Tech Industry Outlook
What's Next for the Technology Sector in Canada

Study
January 2022
Canada’s tech sector has been thriving of late, as demand for digitization and new technologies sweeps across every part of the Canadian economy. Revenues in the sector grew at an average annual pace of 9.4% between 2015 and 2020.

This momentum shows no sign of slowing down, with one in three (30%) small and medium-sized enterprises (SME) planning to invest in software over the next 12 months.

With a robust financing ecosystem, one of the world’s most highly educated workforces and a wealth of passionate entrepreneurs, Canada’s tech businesses are well positioned to capitalize on these opportunities. However, to really benefit, the sector will also need to overcome major challenges, such as a growing shortage of qualified workers and increased threats from cybercriminals.

This report highlights major trends and provides advice to help tech entrepreneurs navigate this rapidly changing environment.

We hope it will provide insights into the industry’s prospects in 2022.

At BDC, we will continue to do our best to support the ecosystem and ensure that Canadian tech entrepreneurs have the tools and resources they need to keep growing. Let’s continue to work together to start, build, scale and grow companies that fuel the innovative future of the Canadian economy.

Dwayne Dulmage
Vice President and National Lead, Technology
Industry at a glance

41,765 businesses, 86% with fewer than 10 employees (2021)

$95.7 billion in revenues (2020, estimated)

9.4% average annual growth in revenues between 2015 and 2020

$5.1 billion in R&D spending in 2020, the largest component of private sector R&D spending in Canada

1.9 million workers in the digital economy, of whom 24% are directly employed in the tech sector

1. Information and Communications Technology Council, Onwards and Upwards—Digital Talent Outlook 2025 (August 2021).
Overview of the tech sector in Canada

The technology services sector, "tech sector" in this study, is a key pillar of Canada’s economy that fuels growth across sectors. Changes in consumer behaviour, accelerated digitization and the adoption of new technologies are likely to continue sustaining demand for the tech sector’s products and services. In turn, those products and services will fuel much of the innovation and productivity that will power economic growth in the next decades.

3. The tech sector includes all sub-sectors of software and computer systems and is defined by the following North American Industry Classification System (NAICS) codes: 5112, 518, 5415 and 8112.
Highlights

5.3% growth is expected for the tech sector in 2022

22.4% growth is expected for the 2021–24 period

52% of Canadian businesses plan to invest in intangible assets over the next 12 months

4. "Intangible assets" are defined as software, intellectual property (IP) protection, R&D, marketing and employee training.
Sustained customer demand will continue to benefit the industry

One in three businesses (30%) will invest in software in the next year\(^5\)

As organizations become increasingly dependent on technology for all of their activities, investments in digital technologies will continue to accelerate, and demand for the goods and services produced by the tech sector will keep growing.

BDC’s fall 2021 Small Business Investment Outlook Survey showed that 52% of Canadian businesses plan to invest in intangible assets (software, intellectual property (IP) protection, R&D, marketing and employee training) over the next 12 months. Of those, 58% will invest in software. Software investment intentions are highest in the technology and professional services sectors.

---

5. BDC, Small Business Investment Outlook Survey (October 2021) (n=992).

---

**Figure 2: Software investment intentions, by sector**

Businesses planning to invest more or about the same in software compared to the last 12 months (%)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Planning to invest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology, information and cultural industries</td>
<td>61%</td>
</tr>
<tr>
<td>Professional services</td>
<td>36%</td>
</tr>
<tr>
<td>Primary sectors</td>
<td>29%</td>
</tr>
<tr>
<td>Retail</td>
<td>28%</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>21%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15%</td>
</tr>
<tr>
<td>Construction</td>
<td>15%</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: BDC, Small Business Investment Outlook Survey (October 2021) (n=992)

**Table 1: Top software expenditure intentions, 2022**

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business software (e.g., accounting, payroll)</td>
<td>53%</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>38%</td>
</tr>
<tr>
<td>Cloud infrastructure and storage</td>
<td>26%</td>
</tr>
<tr>
<td>E-commerce solutions</td>
<td>25%</td>
</tr>
<tr>
<td>Collaboration and remote work tools</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: BDC, Small Business Investment Outlook Survey (October 2021) (n=992).
What is the outlook for the tech sector?

