



Innovating with intention: The path to tech transformation

A Canadian perspective on the
KPMG Global Tech Report 2023



Contents

03 Foreword

04 Executive summary

06 Section 1:
Transforming with purpose

09 Section 2:
Digital ambitions and realities

13 Section 3:
Communication, culture, and collaboration

15 Section 4:
Leading with trust

18 Conclusion

20 Contact us

Foreword

In the face of prevailing economic headwinds, regulatory uncertainty, and cost escalation, Canadian technology executives continue to see digital transformation as a means to an end, and many are profiting from their investments in advanced capabilities. Granted, achieving this return on investment is becoming increasingly challenging, with 76% of Canadian respondents in our research saying they're now expected to do more with smaller budgets.

Fortunately, there is a fair level of optimism around meeting business goals with existing technology. In fact, 60% of Canadian respondents indicated their current technology stack can power their organizations' growth. This is positive, though less so than the global sentiment, at 73%. In contrast, Canadians seem more confident than their global peers in relation to investing in new technologies (43% vs 35%).

In last year's survey, 44% of global respondents cited a lack of capable technology talent to carry out key roles as their top challenge in the adoption of digital technologies. While labour shortages and skills gaps remain a challenge, they've dropped below other concerns, such as lack of governance and coordination for transformation initiatives, cybersecurity, and privacy concerns, as well as spiralling costs.

When it comes to transformation objectives, customer satisfaction remains a priority, but is no longer the primary driver of transformation initiatives as it emerged in last year's survey. Rather, Canadian businesses are driven to invest where their market-leading peers are investing.

In the current economic climate, with inflationary pressures and looming recession risks, more attention is being paid to creating efficiencies and optimizing existing operations. Generative artificial intelligence (GenAI), which was not a factor in last year's results, has emerged as a new technology with significant potential to change how businesses operate, yet posing certain risks. We're also seeing Canadian businesses explore how enabling technology could help them achieve goals in specific areas of focus, especially those related to increasing environmental, social, and governance (ESG) commitments. However, there appears to be an overall lack of technological maturity in many Canadian organizations, as well as a risk-averse approach to implementing and utilizing those new technologies.

Read on to learn more about our 2023 Global Tech survey findings and what they might mean for your organization.

[Connect with our team](#)

About the survey

The global tech report was based on a survey of **2,100 executives** in **16 countries**, representing nine industries including energy, education, financial services, government, healthcare, industrial manufacturing, life sciences, tech, retail, and consumer packaged goods. The Canadian results are based on the responses of **150 Canadian** survey participants.



