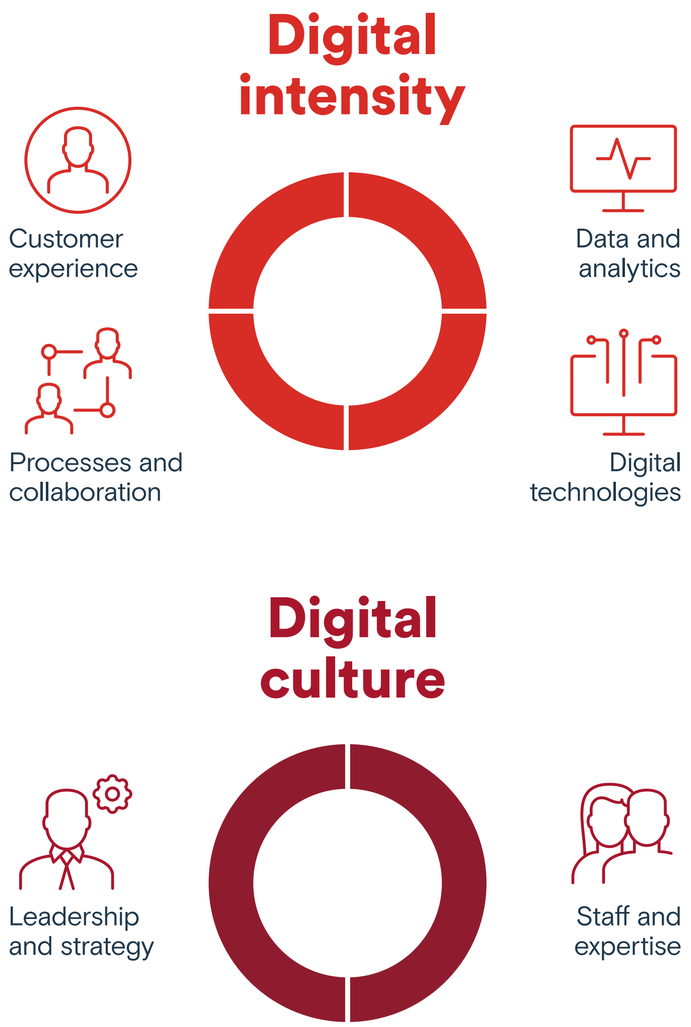
only 9% of the digital latecomers have a digital plan

What is digital maturity?

Digital technology is constantly evolving; new technologies, such as cloud computing and the Internet of Things, are changing the game. Businesses no longer have to invest as much in high-end computer equipment to benefit from digital possibilities.

Our understanding of digital technology must therefore evolve to reflect this new reality. Thus, we have updated the methodology we used in 2018 to measure a company's digital maturity.

We define a company's digital maturity as a combination of two separate but related dimensions: digital intensity and digital culture. These two dimensions are divided into six axes[1], and the sum of these axes determines the level of a company's digital maturity.



Source: BDC Advisory Services.

1 The six axes of the digital maturity model of the BDC Advisory Services team are based on their field experience and are inspired by the TM Forum (2020) model.

BDC’s digital maturity model

Digital intensity

Digital intensity measures the use of digital technologies in a company’s operations.

The axes are the following:

Customer experience

- The use of digital marketing tools to advertise in a personalized way.
- Digital technologies are at the core of the company’s strategy to improve customer experience and satisfaction.

Data and analytics

- The use of systems and processes to collect, store and process data.
- The use of data to plan and make decisions.

Processes and collaboration

- The use of digital tools to interact with customers, partners or suppliers.
- The use of data and technological tools to manage, improve and develop operational processes.

Digital technologies

- The digitization of business processes and the integration of technological systems.

Digital culture

Digital culture measures a company’s ability to make changes to increase its digital maturity.

The axes are the following:

Leadership and strategy

- The development and adoption of a clear and comprehensive digital strategy integrated with the company’s overall strategy.
- The use of a structured approach to prepare, support and help staff navigate the changes caused by digitization.

Staff and expertise

- Attraction and retention of a skilled workforce.
- The provision of training, tools and incentives to develop new skills to cope with digital change.

Digital maturity: A major asset

The vast majority of Canadian small and medium-sized businesses are investing in digital technologies. In fact, according to our survey, nine out of 10 companies did so in 2021.

Not surprisingly, the amount of investment varies according to the size of the company, from an average of $50,000 for the smallest companies to an average of $420,000 for the largest.

Nearly half (42%) of the businesses that did not invest in digital technologies in 2021 were from the construction or services to individuals (e.g., laundry, mechanics, household services, and beauty salons) sectors.

Figure 1 – Share of SMEs that invested in digital technologies in 2021, by company size

Average technology investment by Canadian SMEs: $118,430

Source: BDC, Digital Assessment Survey, 2021, 1,487 respondents. For this graph and throughout the study, asterisks indicate results that are statistically significant compared to other groups, with a confidence level of 95%.

The digital maturity of Canadian businesses remains low

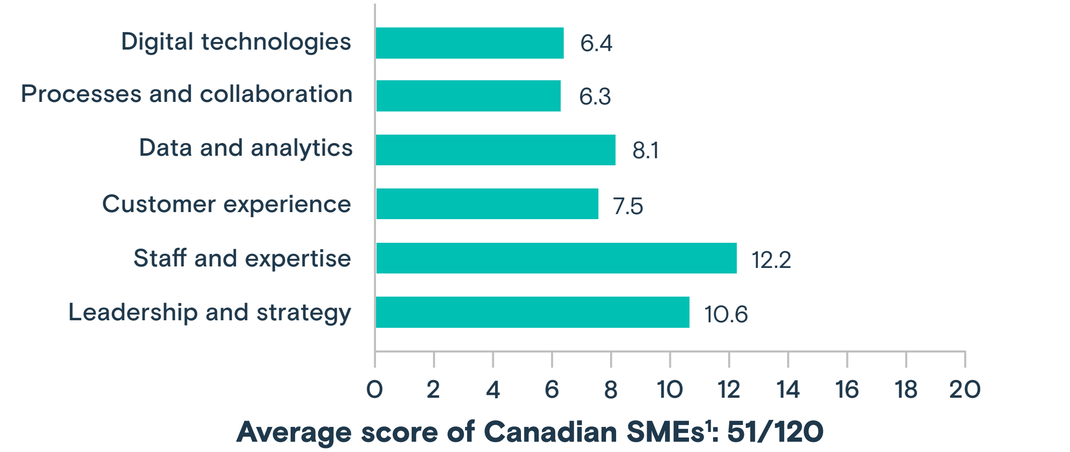
Our survey reveals that the majority of Canadian small and medium-sized businesses are not fully using digital technologies.

Canadian businesses scored an average of 51 out of 120 on the BDC digital maturity scale, our measure of how far companies have come in their use of digital technologies. This lag occurs across all axes of digital maturity.

The following are the areas which could be improved the most:

1. **Processes and collaboration**
   E.g., only 59% of businesses have a website.
2. **Digital technologies**
   E.g., only 41% of businesses have a set of (non-integrated) software applications as their technology infrastructure, and 15% have none.
3. **Customer experience**
   E.g., only 34% of businesses analyze data about their customers.

Figure 2 – Average score of Canadian SMEs across the six axes of digital maturity



Source: BDC, Digital Assessment Survey, 2021, 1,559 respondents.

1 The total average score is the sum of the scores of the six sub-dimensions presented in Figure 2. Each dimension has a maximum score of 20.