Our five-year growth outlook for the tech sector is very positive. This isn’t surprising, given the high demand for and accelerated adoption of technologies across every sector of the economy.

We expect tech sector revenue to grow by 5.3% in 2022. Forecasts show it will grow by a total of 22.4% in the 2021-24 period.

---

### Figure 3: Normalized GDP growth for the Canadian economy and the tech sector, 2010–24

<table>
<thead>
<tr>
<th></th>
<th>Canadian economy</th>
<th>Tech services sector</th>
<th>Forecast</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2010</td>
<td>1.10</td>
<td>1.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2011</td>
<td>1.20</td>
<td>1.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2012</td>
<td>1.30</td>
<td>1.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2013</td>
<td>1.40</td>
<td>1.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2014</td>
<td>1.50</td>
<td>1.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2015</td>
<td>1.60</td>
<td>1.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2016</td>
<td>1.70</td>
<td>1.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2017</td>
<td>1.80</td>
<td>1.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2018</td>
<td>1.90</td>
<td>1.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2019</td>
<td>2.00</td>
<td>2.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2020</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2021</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2022</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2023</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 2024</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Statistics Canada, BDC calculations.
Four trends to watch in 2022

1. **M&As (mergers and acquisitions): A booming market**
   
   The number of M&A transactions in the tech sector has recovered rapidly from a low in the second quarter of 2020. We expect this trend to continue as businesses take advantage of low interest rates to pursue their growth. Tech companies that have made acquisitions in the previous 10 years are three times more likely than their peers to have experienced annual sales growth of 5% or more over the past year.

2. **Labour: A growing need for talent**
   
   Accelerated demand for the sector’s goods and services is fuelling growth, but that growth is limited by the scarcity of skilled workers. Over half (55%) of tech entrepreneurs are struggling to hire the employees they need.

3. **Cybersecurity: A non-negotiable business imperative**
   
   Many companies have had to rush through their digital transformation because of the pandemic. This has created critical vulnerabilities that put their security at risk. While this represents an opportunity for companies that can help clients upgrade their systems and ways of working, it’s also posing a challenge for providers who increasingly need to show they take cybersecurity seriously in order to secure contracts.

4. **Everything-as-a-service: The transition to the cloud is accelerating**
   
   The “as-a-service” model will continue to win over customers who appreciate its flexibility, convenience and affordability. Companies that are slow to adapt risk becoming obsolete.
M&As: A booming market

M&As have rebounded quickly following the waves of the pandemic. That is especially true in the tech sector, where deal-making has been happening at a record pace since the beginning of the year.

The low cost of debt financing—as well as strong buyer demand from tech companies that saved up cash as a precaution and now have capital available for M&As—is driving high transaction levels.

Figure 4: Number of tech sector M&A deal announcements in Canada, by quarter

Source: Crossbie & Company, M&A Report Q3 2021 (November 2021)
One in three tech companies is likely to make an acquisition in the next five years

More than one in three tech business (36%) reported they would be likely to complete an acquisition in the next five years.

The main reason for purchasing a business (70%) is to acquire technology and IP. Indeed, technology adoption often requires sufficient critical mass for a company to reap the full benefits. Acquiring talent and expertise is also a top reason (43%).

Figure 5: Top reasons to purchase a business in the next five years

<table>
<thead>
<tr>
<th>Reason</th>
<th>Tech sector</th>
<th>Other sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology and IP acquisition</td>
<td>70%</td>
<td>34%</td>
</tr>
<tr>
<td>Products, service and geographic diversification</td>
<td>48%</td>
<td>46%</td>
</tr>
<tr>
<td>Talent and expertise acquisition</td>
<td>43%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Source: BDC, Survey on Growing, Buying and Selling SMEs in Canada (June 2021) (n=119).
**M&As: Fast track to growing your business**

We conducted an advanced statistical analysis to determine how much growth results from M&As in the tech sector and found they are a very effective driver of growth.

**Acquisitions triple the chances a business will experience high sales growth**

Tech entrepreneurs who had made one or more acquisitions in the previous 10 years were three times more likely than their peers to have experienced annual sales growth of 5% or more over the past year.

