



# 2022 Global technology report – Canadian Insights

**How Canadian organizations  
are propelling their business  
with technology**

Fall 2022 | [home.kpmg/techreport2022](https://home.kpmg/techreport2022)



# Foreword

After accelerating their digital transformation plans during the pandemic, organizations are now dealing with a host of new challenges, from economic uncertainty and geopolitical turmoil, to rising costs and a global talent crisis. Against the backdrop of our evolving reality, Canadian Digital leaders have maintained focus on investing in new and emerging technologies.

In our latest KPMG Global Tech Report, which surveyed more than 2,200 technology executives and industry experts around the globe, almost all respondents reported improved performance and profitability over the past two years, largely aligned with those who invested in their digital evolution. While overall Canadian respondents appear to be more risk averse in adopting new technologies than their global counterparts, they're still making significant plans and investments.

Additional insights from KPMG's 2022 CEO Outlook found that while Canadian CEOs are preparing for rocky roads ahead, they remain optimistic in their ability to prosper over the next three years—and technology is expected to play a key role. Both surveys pointed toward six key themes where Canadian companies can prioritize their transformation efforts, particularly during a potential downturn.



# Six key themes

**The rapid evolution of digital transformation is continuing full-speed ahead**

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**Canadians may be risk-averse, but there's an increased appetite for emerging technologies**

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**The importance of customer centricity spurs IT investments**

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**Technology adoption drives positive ROI**

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**Cloud computing is table stakes but remains significant in transformation strategies**

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**Disruptive technologies create new cyber threats**

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A photograph of two men in a server room. The man on the left is wearing glasses and a light blue shirt, pointing at a laptop held by the man on the right. The man on the right is wearing a dark blue sweater and is looking at the laptop. The background shows server racks with blue lighting. A white graphic element, resembling a speech bubble or callout box, is overlaid on the left side of the image, containing the main text.

**The rapid evolution of digital transformation is continuing full-speed ahead**

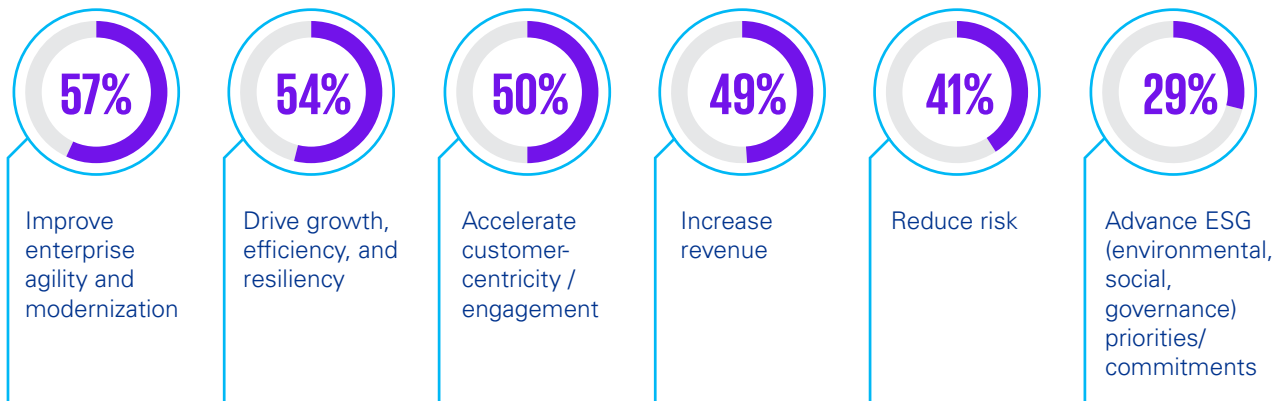
**Almost all global respondents say that digital transformation helped them reach key business and IT milestones sooner than expected, and they're likely to prioritize application modernization and intelligent automation over the next year.**

There's also widespread appetite for new technologies, including metaverse, non-fungible tokens (NFTs) and Web3

technologies. Despite the possibility of an economic downturn, 57% of Canadian respondents (versus 48% globally) said that improving enterprise agility and modernization is the top driver for digital transformation and corresponding investments.