Companies can be classified under four digital profiles

We divided small and medium-sized businesses into four digital profiles:

Latecomers (19%)

These companies use little to no digital technologies in their activities

Beginners (47%)

These companies often use digital technology in customer-related activities, mainly to digitize sales and marketing

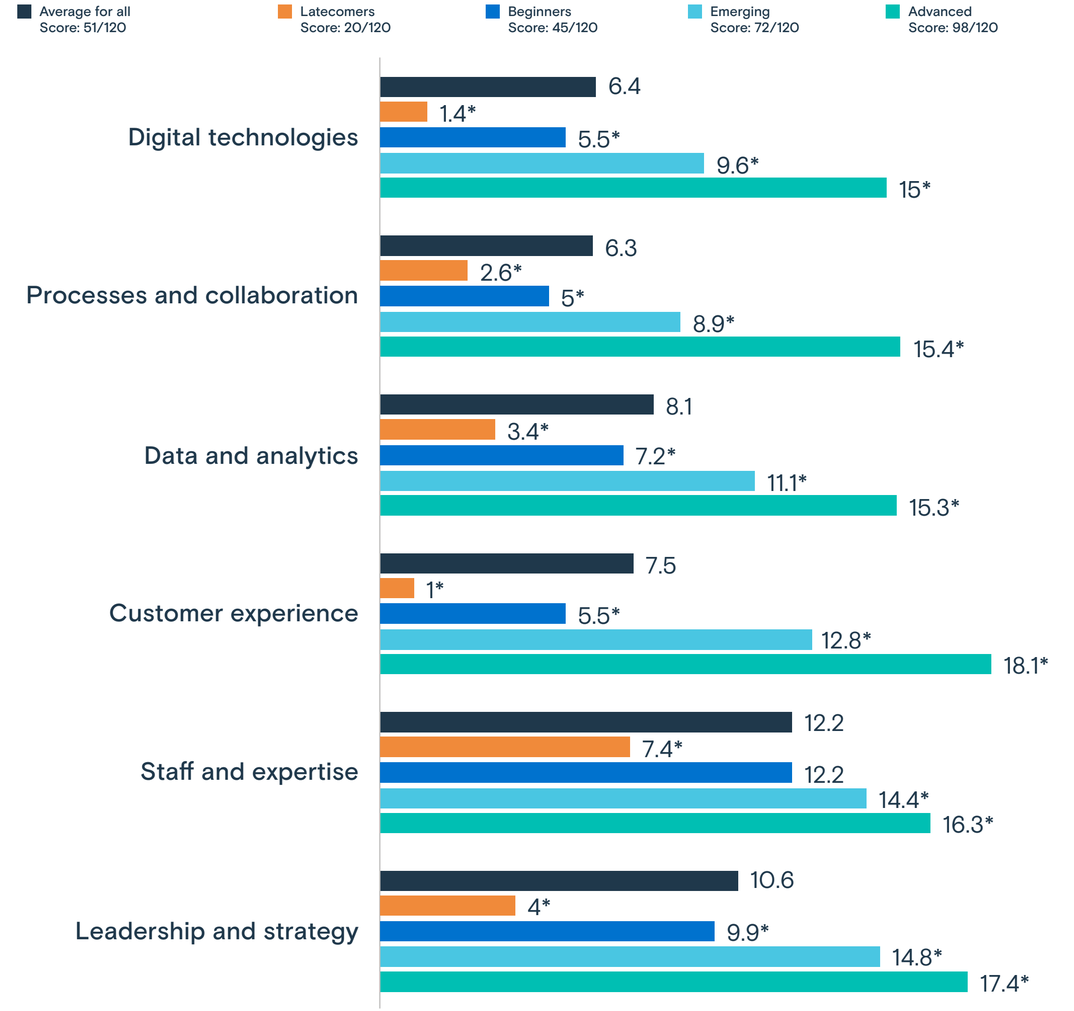
Emerging (20%)

These companies have begun to apply digital technology throughout the entire enterprise

Advanced (5%)

These businesses effectively use digital technologies to transform themselves

Figure 3 – Digital maturity of Canadian businesses



Source: BDC, Digital Assessment Survey, 2021, 1,559 respondents.

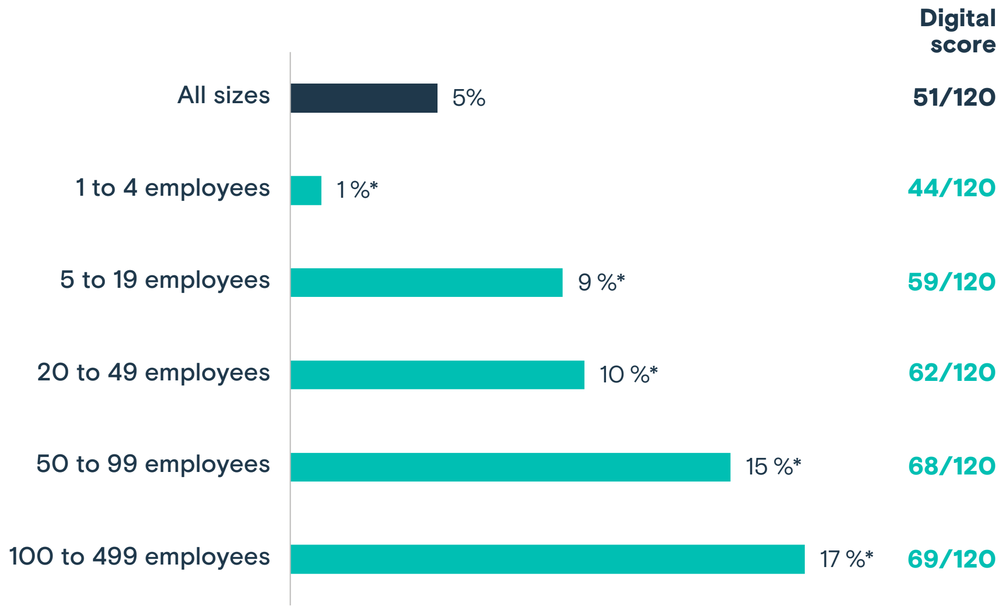
Larger SMEs achieve higher levels of digital maturity

Our survey shows a significant relationship between digital maturity and a company's size and industry.[1]

There are many more large SMEs with an advanced digital profile (17% compared to 5% for all companies), but some smaller businesses (with fewer than 20 employees) were also able to stand out.

These small businesses with an advanced digital profile are mainly found in the technology and retail sectors.

Figure 4 – Percentage of digitally advanced SMEs by company size



Source: BDC, Digital Assessment Survey, 2021, 1,559 respondents.

1 Our analyses do not show significant differences in different areas of the country. The regional breakdown is available from the author upon request.

Case study

Technology investment pays off for this Winnipeg hair salon owner

Praise Okwumabua, owner of the Winnipeg hair salon Freshair Boutique, had been hearing a regular refrain for years from her husband, Ogo: "You need to go digital."

She would typically respond with skepticism. "Who's going to buy shampoo online? They'll buy it when they come in here."

Then the pandemic hit. And people stopped coming in.

But Winnipeggers were trying to support local businesses. Just prior to the pandemic, Okwumabua had decided to take baby steps with e-commerce, using a simple platform that allowed people to order products online. So, when her brick-and-mortar store shut down, she saw a wave of sales come in.

With a more robust online platform in August 2020, Freshair experienced consistent sales growth. By November, the salon recorded $7,000 in digital purchases.

Attracting new clients through online tools and platforms

Since then, digital changes have made an even bigger difference for Okwumabua's salon, from 24-hour online bookings to Instagram-posting hair stylists marketing the business. She recently saw the power of a digital initiative after posting a video she made about an exfoliating face sponge.

"I was doing my morning routine and showing people all the stuff I use from the store. Later that day, somebody bought the sponge!"

Since launching her online booking system, Okwumabua has been noticing a new wave of clients; they are more digital savvy and seem to care little for the personal touches her older clients appreciate. "They want to confirm via text, they like to pay online," she says. "They also don't need you to hang up their jacket or make an appointment for them."

Many of those new clients have come to Freshair through stylists the salon has recently hired. Those hair cutters are quick to post their latest styles on Instagram and reach out to potential customers through their online networks. She says a salon taking efforts to attract new clients through digital means makes sense, especially during a pandemic, "because people aren't going out as much and making those connections."

"Without getting a handle on digital, you're just making it, and closing yourself off to a lot of people."

Praise Okwumabua
Owner, Freshair Boutique

Digital maturity varies according to sector

Digital maturity is unevenly distributed across industries.

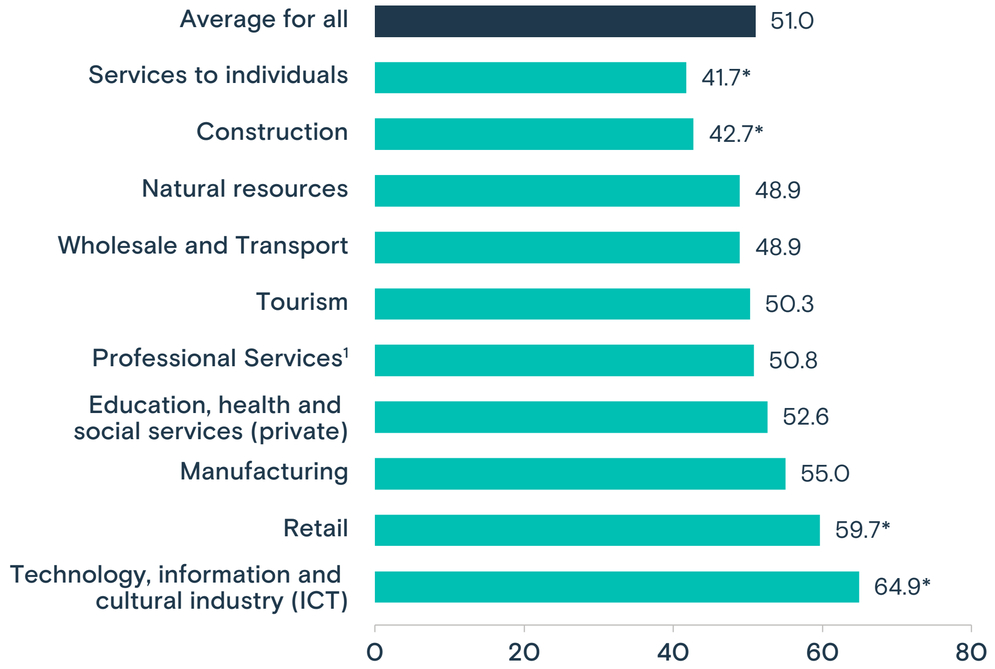
Not surprisingly, the average digital score is significantly lower among businesses in the construction and services to individuals sectors—the two sectors with the least investment in 2021.