Tech firms that completed an acquisition also reported that it allowed them to increase market share (46%), expand into new markets (40%), reduce operating costs (39%) and access better technology (35%).

8% of Canadian tech businesses are expected to be up for public sale in the next five years

Approximately 3,900 tech businesses will be for sale to buyers other than family or management.

---

6. The econometric analysis used logistic regression and measured whether acquisitions resulted in stronger sales growth than organic growth did.

   The model also controlled for the region and the number of years the company had been in business.

7. The Survey on Growing, Buying and Selling SME’s in Canada revealed that 28% of entrepreneurs want to sell or close their business in the next five years. Of those, 30% want to sell it externally. The figure of 8% = 28% (proportion of entrepreneurs departing) X 30% (the proportion of those planning to sell externally).
Advice: Completing a tech acquisition

Tech entrepreneurs who completed an acquisition reported the following factors as keys to success

→ The target company is aligned with your strategic plan.
→ The acquisition price is reasonable.
→ Professionals carry out thorough due diligence.

Make sure the acquisition is aligned with your strategic plan

Strategic planning is key to making your acquisition a success. First, it is essential to know why you want to carry out an acquisition and what you expect to gain from it. Think about products that might be interesting to acquire, geographies that might be important, technology that could be transformational or capacity that might enhance operations.

Perform your due diligence

Before purchasing a business, it is vital to complete a due diligence process. Make sure you hire qualified professionals to conduct this process, which will likely take a few months. Part of this process involves verifying the company’s financials, and confirming or correcting the purchase price.

Learn more

A roadmap to business acquisitions

Check out the full roadmap to a successful business acquisition in our latest study on the Canadian M&A market.

Learn more
Labour:
A growing need for talent

Employment in the digital economy remained steady during the pandemic. The unemployment rate for tech professionals averaged 2.8% in 2020, almost unchanged from 2019, when it stood at 2.7%. By contrast, unemployment for workers across the Canadian economy shot up from 5.7% in 2019 to 9.5% in 2020.

Forecasts show that employment growth in the digital economy will continue to outpace that in the general economy. By the end of 2025, employment in the digital economy will reach 2.26 million people, reflecting the addition of 250,000 jobs since 2020.8, 9

Entrepreneurs are already experiencing great difficulties in finding the qualified tech workers they need. Tech businesses will have to spend more time hiring and retaining workers than they did before. Some tech entrepreneurs have already increased salaries by 20 to 25% in an attempt to retain current workers.

55% of tech entrepreneurs are struggling to hire the employees they need10

29% of tech entrepreneurs struggle to retain their employees

---

8. Information and Communications Technology Council (ICTC), Onwards and Upwards—Digital Talent Outlook 2025 (August 2021).
9. According the ICTC, the digital economy included 1.9 million workers in 2020. Of these workers, 80% were information and communications technology (ICT) professionals, of which 63% worked in non-ICT sectors and 37% in the ICT sector. The remainder of workers were non-ICT professionals working in the ICT sector.
10. BDC, Survey on Labour Shortage in Canada (May 2021) (n=81 (tech respondents)).
Automation: The game changer

The ongoing labour shortage underlines the importance of new solutions to sustaining growth and productivity for tech companies in the long run.

A recent BDC study\textsuperscript{11} found that automation is the most efficient way for businesses to ensure they can hire the employees they need. Companies that automated certain areas of their businesses\textsuperscript{12} are:

\begin{itemize}
  \item 2.0 times more likely to find hiring easy
  \item 1.9 times more likely to see higher-than-average sales growth
\end{itemize}

Investing in labour-saving technology boosts the productivity of current workers by automating repetitive tasks. This reduces the need to hire new employees, while providing more resources to retain existing workers.

Automation also helps position a business as a desirable place to work. With so many jobs going unfilled, employees now have more choices. A business that offers advanced technical solutions has a definite advantage in the competition for talent.

\textsuperscript{11} BDC, How to Adapt to the Labour Shortage Situation (September 2021).