However, one of the biggest challenges ahead—in Canada and around the world—is the lack of talent and skillsets required for implementation and adoption of disruptive technologies. In a downturn, companies that typically come out on top are those that maintain investment focus on critical business

**What are the key drivers of your digital transformation and investments?**



There's a war for talent. While customer experience is important, creating a more satisfactory and engaging employee experience is going to be a very, very big deal in the near future."

**Sanjay Pathak**

Partner and National Leader, Technology Strategy and Digital Transformation Services, KPMG in Canada

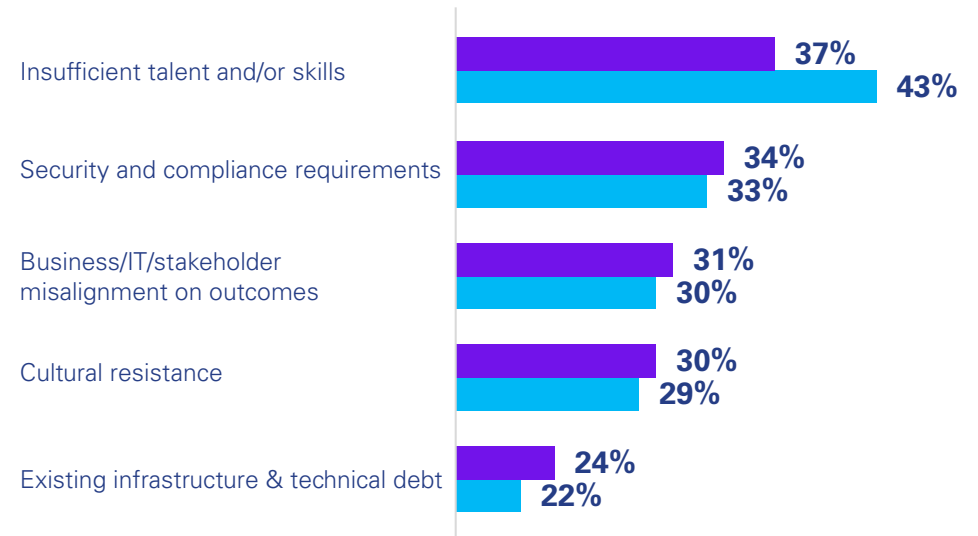
priorities. This is a good time for Canadian companies to do their homework, build use cases for disruptive technologies and ensure they're developing the required skillsets—whether that's building capabilities in-house or by establishing a strong ecosystem of external partners. So when there's an upturn, they will continue to thrive.


## What are the biggest challenges you face in your adoption of new digital technologies?



■ Global  
■ Canada

## What are the top challenges your organization is facing or has faced in your cloud journey?





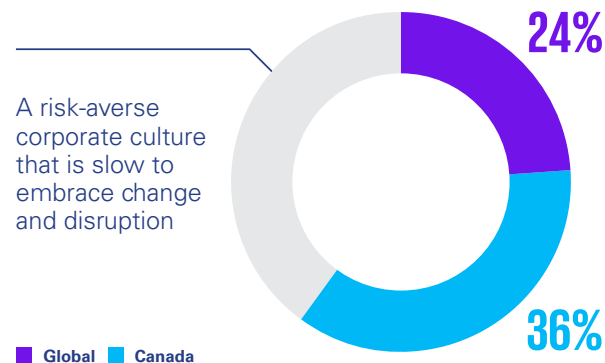
**Canadians may be risk-averse, but there's an increased appetite for emerging technologies**

## Global respondents said they're laying the foundation for emerging technologies, with nearly half (46%) making plans for the future.

But the majority (55%) haven't made any significant moves, choosing instead to wait and see what their competitors do, or to see which products and services their customers demand. Although there are perceived risks in emerging and disruptive technologies, 53% of Canadian respondents expect to invest in the metaverse within the next two years (versus 57% globally) and 67% expect to invest in quantum computing within the same period (versus 67% globally).

Lower investment in these areas when compared to our global counterparts may reflect cost pressures, but could also be related to a general sense of risk-aversion, which is a significant issue for Canadian respondents in adopting new technology (36% of Canadians versus 24% globally). In the CEO survey, Canadian CEOs ranked emerging/disruptive technologies as the number 2 risk to company growth, after regulatory concerns/risks, over the next three years.