ICT and retail are the sectors with the proportionately highest number of advanced businesses.

Not surprisingly, the ICT sector outperforms in all dimensions and components of digital maturity.

The same is true for the retail sector, which largely went digital during the COVID-19 pandemic. The industry has relied heavily on data analysis and customer experience to differentiate itself.

Figure 5 – Digital score by industry



Source: BDC, Digital Assessment Survey, 2021, 1 530 respondents.

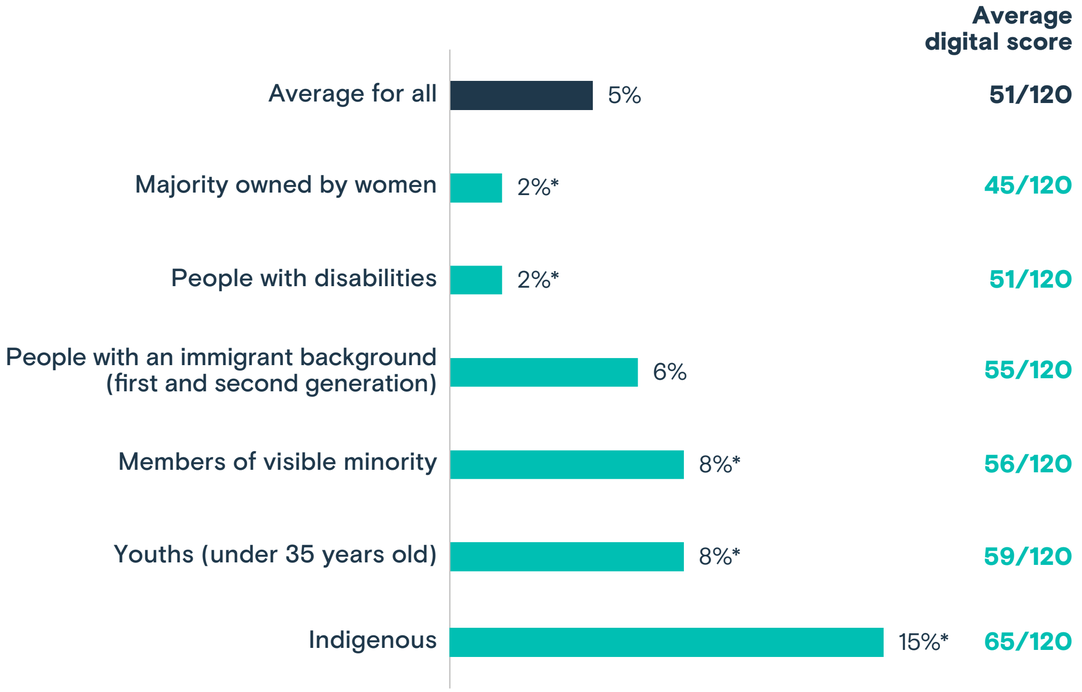
1 Professional services include scientific, technical, financial, insurance, real estate and leasing services.

Some groups are more invested in digital technology

Of all the businesses surveyed, those owned by Indigenous entrepreneurs and youth have the highest average digital scores in Canada. Conversely, businesses majority owned by women have the lowest average score.

These findings stay the same even when company size, sector, experience and region are taken into account[1].

Figure 6 – Percentage of digitally advanced SMEs by group



Source: BDC, Digital Assessment Survey, 2021. Base gender of owners = 1,511 respondents. Base other owner characteristics = 1,514 respondents.

1 The econometric models we used to analyze the results of our 2021 Digital Assessment Survey are explained in the methodology section.

Digitally advanced businesses show much higher growth than others

Digitization is beneficial in many ways.

The most digitally mature businesses:

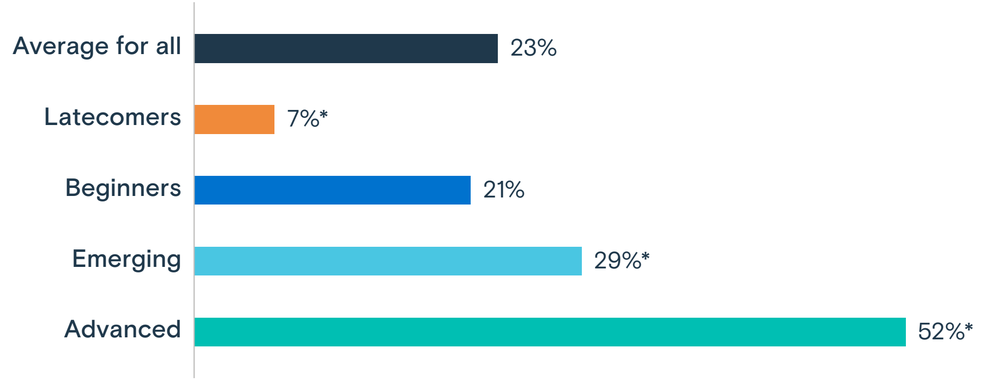
- grow faster
- are more resilient[1]
- are more likely to export

Latecomer businesses need to catch up.

They are significantly more likely to have seen their revenues decrease in 2021, with one-third of latecomers having experienced stagnation of or a drop in revenues.

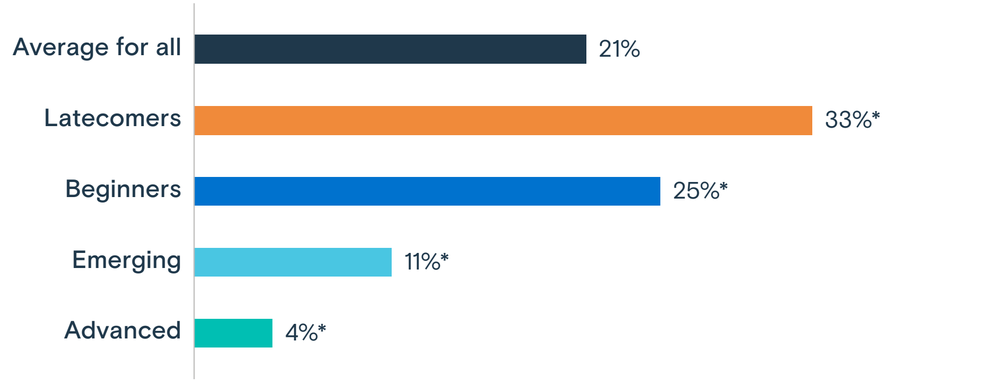
1 Resilient organizations are able to absorb disruptions to their activities and to adapt to a changing environment. As we demonstrated in a study published in October 2020, digital technologies were critical for sustaining business continuity during the pandemic. These digital technologies may also enhance and expand the in-person activities of a business.

Figure 7 – Percentage of SMEs with revenue that has been increased by over 10%, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,406 respondents.

Figure 8 – Percentage of SMEs with revenue that has decreased or stagnated, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,406 respondents.

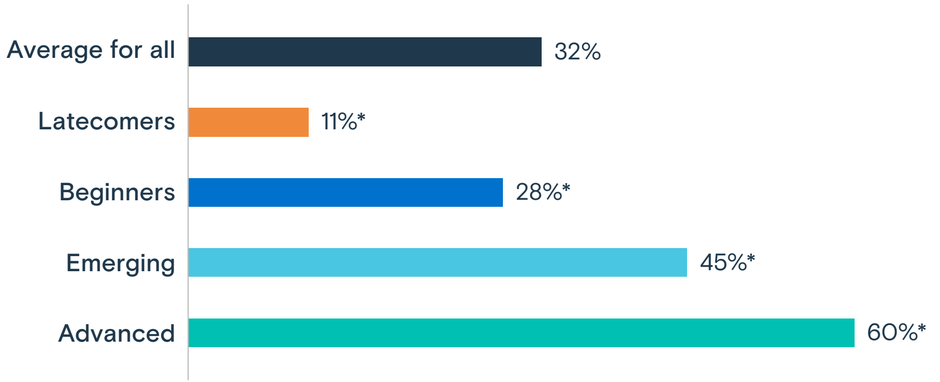
Digitally advanced SMEs export more and are more resilient

Few digital latecomers are exporting: only 11% of them sold goods or services outside of Canada in 2021.