\textsuperscript{12} “Automated certain areas of their business” means the firm has fully automated processes in at least one function or business unit.
Labour: A growing need for talent

Advice: How to get started with automation

1. **Analyze your needs and eliminate waste**
   Get started by observing your process flow and looking for waste, recurring problems or gaps. Map out your processes and identify the processes you need to improve and the inefficiencies you need to eliminate. Inefficiencies can include errors in quality or rework, poor workspace layout or insufficient information.

2. **Implement automation iteratively**
   Create a prototype, test it, tweak it and then test the revised prototype. Repeat this process until you reach your solution. Don’t wait to reach the final version before implementing. The iterative process allows you to refine an automation solution quickly, especially if you still need to identify features and functions in detail.

3. **Train your employees**
   Invest in training so that your employees can learn to use the tools you put at their disposal. Not only will you increase efficiency, but you will also increase your employees’ engagement and motivation.
Labour: A growing need for talent

Attracting talent: It’s more than just salary

Salary is only a small part of what you can offer to make your business more attractive to employees. Factors such as flexible work arrangements, perks and bonuses, paid vacation, and a supportive workplace culture will make employees feel valued and appreciated. We found that competitive salaries and benefits, flexible work arrangements, and mentoring programs are key elements of a total compensation package that helps businesses retain workers.

Become a top employer by offering a total compensation package

Raising wages and benefits can cut into your profits, which may be a challenge. However, by calculating your turnover costs (which are usually high), you may find that offering higher salaries is an investment rather than an expense.

Flexibility in all its forms is the new normal. Get creative. Consider offering employees one or more of the following:

→ scheduling flexibility
→ flexibility in the number of hours worked
→ flexibility in the place of work
Automating hiring:

business uses talent assessment platform to quickly find best candidates

Caitlin MacGregor was leading a technology start-up when she had a revelation that changed her life. She needed to hire employees, but wasn’t satisfied with the usual long process of posting jobs, sifting through resumes and sitting through interviews.
What if she could use industrial/organizational psychology and technology to speed up hiring and zero in on the best candidates? What if she could use data to reveal the potential of workers to objectively align talent to opportunities at speed and scale?

MacGregor developed a psychometric assessment to identify high-potential applicants using research from industrial and organizational psychology. “We found people we would have never looked at,” she says. “It democratized access to this highly predictive data and we found some absolutely incredible top performers.”

Plum uses a talent assessment platform to automate hiring

Plum was founded in 2012, with a mission to empower people to reach their full potential at work. Plum’s behavioral assessment quantifies people’s potential and provides organizations with objective data to inform talent decisions across the employee lifecycle. Her rapidly growing company has expanded from 10 employees to 33.

MacGregor also uses the behavioral assessment herself to identify high potential candidates for roles at Plum. Candidates complete the 25-minute assessment that gauges social intelligence, problem-solving, adaptability, innovation, leadership potential and more.
The assessment then automatically generates a profile that reveals the candidate’s top talents, work style and work preferences. These can then be matched for fit with a company’s job openings.

“It’s a lot of work to read hundreds or thousands of resumes,” MacGregor says. “The tool automates talent acquisition and matches candidates to roles.”

**Hiring pool expanded**

Only after a candidate is identified as a good fit does the company look at their resume and credentials. “Once you find the top 10 percent of people who are a great match, you can look at their hard skills and decide if it’s worth training or upskilling them,” MacGregor says.

The assessment provides objective data to help remove biases and expands the hiring pool to more diverse candidates, MacGregor says, crediting it with helping Plum achieve gender parity in its workforce.

She has now added automated functionality for using the platform in talent management. The assessment can identify future leaders, give employees career insights, help form teams and boost retention.

“This is game changing for talent management—the critical missing piece,” MacGregor says. “We’re envisaging hockey-stick growth.”

“It’s a lot of work to read hundreds or thousands of resumes.”

Caitlin MacGregor, CEO, Plum
Cybersecurity: A non-negotiable business imperative

The increased sophistication of cyberattacks, coupled with the fact that more people are working remotely, has positioned cybercrime as one of the greatest threats for tech businesses. Companies have had to rush through their digital transformation and have left behind vulnerabilities that put their security at risk. While cyberattacks on larger businesses are well publicized in the media, the many attacks on small businesses don’t attract as much attention.