## What are the biggest challenges you face in your adoption of new digital technologies?



Canadian companies need to first understand why they're investing in emerging platforms such as the metaverse—they should calibrate investment in alignment with target corporate and brand direction, and digital transformation strategy in a holistic sense. Technical capabilities in areas such as metaverse, Web3 and quantum computing are also in short supply, so prioritizing allocation of those skillsets internally while also developing an ecosystem of partners will become increasingly important, as will automation for low-complexity, high-volume tasks.



There are a lot of shiny objects out there. Remember to focus on transformation that aligns with your overall strategy and values as an organization."

### Kareem Sadek

Partner, Advisory, Cryptoassets & Blockchain Co-leader, KPMG in Canada



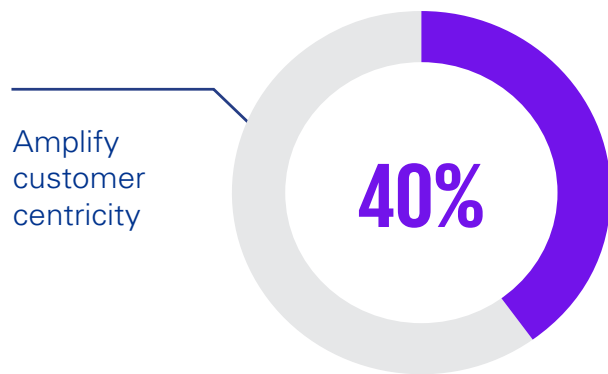
# The importance of customer centricity spurs IT investments



**Customer experience is a key driver of momentum in IT investments and is synonymous with digital transformation. Canadian respondents weighted the importance of improving customer experience at least 10% higher than global counterparts.**

Enterprise technology is expected to play a key role, with almost two-thirds of Canadians prioritizing investments in this area over the coming year. In our CEO survey, Canadian CEOs also placed high importance on corporate purpose and the impact it has on

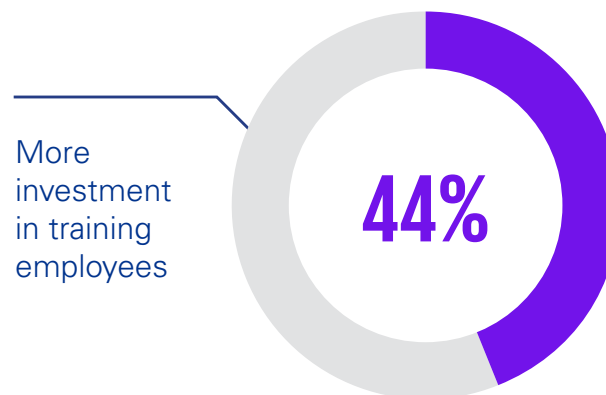
**What is the primary goal for your organization's investment in enterprise technology?**



their company—including building brand reputation and customer relationships, as well as driving shareholder returns.

Alongside customer experience, employee experience is becoming increasingly critical. With a global war for talent, and the ability for employees to work from anywhere, employee experience is becoming a key competitive differentiator. To attract and retain both customers and employees, companies should think about how they can improve digital capabilities and use technologies to meet and exceed the user experience. This will include re-engineering enterprise technology and breaking down silos between departments.

**What will be required to overcome the challenges your organization faces in fully adopting enterprise systems and applications?**



Over time, the word 'digital' in "digital transformation" is going to become an unnecessary adjective to describe transformation. Digital Leaders know that "Digital" must be part of their DNA, ingrained in how they do things. Because Digital is not technology – it's much more about enhancing experience, about how you get things done."

**Sanjay Pathak**

Partner and National Leader, Technology Strategy and Digital Transformation Services, KPMG in Canada



Customer experience and employee experience are equally important, especially in a market like the one we're in today. Companies need to sell themselves to attract the best talent."

**Kathy Penner**

Partner and National Leader,  
Technology Enterprise Solutions,  
KPMG in Canada





# Technology adoption drives positive ROI

**Leaders are confident about what they can achieve through digital transformation. 78% of Canadian respondents (compared to 66% of global respondents) believe their organization is either extremely or very effective at using technology to advance their business strategy.**

Nearly all Canadian respondents said digital transformation has improved profitability or performance over the past two years. Marketing, sales and customer service are benefitting most from these investments.