Similarly, there are proportionally half as many very resilient companies among latecomers (25%) as among advanced businesses (55%).

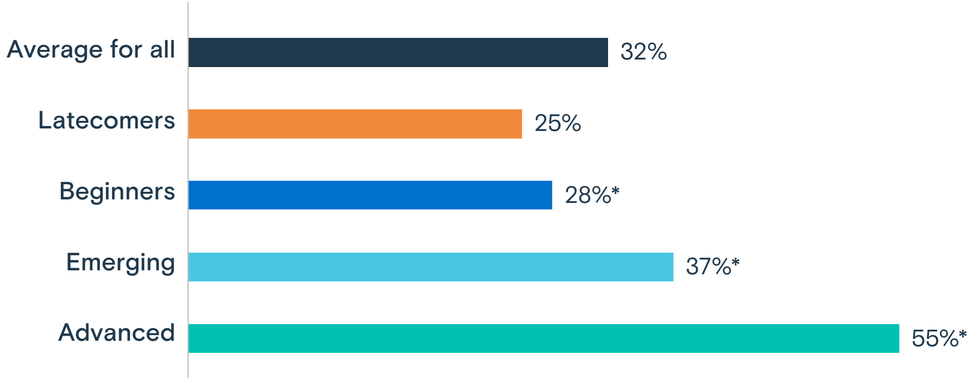
The latecomers seem overwhelmed by the digital transformation of the economy and of their business ecosystem. Having already fallen behind digitally, these businesses may not be able to keep up with future transformations.

Figure 9 – Percentage of SMEs that export, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,549 respondents.

Figure 10 – Percentage of SMEs that are very resilient, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,529 respondents.

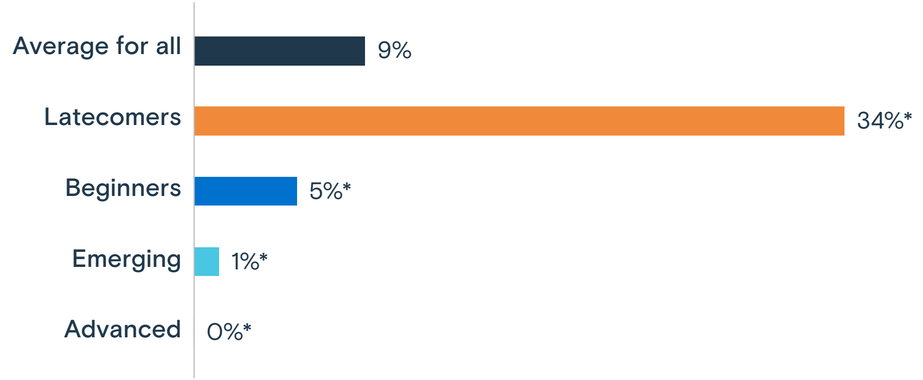
Digitally advanced businesses invest more in digital and growth projects

Small and medium-sized businesses with a more advanced digital profile do things differently.

They invest more in digital technologies, which they understand will provide them with benefits.

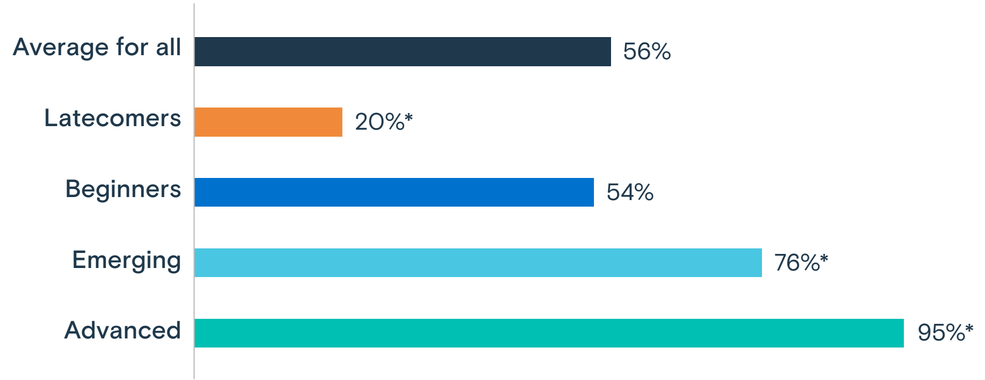
They also aim for growth, and significantly more of them allocate time and money to growth projects.

Figure 11 – Percentage of SMEs that have not invested in digital technologies in 2021, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,487 respondents.

Figure 12 – Percentage of SMEs with growth projects requiring investments, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,559 respondents.

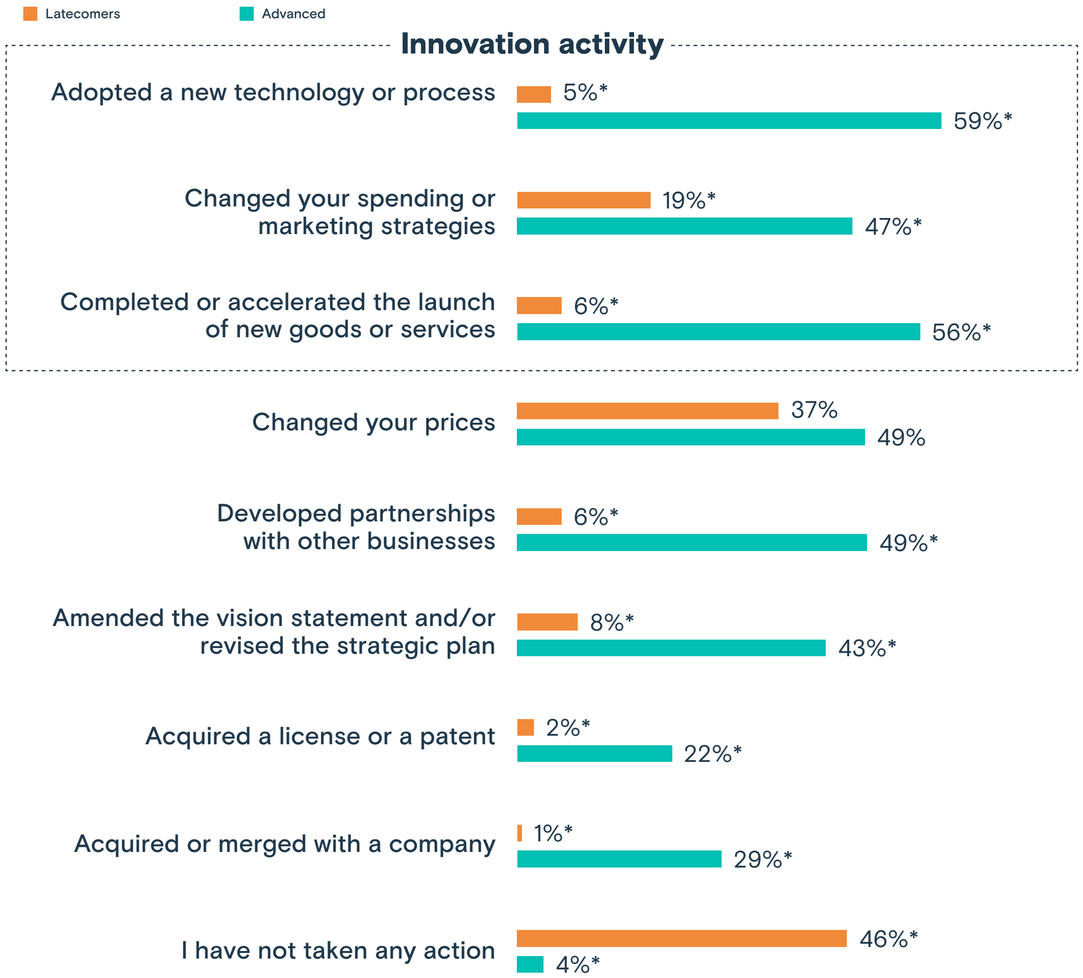
The most digitally advanced businesses focus on innovation as a differentiator

Digitally advanced businesses use a wider variety of strategies to differentiate themselves from the competition; thus, they may respond quickly and profitably to competitive pressures.