Businesses are targeted mainly for their customer, partner and supplier data; financial information; medical data; payments; and proprietary information. That information is then held for ransom, sold or used to gain a competitive advantage.

<table>
<thead>
<tr>
<th>Table 2: Frequency and cost of cyberattacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>16% of small businesses have been the target of a cyberattack in the last 12 months</td>
</tr>
<tr>
<td>28% of medium-sized businesses have been the target of a cyberattack in the last 12 months</td>
</tr>
<tr>
<td>30% of businesses that suffered a cyberattack reported costs of at least $50,000 in the last 12 months</td>
</tr>
</tbody>
</table>

Consequences can be severe for businesses and range from financial losses—due to thefts, ransom payments or legal fees—to IP theft, productivity loss, operational interruption and reputational damage.

Ransomware (67%) and business email compromise (18%) attacks were the two most common types of cybercrimes in 2020. Ransomware attacks can easily shut down an entire organization. They are often carried out through a type of malware that renders an organization’s systems or files inaccessible until a ransom is paid. In business email compromise attacks, cybercriminals may send phishing emails to employees or attempt financial fraud. These incidents are often complicated and expensive to deal with, and can wreak havoc in an organization.

13. BDC, Survey on Digital Maturity (November 2021) (n=1,559).
14. 19% of small (fewer than 100 employees) and 75% of medium-sized businesses (100 to 499 employees).
Only half of businesses (55%) train their employees on cybersecurity

Even though businesses recognize the risks linked to cybersecurity, only half of surveyed businesses (55%) said they train their employees against possible cyberattacks.\(^6\)

Table 4: Cybersecurity practices adopted by small and medium-sized enterprises

<table>
<thead>
<tr>
<th>Practice</th>
<th>Average</th>
<th>Businesses that haven’t suffered a cyberattack</th>
<th>Businesses that suffered a cyberattack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee training and awareness on cybersecurity</td>
<td>55%</td>
<td>51%</td>
<td>78%</td>
</tr>
<tr>
<td>Installation of patches and regular updates of operating systems and third-party applications</td>
<td>65%</td>
<td>63%</td>
<td>79%</td>
</tr>
<tr>
<td>Use of strong and secure passwords that are regularly changed</td>
<td>79%</td>
<td>81%</td>
<td>82%</td>
</tr>
<tr>
<td>Regular backup of the organization’s information</td>
<td>81%</td>
<td>82%</td>
<td>87%</td>
</tr>
<tr>
<td>Use of regularly updated antivirus and antimalware software</td>
<td>83%</td>
<td>85%</td>
<td>88%</td>
</tr>
</tbody>
</table>

Source: BDC, Survey on Digital Maturity (November 2021) (n=1559).
Security certification as a competitive advantage

With countless cyberattacks occurring every month, demonstrating compliance with cybersecurity best practices is fast becoming a prerequisite to doing business in many industries and jurisdictions, due to tougher privacy laws and rising customer expectations.

Businesses are increasingly turning to certifications such as ISO 27001 to signal that they take security seriously and have invested in processes and systems to protect customer data.

What is ISO 27001 certification?
ISO 27001 is the central standard in the ISO 27000 series, which is designed to improve information security for organizations. To obtain ISO 27001 certification, a company needs mechanisms to ensure information security and must develop a continuity plan that details how it will maintain operations if a cyberattack occurs. While obtaining the certification doesn’t prevent a cyberattack, it does confirm a firm has put in place best practices to prevent one. The certification is available to organizations of all shapes and sizes.

Obtaining ISO 27001 certification, will allow companies to certify that these measures are in place to ensure the security of their information systems and those of their clients:

- privacy and data-handling policies
- notification processes for private data accessed without prior authorization
- destruction processes for data at the end of any outsourcing contracts
- measures to ensure the security of any outsourced data centres

Learn more about ISO 27001 certification
Advice: Simple steps to protect your business

The potential for financial and reputational losses caused by cyberattacks is huge, but you can do a great deal to protect yourself, starting with these simple steps. But remember that the most basic step any business can take to protect itself it to educate employees about cybersecurity.