However, only 32% of Canadian CEOs believe their ESG programs improve financial performance, compared to 70% of American CEOs.

This could be because they're looking at financial performance purely through a lens of profits and losses. Enhancing brand profile, connecting to a sense of purpose and being seen as an innovator will attract customers, employees and other stakeholders—including investors—who want to be aligned with your brand. That, in turn, will have an impact on ROI and value creation over-time and help them progress forward.



“

Leaders are looking at technology and digital investments with increased scrutiny. The need for demonstratable ROI and scalable delivery models being top of mind for most.”

**Kathy Penner**

Partner and National Leader,  
Technology Enterprise Solutions,  
KPMG in Canada

A woman with long dark hair, wearing a dark blue long-sleeved shirt, is leaning over a desk and pointing at a computer monitor. A man with glasses and a blue and white plaid shirt is sitting at the desk, looking at the monitor. The background shows a modern office with a brick wall and a desk lamp. The text is overlaid on a blue speech bubble shape.

**Cloud computing  
is table stakes but  
remains significant  
in transformation  
strategies**

## Organizations that are most effective at digital transformation and see the highest ROI are likely to have met—or even exceeded—their objectives with cloud.

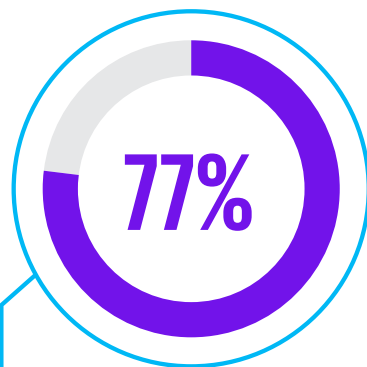
Indeed, 93% of Canadian respondents (and 89% globally) said they are advanced in their adoption of cloud, having either completed migration or started migration of their strategic workloads. In addition, 59% of Canadian respondents say that 40% or more of their enterprise workloads are now in the cloud, while our CEO survey found that 71% of small and mid-sized businesses are investing in cloud technologies.

But misalignment between IT teams and business departments on cloud priorities continues to be a challenge—even more so than

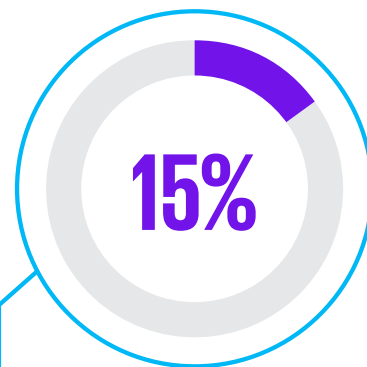
security and compliance requirements. A unified strategic vision for cloud can improve alignment and outcomes, perhaps through the appointment of a head of cloud. This can provide a good return for organizations in terms of better connectivity with the strategic vision and implementation of cloud, which can improve ROI and value creation or preservation.

While cloud is a logical evolution of IT, it shouldn't necessarily be equated with modernization. Many companies are increasingly exploring Hybrid cloud strategies as they increasingly realize that some of their workloads may need to stay on-premise. In many cases, it's possible to modernize or maintain those workloads in non-cloud environments. Hyperscale cloud providers are making substantial investments in solutions that will span clouds and allow for more seamless on-prem integration.

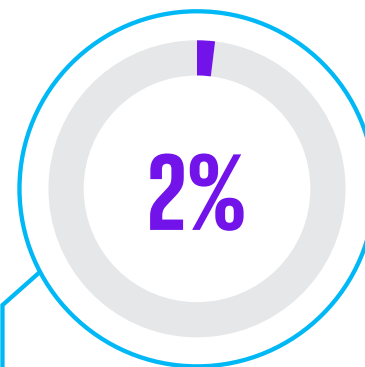
## Where would you place your organization in its cloud journey?