Digitally advanced businesses innovate more to differentiate themselves. For example, half of them have adopted new technologies or ways of doing things to differentiate themselves from their competitors. This strategy is 10 times more common for digitally advanced businesses than it is for latecomers.

One-third of advanced businesses have launched new products, developed partnerships or revised their strategic planning, at a rate of three times more than the latecomers.

Figure 13 – Percentage of SMEs that have taken action to become more competitive, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,356 respondents.

Businesses that are more digitally advanced perform significantly better than others

Our analyses demonstrate a strong link between digital maturity and a range of performance indicators, including: sales growth, exporting, resilience and obtaining financing.

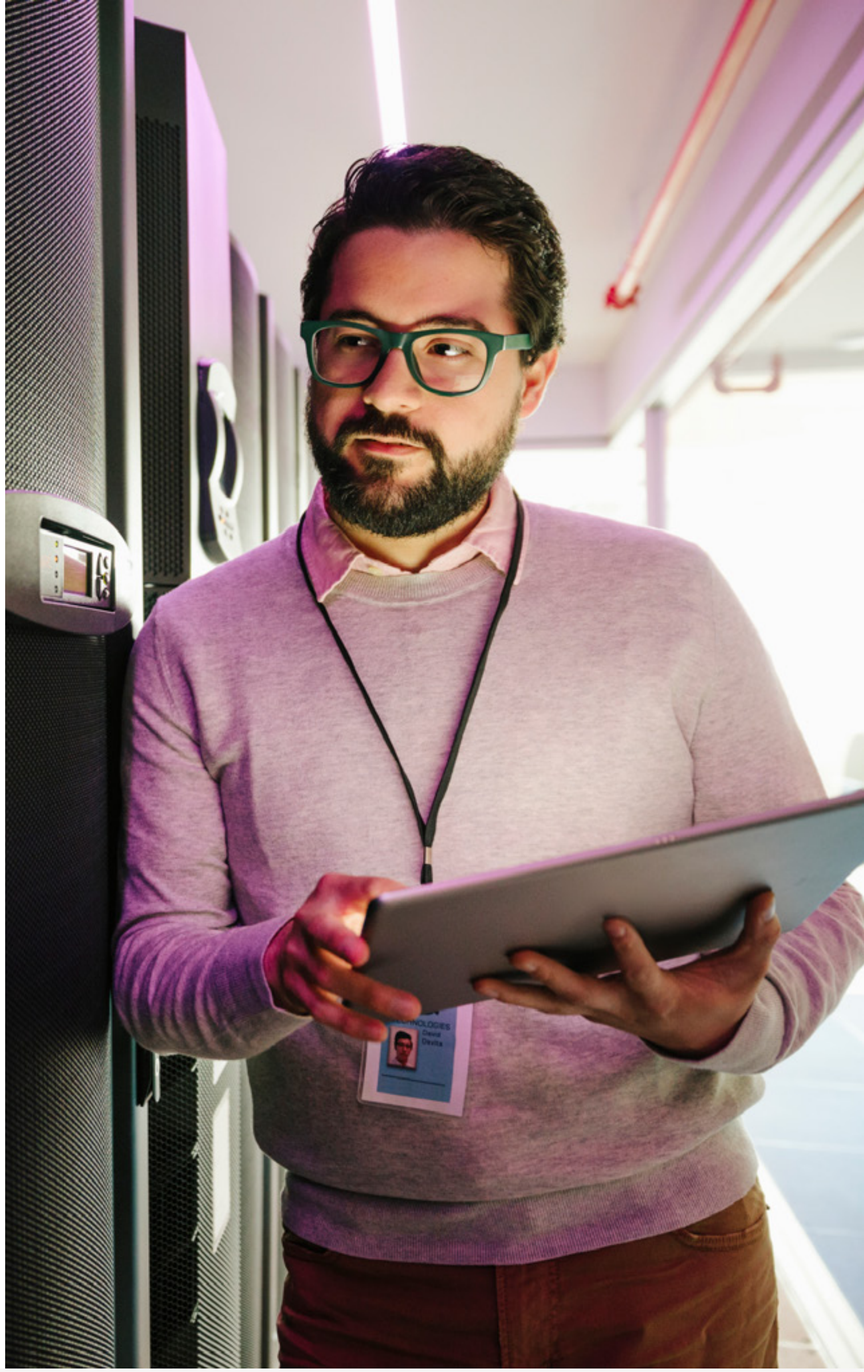
We conducted an advanced statistical analysis to isolate digital maturity from other factors that may affect business performance, including the size of the business, the industry, experience (number of years in business) and the region.

For a company, moving up the BDC digital maturity scale by 30 points—the equivalent of moving up one category (e.g., from beginner to emerging or from latecomer to beginner)—increases the odds of[1,2]:

- growing rapidly (at least 10% of sales) by 81%
- exporting abroad by 54% and
- becoming very resilient by 241%

Moving up the digital maturity ladder by 30 points also decreases the probability that a company would be denied funding by 63%.

1 The econometric models we used to analyze the results of our 2021 Digital Assessment Survey are presented in the annex.
2 These results are highly reliable with a significance point of 1% (p-value ≤ 0.01).



Adopting digital technologies with confidence

The Government of Canada's Canada Digital Adoption Program (CDAP) aims to facilitate the adoption of digital technologies and to improve business competitiveness.

The program is divided into two streams. The Boost Your Business Technology Stream offers financial support to Canadian-owned SMEs, such as small manufacturing and food operations, to adopt new technologies. Eligible companies with annual revenues exceeding $500,000 could access:

- a grant that covers up to 90% of the costs for the services of a digital advisor to help you develop a digital adoption plan—up to a maximum value of $15,000
- a 0% interest loan of up to $100,000 to facilitate the acquisition of new technologies such as software or IT equipment

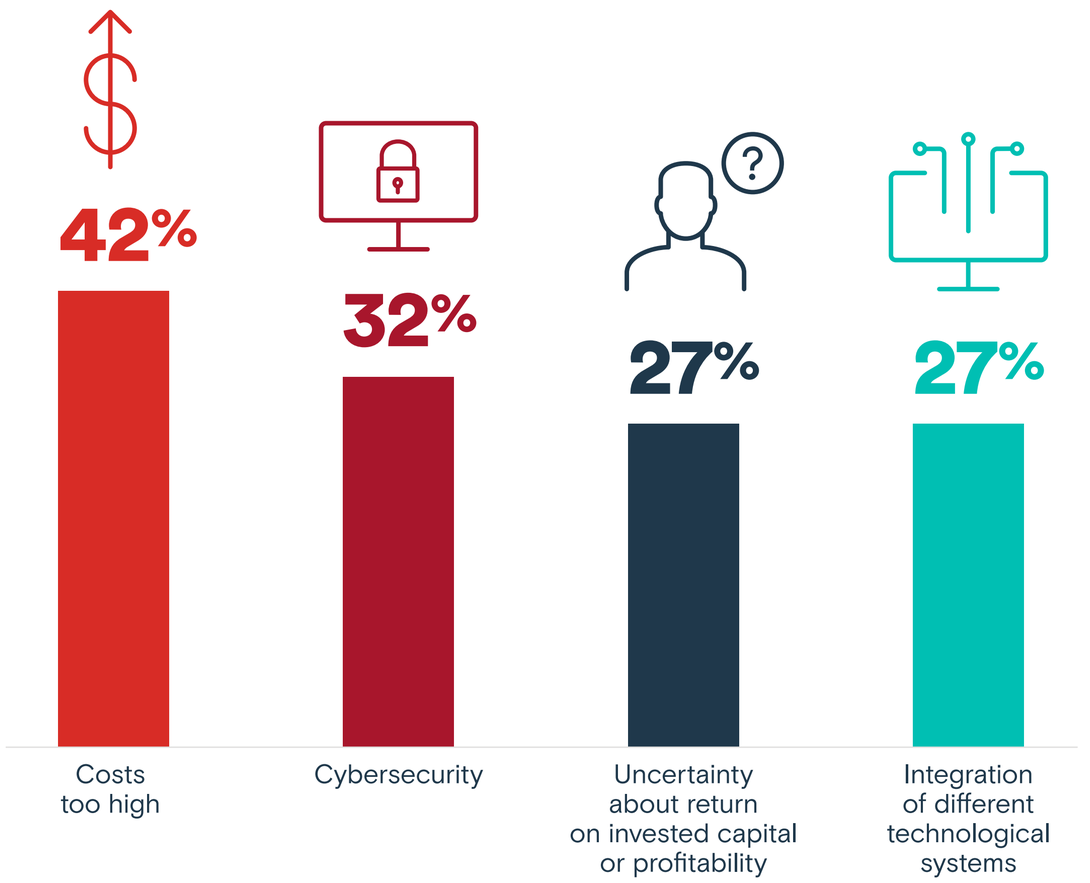
Accelerate your digital shift!