- Identify all of your business’s sensitive data, including IP, client and supplier data, and financial records. Knowing the content and location of your data assets means you can better protect them.
- Make sure you have a firewall between your network and the Internet.
- Train employees to create strong passwords.
- Enforce multi-factor authentication for logins and network access.
- Regularly back up data and make sure the backups have unique access credentials.
- Secure equipment (such as smartphones, laptops and USB sticks) used by employees.
- Focus on email security: enable attachment scanning, use external sender banners, and train staff to spot and contain malicious phishing attempts.
- If you have employees who work remotely, make sure they have a firewall on their home network and a virtual private network (VPN).
- Develop a cybersecurity incident response plan to respond to a cyberattack.
Everything-as-a-service: The transition to the cloud is accelerating

The debate about whether tech firms should move to the “X-as-a-service” model (XaaS) of cloud computing is long over. Companies are now efficiently and profitably delivering all types of technology products and tools to users as services over the Internet, rather than locally or on site. Apart from being hosted remotely, these services are usually accompanied by a flexible consumption model that makes it easier to enroll new clients and can be scaled up to meet their needs.

Software-as-a-service (SaaS), infrastructure-as-a-service (IaaS) and platform-as-a-service (PaaS) companies are among the fastest-growing segments in the software sector.

Cloud penetration in Canada’s software market was about 29% in 2018 and had reached 37% by the end of 2020\(^1\). Public cloud services are forecasted to grow by an annual average of 15% until 2024.

**Table 4: Canada’s forecasted public cloud market growth, 2021 to 2022**\(^2\)

<table>
<thead>
<tr>
<th>12%</th>
<th>15%</th>
<th>17%</th>
<th>22%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SaaS applications</td>
<td>IaaS</td>
<td>SaaS system infrastructure software</td>
<td>PaaS</td>
</tr>
</tbody>
</table>

\(^1\) International Data Corporation (IDC), Top Public Cloud Trends in Canada (2020).
\(^2\) Ibid.
What does XaaS mean for a business and its customers?

**Advantages for the business**
- Predictable and recurring revenue streams
- Faster development and deployment cycles
- Lower operational costs, due to the ability to serve customers at scale through a common platform
- Quicker responses to customer and trade requests
- Deeper insights into customer consumption patterns to help inform add-on sales
- Opportunity to reach new customers

**Advantages for its customers**
- Better entry-level pricing
- Possibility to add features as needs mature
- Shift from capital expenditures to more predictable operational expenses
- Faster implementation and return on investment
- Regular product enhancements (upgrades)
- Lower IT maintenance costs
- Improved security

Everything-as-a-service: The transition to the cloud is accelerating.
### Advice: Implementing disruptive business models for high growth

Shifting your offerings to the as-a-service model can bring great success. However, the transition also comes with challenges, because it requires fundamental changes to your business model.

**Choosing the best offering to generate value and maximize revenue**

Determining what to offer clients and how is one of the first challenges of transitioning to a cloud model. What is the right price point to win new customers while retaining existing ones? How much configurability do clients need? How will your services be delivered? You will need to examine these questions in depth before making the switch.

---

### Figure 7: Configurations for companies considering the as-a-service model

<table>
<thead>
<tr>
<th>Monetization</th>
<th>Subscription-based</th>
<th>Hybrid</th>
<th>Consumption-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you monetize your products?</td>
<td>e.g., flat-fee subscription</td>
<td>e.g., subscription plus usage-based average</td>
<td>e.g., pay-per-use</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packaging</th>
<th>Monetization</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you provide customers with configurability and scalability?</td>
<td>Subscription-based</td>
</tr>
<tr>
<td>Predefined</td>
<td>e.g., all-in bundling</td>
</tr>
<tr>
<td>Tailored packages</td>
<td>e.g., category/segment/role bundles</td>
</tr>
<tr>
<td>Configurable</td>
<td>e.g., modules to build your own</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Delivery</th>
<th>Monetization</th>
</tr>
</thead>
<tbody>
<tr>
<td>What form will your offering take (physical, digital or both)?</td>
<td>Subscription-based</td>
</tr>
<tr>
<td>Fixed</td>
<td>e.g., on-premise</td>
</tr>
<tr>
<td>Hosted</td>
<td>e.g., hosted by the provider</td>
</tr>
<tr>
<td>Unconstrained</td>
<td>e.g., cloud computing</td>
</tr>
</tbody>
</table>