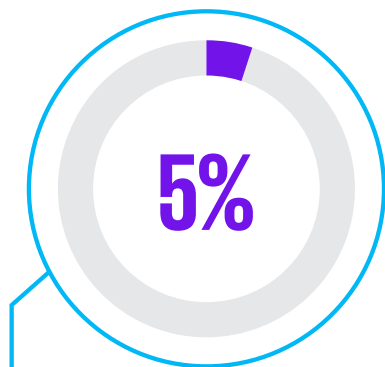
Evaluating cloud as an option but remain primarily on-premise



Piloting workloads and starting to leverage cloud, but at a limited, measured pace (pilots)



Migrating strategic workloads to the cloud is in progress



Completed migration to the cloud and are now focused on continuous optimization and modernization

**Disruptive  
technologies create  
new cyber threats**



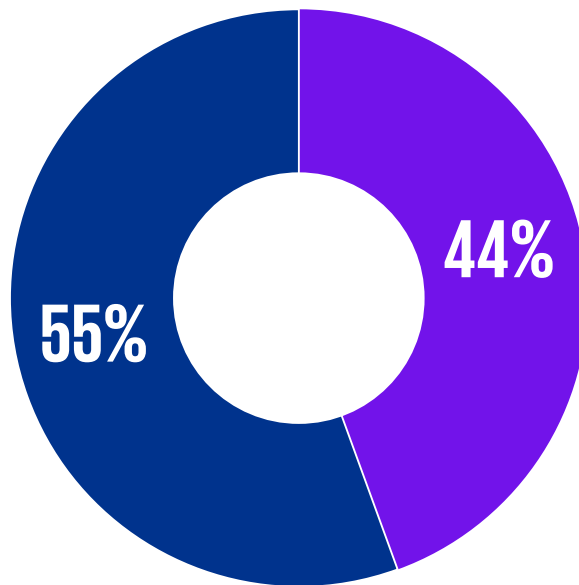


**On average, two in three Canadian respondents (65%) say they are either extremely or very confident in their ability to manage cyber risk, including threats from organized crime groups and compromised supply chains.**

Despite this, 55% of Canadians said their organization is behind schedule when it comes to cybersecurity—even if plans, a vision and leadership support are in place. And our CEO survey found that only 56% of Canadian CEOs feel well prepared for a cyberattack, a decrease of 17% compared to the previous year.

**How would you describe your organization's position today in each of the following areas?**

- We are proactive in progressing against our strategy and are continually evolving
- We are behind schedule, even if plans and a vision are in place



There appears to be an increasing degree of overconfidence in companies' ability to manage cyber risk, both in Canada and globally which could result in underappreciating the true risks they face. The relatively recent adoption of hybrid work and digitalization of customer channels have redrawn the cyber threat landscape. Cybersecurity is becoming more complicated in a quickly evolving Web3 world that includes the metaverse and quantum computing.

Companies will need to understand how security and privacy are evolving in those spaces. Since customer loyalty is built on trust, embedding security in digital transformation initiatives from the get-go can help to build trustworthy customer experiences—which, in turn, could unlock additional cybersecurity funding.





Remember not to just invest in the technology. You need to have the supporting infrastructure to allow for agility and speed to market. The infrastructure that allows you to go to market are things like your legal, regulatory, governance and your risk functions.”

**Kareem Sadek**

Partner, Advisory, Cryptoassets & Blockchain Co-leader, KPMG in Canada



# Leading the way in innovation comes with the right support

Canadian companies are leveraging technology to face the uncertainties ahead and seeing positive returns on initiatives they accelerated over the past two years. But being agile means looking beyond technology to supporting infrastructure such as legal, regulatory, privacy, governance and risk functions, which need to keep in step with digital transformation.

Maximizing performance and resilience for an uncertain future also means understanding which technology areas to focus on internally and which may require external expertise. In many cases, it isn't practical to develop certain technological capabilities in-house, particularly with disruptive platforms like the metaverse.

Canada has quietly become a global leader in innovation, with a growing number of IT startups and fin-techs, as well as innovation communities and partnership networks. Canadian companies that embrace the partner ecosystem—which could include third-party service providers, technology companies and advisors—can leap ahead in the race to transform.

**Contact KPMG to find out how we can help accelerate your digital transformation journey.**

# Contact us



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