Start the process

Cost, cybersecurity and other challenges

The main challenges of digitization for Canadian businesses are: cost, cybersecurity, uncertainty about return on investment, and technology integration.

Figure 14 – The main challenges of digitization



Source: BDC, Digital Assessment Survey, 2021, 1,459 respondents.

The cost of technology is more of a concern for latecomers

Over a quarter of latecomer businesses (28%) justify not investing in digital technology due to its high cost. However, the cost of technology was not an obstacle for any of the digitally advanced businesses.

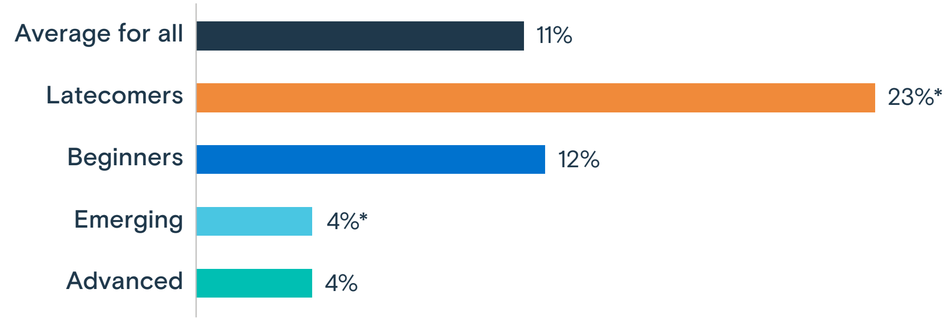
Our survey reveals that latecomers are underperforming so much that they are finding it more difficult to finance their growth projects, especially those that would enable them to make a digital shift. Hence the widening gap.

However, digital technologies continue to decrease in cost and to become more user friendly.

Today, cloud computing provides access to the latest technologies without having to invest in IT infrastructure or in resources dedicated to maintenance and updates.

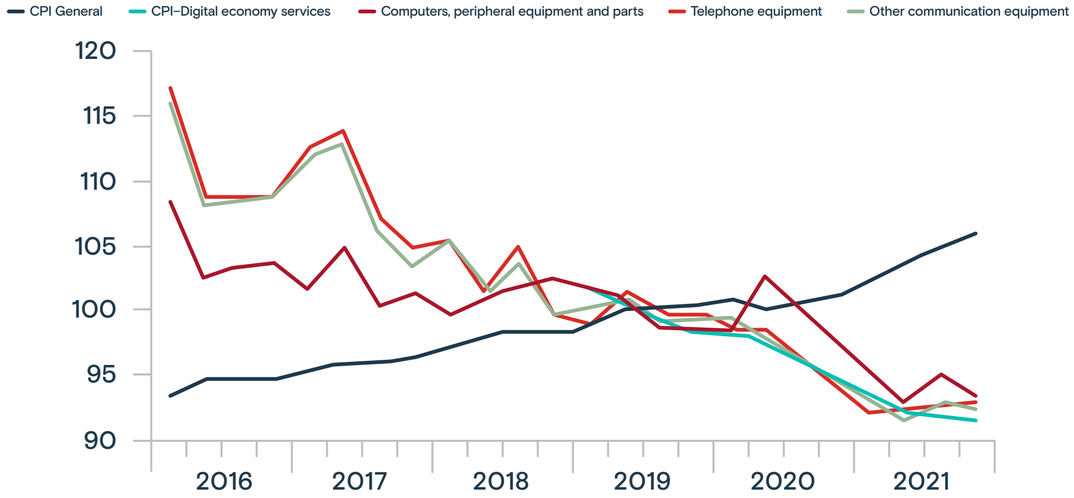
Using the high cost of technology as a reason not to invest seems like a misperception.

Figure 15 – Percentage of SMEs that claim not to have access to the capital needed to invest in digital technologies, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,499 respondents.

Figure 16 – Digital technology price indices (index 2019 = 100)



Source: Statistics Canada Table 18-10-0004-01. Consumer Price Index (CPI), monthly, not seasonally adjusted and Table 18-10-0269-01 Machinery and equipment price index, by commodity, quarterly.

Entry-level digital technologies are affordable and meet most needs

Table 1 – Price ranges for major digital technologies

Technologies	Entry-level	Mid-range	Top range
Creation of websites (informative, transactional)	→ $0-$29/month	→ $5-$95/month	→ $10-$250/month
Collaborative tools (video conferencing, messaging, file sharing and editing)	→ $0-$25/year → $0-$17/month → $0-$12/per user/month	→ $75-$270/year → $5-$55/month → $10-$38/per user/month	→ $250-$320/year → $8-$105/month → $17-$60/per user/month
ERP (Enterprise Resource Planning)	→ $55 $85/month → $20-$40/per user/month → $1,000-$4,000/perpetual license	→ $125-$375/month → $80-$175/per user/month	→ $1,000-$2,900/month → $220-$1,000/per user/month
CRM (customer relationship management)	→ $30-$45/month → $0-$30/per user/month	→ $35-$75/month → $29-$59/per user/month	→ $60 $100/month → $34-$119/per user/month
HR management	→ $100-$350/year → $1-$35/month → $1-$20/per user/month	→ $600-$10,000/year → $35-$50/month → $20-$50/per user/month	→ $10,000-$60,000/year → $50-$500/month → $50-$350/per user/month
Accounting	→ $0-$32/month	→ $11-$48/month	→ $17-$350/month

Source: BDC compilation

Cyberattacks hit digitally advanced businesses harder

Businesses are increasingly concerned about cybersecurity, and they are clearly right.

18%
of Canadian companies experienced at least one cyberattack in 2021

$49,470
Average cost of damage in 2021

Cybersecurity is a bigger challenge for businesses that regularly use data. Cybersecurity is a challenge for:

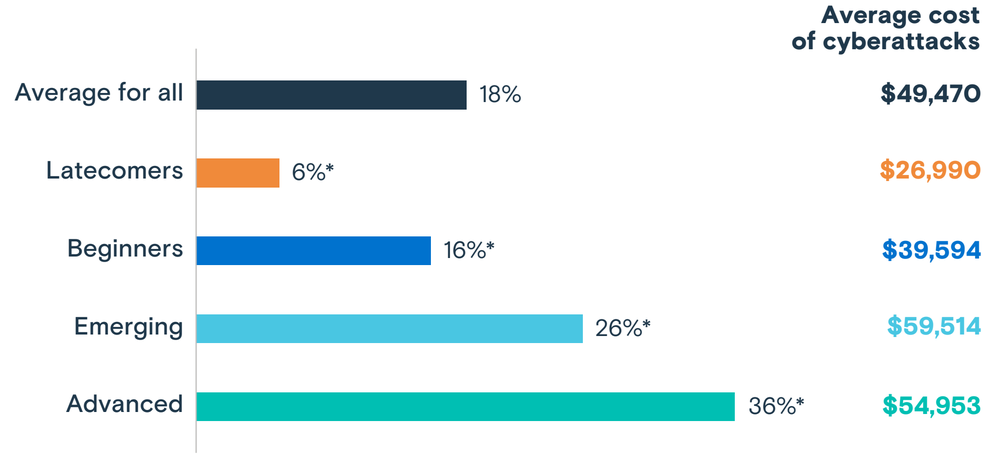
39%
of companies that regularly use data

29%
of companies that don't regularly use data

As a result, digitally advanced businesses are five times more exposed to cyberattacks and suffer twice as much damage as latecomers.

However, the cost of cyberattacks for advanced businesses ($54,953) is lower than the cost for emerging businesses ($59,514), as they are more careful with their cybersecurity. We see more of them adopting a variety of cybersecurity practices.

Figure 17 – Percentage of SMEs that have experienced at least one cyberattack, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,393 respondents.