Sources: Deloitte, Everything-as-a-Service Business Strategies (2020); BDC.
Reconsider your financial expectations and track your metrics

Transitioning from a traditional sales and delivery model to an XaaS model means moving from a fixed to a recurring revenue stream. The expenses of developing the service and acquiring customers are upfront, while the customer payment happens over time (e.g., monthly). This means that, in the early period, your expenses to acquire customers and deliver your services will outstrip your revenues. When preparing to move to an XaaS model, you should consider the following.

→ Plan for a buffer period, when your profitability will probably decrease.
→ Offer discounts for annual purchases, rather than monthly subscriptions, to help with cash flow.
→ Closely track your recurring revenues, customer acquisition cost, renewal rates and churn rate.

Download our Essential SaaS Metrics guide for more information on the main financial ratios that apply to SaaS companies and how to analyze them.

Ease into the transition by offering a hybrid model

One way to ease into the transition is to offer a subscription model while continuing to serve existing customers with your traditional offering. This can allow you to test your new model while maintaining revenues.

Focus on customer retention

It takes a lot of hard work and money to acquire customers. If they only stick around for a month or two, all that effort is for naught, and your business is headed for trouble. Even small improvements in your retention rate will produce important gains in customer lifetime value. That’s why your business needs to pursue a disciplined, methodical customer retention strategy. The payoff will be a faster-growing, more profitable business.

Note here the stickiness factor, which will depend on the nature of your product. For example, a software service that is somewhat difficult to remove from your customers’ systems will make clients reluctant to unsubscribe. They will have more to lose than to gain by leaving you. Good stickiness will improve retention. Consider this in your strategy!

Learn more about transitioning to an as-a-service model
Methodology

We undertook a comprehensive literature review of economic indicators associated with the technology sector in Canada. This was supplemented by a series of interviews with experts in the field. We used this research to identify four main trends that influence the technology industry. The data used in this study came from the following four online surveys and an econometric analysis.

Small Business Investment Outlook Survey
This quarterly survey seeks to better understand the investment intentions of SMEs in Canada, as well as the factors that encourage or restrict their investments. The latest survey was conducted in October 2021 among 992 respondents. The results were weighted by region, sector and size of business. For comparison purposes, a probability sample of this size would carry a margin of error of ±3.1 percentage points, 19 times out of 20.

Survey on Growing, Buying and Selling SMEs in Canada
Information on the buying and selling intentions of Canadian entrepreneurs is based on this online survey (on a non-probability basis) of 1,563 Canadian entrepreneurs—including 119 tech entrepreneurs—in May and June 2021. The results were weighted by size and region. If the sample had been conducted on a probability basis, the margin of error would have been ±2.5 percentage points, 19 times out of 20.

Survey on Labour Shortage in Canada
This survey assessed labour market conditions and labour shortage among SMEs in Canada. It was conducted online in May 2021 and included 1,251 business owners. The results were weighted by region and size of business. For comparison purposes, a probability sample of this size would carry a margin of error of ±2.8 percentage points, 19 times out of 20.

Survey on Digital Maturity
This survey was conducted to better understand the level of digital and technological maturity of Canadian businesses, as well as the cybersecurity situation of SMEs. It was conducted online with 1,559 entrepreneurs in November 2021. The results were weighted by size and region. If the sample had been conducted on a probability basis, the margin of error would have been ±3.1 percentage points, 19 times out of 20.

Econometric analysis of growth from M&A in the tech sector
We conducted an econometric analysis to measure the impact on sales of growth through acquisition, compared to organic growth. The analysis was performed by STATLOG and was based on data gathered in the Survey on Growing, Buying and Selling SMEs in Canada. The model controlled for the region and number of years in business.
BDC is here to help. We provide business loans and advice to help tech businesses achieve long-term success.

❯ Discover our financing for tech companies.

❯ Find out how our experts can help you position your business, increase revenue and better manage your company.

For more information

1 888 INFO-BDC (1 888 463-6232)
info@bdc.ca
bdc.ca