2,100

Executives

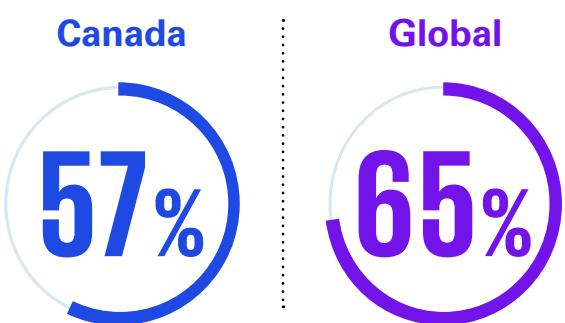
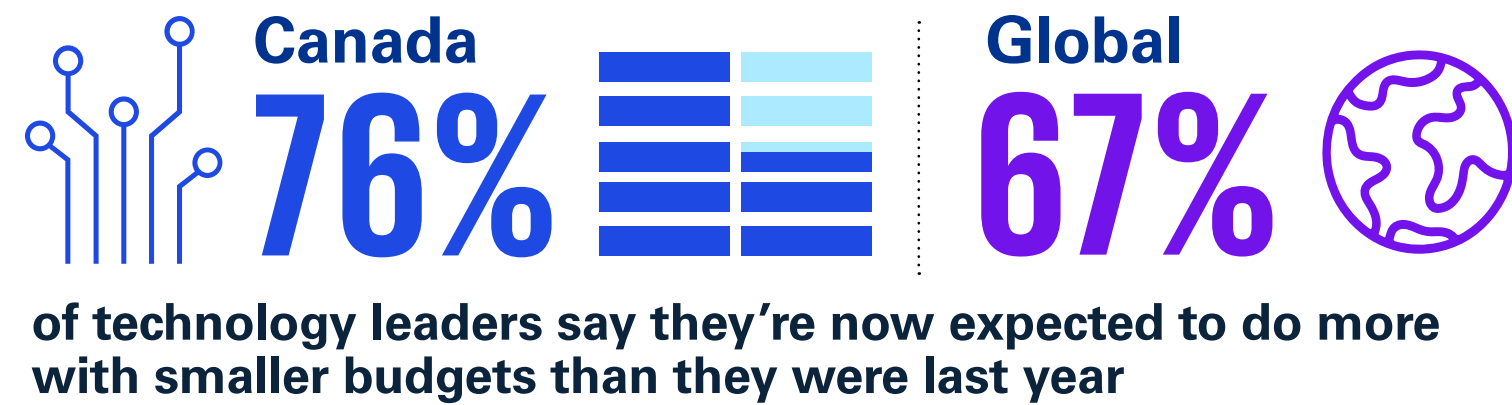
16

Countries

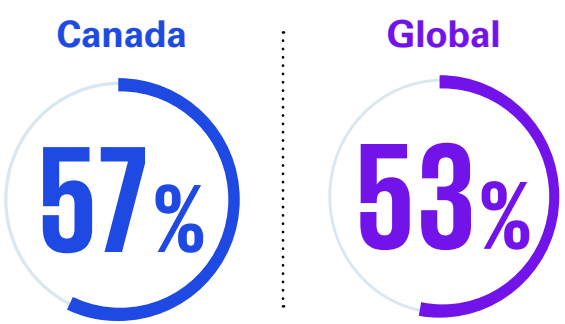
150

Canadian respondents

Executive summary

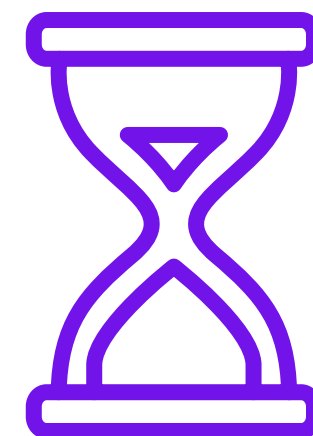
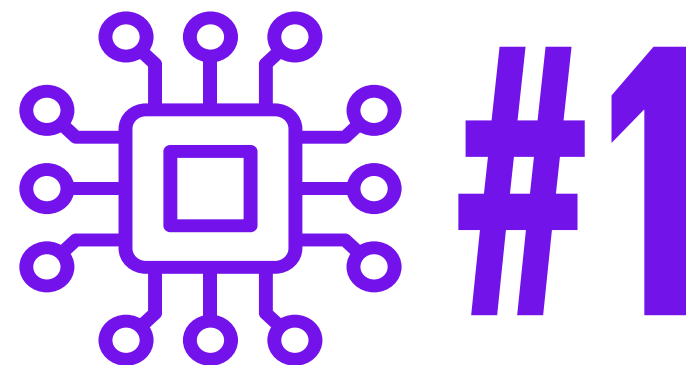


of technology executives that say that economic uncertainty has left them feeling less confident about investing in new technology



of businesses say fast-tracking employee productivity is the primary trigger for digital transformation

AI was identified as the top technology to help businesses achieve their goals over the next three years