Cybersecurity training remains a weakness for many companies

55%
of Canadian businesses…
(over half of all companies)

19%
of latecomer businesses…
(around one in five companies)

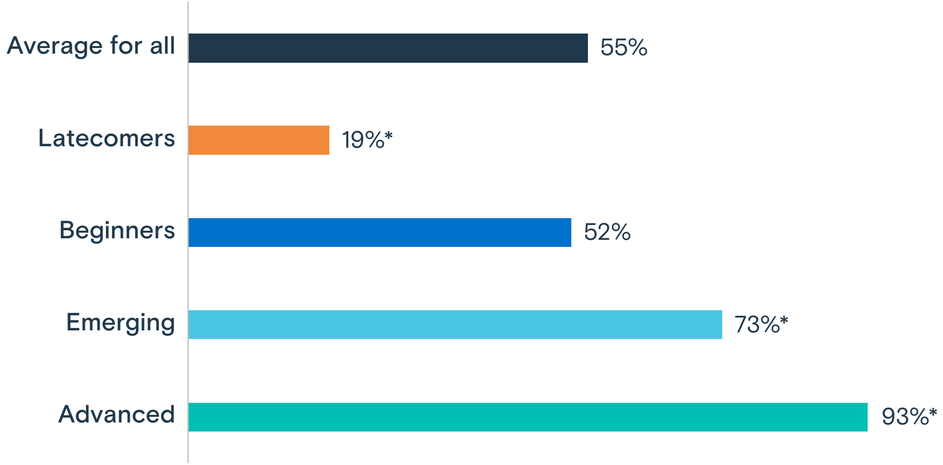
…regularly train and raise awareness of their staff on cybersecurity

26%
of Canadian businesses…
(a quarter of companies)

44%
of latecomer businesses…
(almost half of all companies)

…don't install patches and updates in their operating systems and third-party applications on a regular basis

Figure 18 – Percentage of SMEs that train and raise awareness of their staff on cybersecurity, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,458 respondents.

4 steps to strengthening your cybersecurity

We suggest this four-step approach to strengthen your defences against cyberattacks.

1 Identify risks

Countering cyber threats starts with asking questions:

- What are our most valuable assets?
- What are some potential threats we are facing?
- Are our current security controls effective?
- Who is currently responsible for cybersecurity?

2 Create controls

Next, put in place measures such as malware detection, training, data encryption, and assets and supply chain risk management.

Consider implementing the following measures:

- a formal information security management program
- information and security policies, identity and access control
- staff information security training, security team competence
- encryption, physical and environmental security
- patch management, network and communications security

3 Establish a security culture

Train staff to think in terms of cybersecurity and adopt safe practices: a strong security culture can go a long way toward keeping an organization safe. Developing the skills of your people internally can take a long time and will entail more than simply having them complete a class. If you urgently need these skills in your team then asking for short-term help from a consultant.

4 Monitor and improve

You'll need to install software or hire a service provider to monitor your network and watch for anomalies and potential cybersecurity incidents before they cause damage. Over time, you'll be able to set benchmarks and measure how effective you are at responding to threats and keeping systems protected with the latest software.

Read the full article

Estimating return on investment (ROI) and technology integration are also challenges to digitization

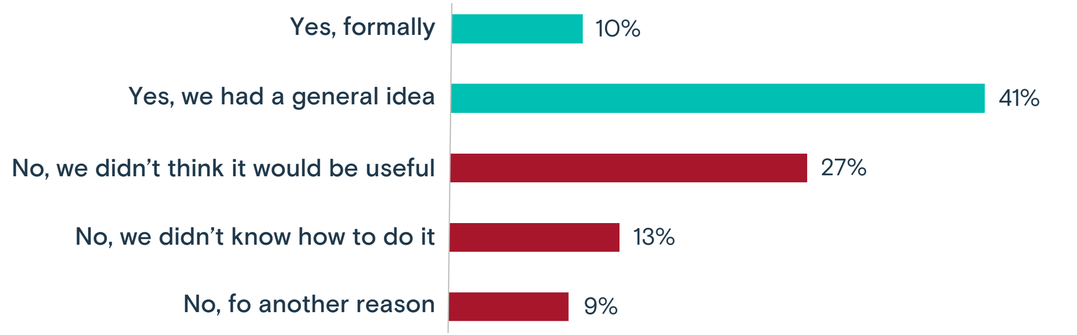
Our experts state that the majority of entrepreneurs are moving forward with their technology acquisition project even if they cannot quantify the ROI.

- Not surprisingly, estimating the ROI is difficult.
- Only 10% of entrepreneurs formally calculate their ROI before making a technology investment.

Further, time, resources and money required to integrate new technologies are often underestimated.

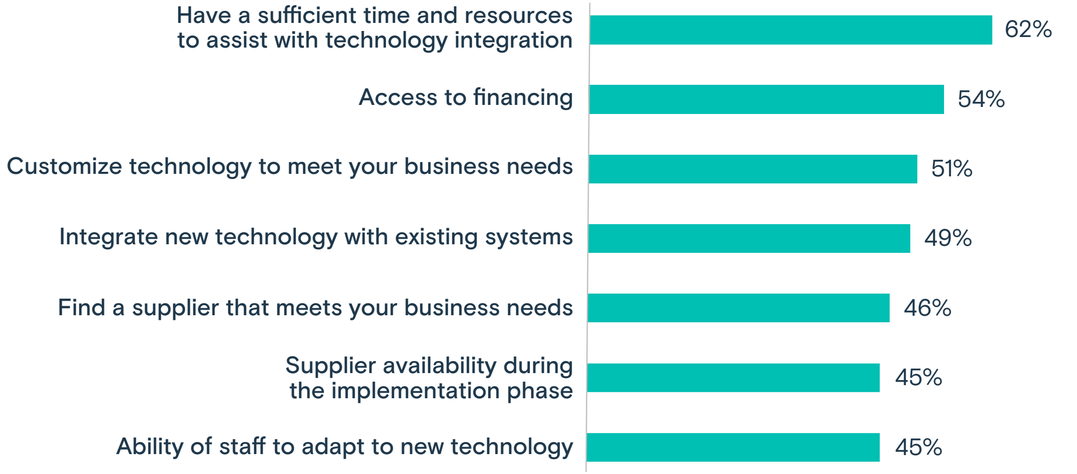
- Take it for granted, you probably underestimate how difficult integrating new technologies is along the technology acquisition pathway.
- It's not just a matter of integrating the new technology with existing systems (a major challenge for 49% of businesses), but of finding the time and resources required to integrate the technology within the business (a major challenge for 62% of businesses).

Figure 19 – Percentage of SMEs that estimated the return on investment for their most recent technology acquisition



Source: BDC, Small and Medium-sized Businesses Technology Acquisition Pathway Survey, 2022,478 respondents.

Figure 20 – Challenges faced by SMEs in a technology acquisition process



Source: BDC, Small and Medium-sized Businesses Technology Acquisition Pathway Survey, 2022, between 451 and 479 respondents.

Case study

Digital investments lead to better business growth

When Heat-Line was launched in 1988, digitization was not top of mind for its two founders.

The rural Ontario company based in the Haliburton Highlands first addressed the problem of freezing pipes in local cottages. Starting out in a garage, the owners were manually building and testing prototypes of freeze-protected pipes.

Heat-Line saw significant growth between 2000 and 2018 by employing the heated cables in a variety of commercial and residential purposes. But while the company was growing, its internal tracking and accounting systems were being challenged by a mix of unconnected older systems and manual processes.

“There was a lot of human involvement, which increases the risk of errors,” says Matthew J. Roberts, the company’s operations manager.

Roberts could recognize that it was a successful company, but its lack of both digitization and a digital plan was endangering its future growth.

ERP system helped organize the work

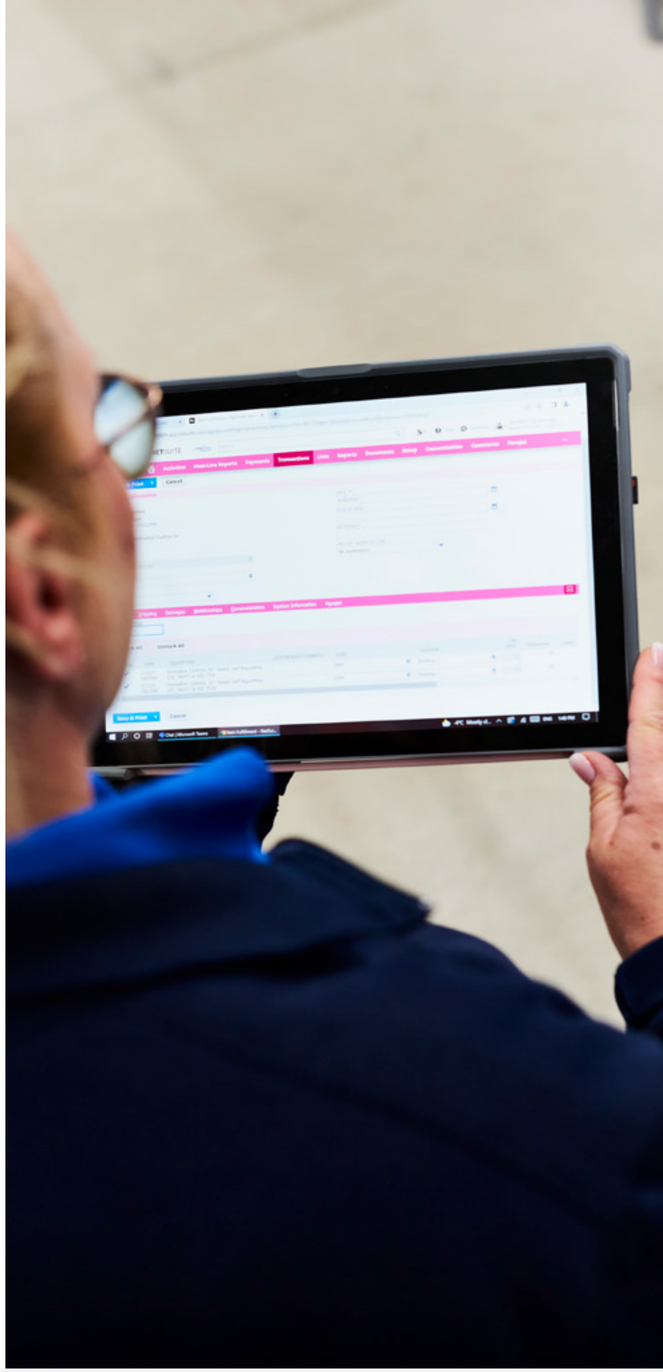
In 2018, Heat-Line’s leadership team decided the company needed a tool to integrate its various systems. The team reached out to BDC Advisory Services to help them select an ERP system that met their needs.

The ERP was implemented at a critical time. As the pandemic caused people to move out of cities and into rural areas or cottages, the demand on Heat-Line’s services skyrocketed. Heise is convinced that without the new ERP system, they would never have been able to keep up with the volume of orders.

“The capability we captured through the ERP is what gave us the ability to get that work done,” says Lorne Heise, CEO and Co-Founder of the company. “Not implementing the ERP would have significantly impacted Heat-Line.”

The ERP helped streamline processes, enabling employees to focus on building products rather than managing paper-based tracking tools. As a result, Heat-Line saw a 40% increase in sales and an almost doubling of its revenue between late 2020 and 2022. Heat-Line continues to integrate new tools with the ERP to further enhance its service and grow the company’s sales.

“Because of the growth in the business, we now employ more people, and have given them good jobs.”



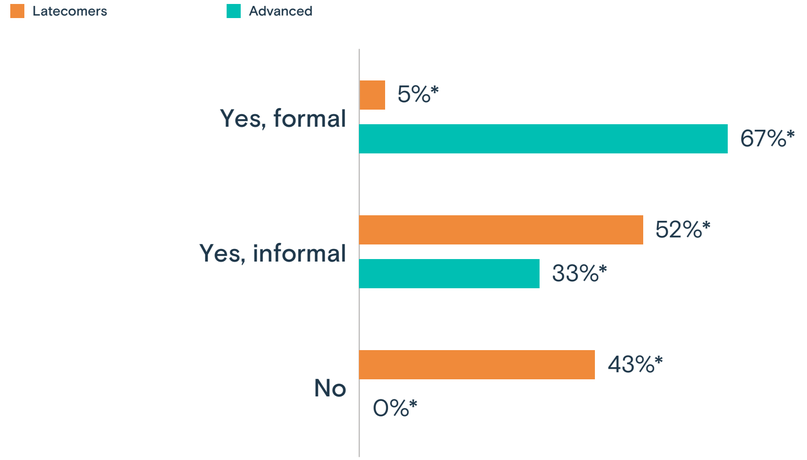
Where do I begin?

One of the distinguishing characteristics of digitally advanced businesses is that they all have a business strategy.
Meanwhile, only 5% of digital latecomers have a formal business strategy, while almost half of these businesses (43%) do not have a businesss strategy.

Almost all advanced businesses have also already created a digital plan. This plan details their technology vision for the coming years with long-term goals and people who are responsible for each step. Only one in 10 latecomer business can say the same.

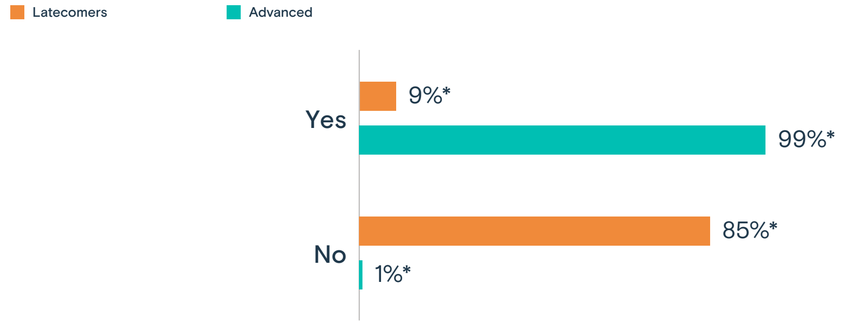
This data would indiacte that the first step to take is to take stock of existing technologies, and then to plan investments with the help of a digital plan.

Figure 21 – Percentage of SMEs with a business strategy, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,559 respondents.

Figure 22 – Percentage of SMEs with a digital plan, by digital profile



Source: BDC, Digital Assessment Survey, 2021, 1,402 respondents.

6 tips for a successful technology acquisition

We talked to a panel of business owners who recently completed a technology purchase. Here are their six tips to make the most of a technology investment.

1 Create a plan

Business owners strongly recommended building a technology plan. As a company grows, its technology needs become more important. Having a plan enables business owners to focus their efforts and stay ahead of the curve.

2 Build a team to support you

Most business owners gather an internal team or hire external IT consultants to guide them through the different phases of a technology purchase (e.g., preparation, finding the right vendor, asking the right questions, implementation). Vendors can also help you along the way.

3 Take the time to prepare

Preparing for a technology purchase can help avoid mistakes or surprises. Talking to peers within their sector, listening to company demos and testing tools were all important. Some teams created grids with specific vendor criteria. Vendors were then rated on each specific aspect to aid with decision making.

4 Communicate your expectations to the vendor

Our panel insisted on the importance of communicating expectations to vendors clearly and from the beginning. It is also important to communicate with the different parties that will be using the system.

5 Prepare an integration plan with milestone dates

Even though dates can change and steps will get modified, an integration plan helps set the pace for the various steps that need to be completed along the way. Implementation usually took longer for panel participants who did not have an integration plan from the outset.

6 Start now

The one thing all business owners agreed they would have done differently was to start their technology projects sooner. Despite the challenges and disruptions, the benefits of technology are clear. Having started sooner they would have profited from the system earlier.

Methodology and data

The findings in this report are based on the results of a literature review, two online surveys, and econometric analyses.

Online surveys

Digital assessment survey

Our Economic Research team has developed a questionnaire to better understand the level of digital and technological maturity of Canadian businesses and the challenges of digitizing small and medium-sized businesses (BDC, Digital Assessment Survey, 2021). Forum Research then conducted the online survey of 1,559 Canadian businesses between November 12 and December 3, 2021. The results were weighted by region and business size to ensure that the findings are representative of all Canadian small and medium-sized businesses. For comparison purposes, a probability sample of this size would have a margin of error of ±2.5 percentage points, 19 times out of 20.

Small and Medium-sized Businesses Technology Acquisition Pathway Survey

A second questionnaire was developed by BDC's Research and Market Intelligence team, which then conducted a survey to better understand the technology acquisition pathway and the challenges of business owners (BDC, Small and Medium-sized Businesses Technology Acquisition Pathway Survey, 2022). This online survey was conducted with 510 business owners and decision makers from February 8 to 18, 2022. The results were weighted by region and business size to ensure that the findings are representative of all Canadian small and medium-sized businesses. For comparison purposes, a probability sample of this size would have a margin of error of ±4.3 percentage points, 19 times out of 20.

Econometric analysis

This study used two econometric models:

- The first is based on ordered logistic regressions and examines the impact of digital maturity on performance, which is defined as growth, exporting, and resilience.
- The second is based on linear regressions (ordinary least squares method) and assesses the socioeconomic determinants of digital maturity, i.e., the correlation between digital maturity and gender, age, and other owner characteristics related to diversity (Indigenous, visible minority, immigrant, disabled).

Both models control other factors that can affect digital maturity. These factors include the size of the business, its industry, its experience (number of years in business) and the region in which it operates.

The regression equations determined whether (1) digital maturity and (2) owner characteristics were statistically significant predictors of (1) performance and (2) digital maturity with p-values at or below 5%.

Econometric results are available from the author upon request.

- Learn more about the Canada Digital Adoption Program (CDAP).
- Talk to our specialists to create a digital plan and choose the right technologies.
- Explore our flexible financing solutions for investing in technology.

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