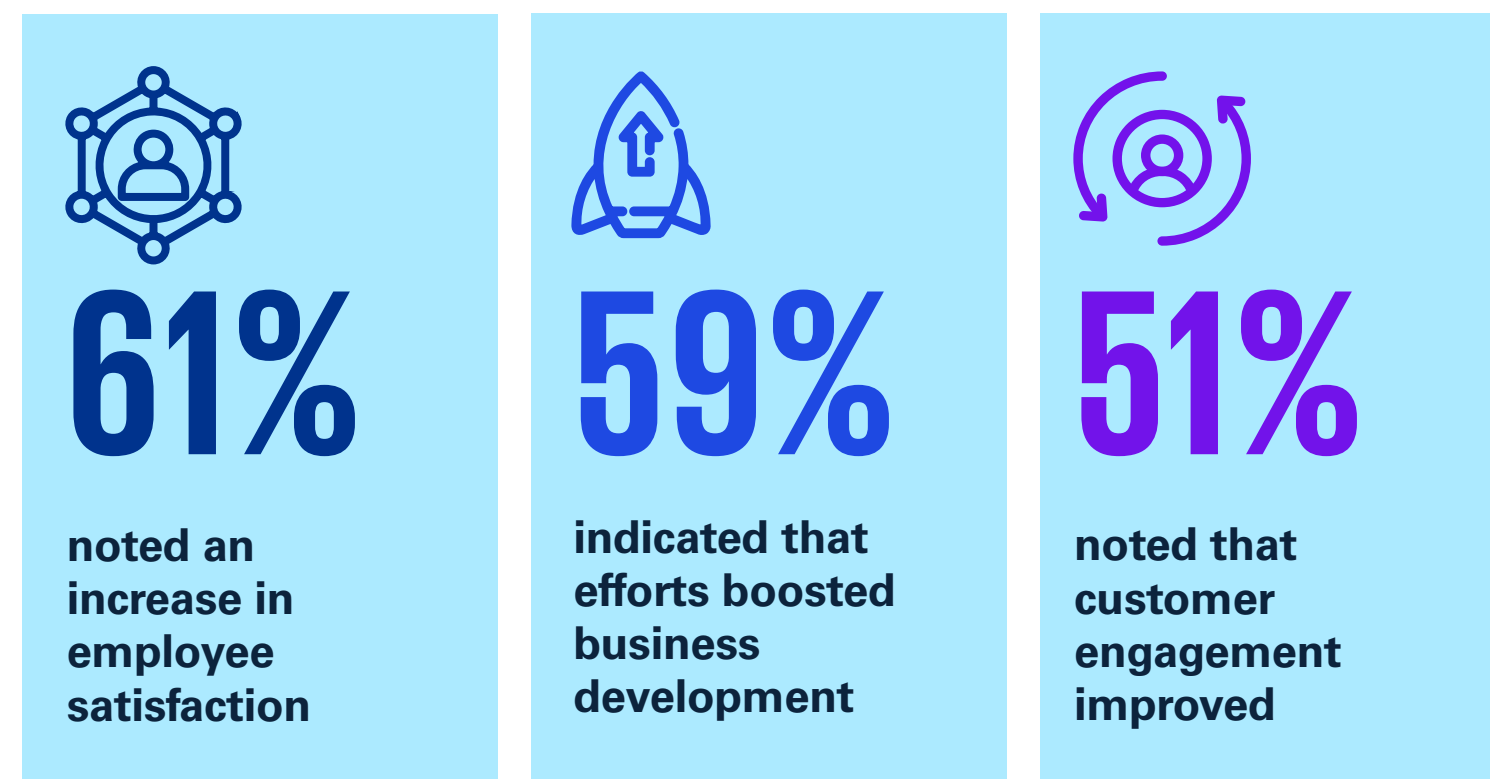


Follow the leader mentality

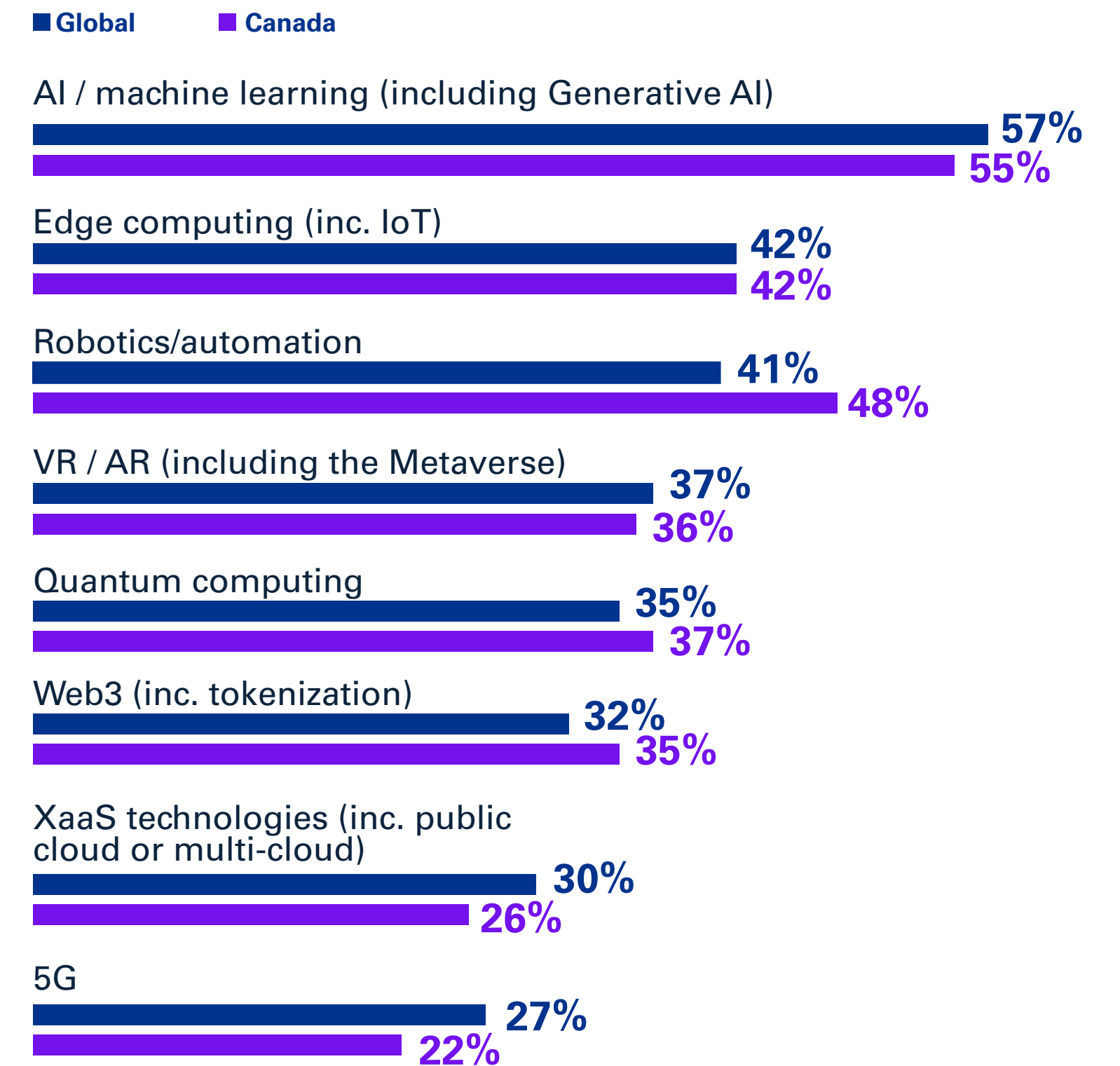
The top reason Canadian organizations are prioritizing certain technologies over others to support their ambitions is "Leaders in our market have already adopted"

Transformation impact

The three key areas where Canadian respondents indicate they've seen the most transformation impact



Top technologies identified as helping businesses achieve their short-term ambitions

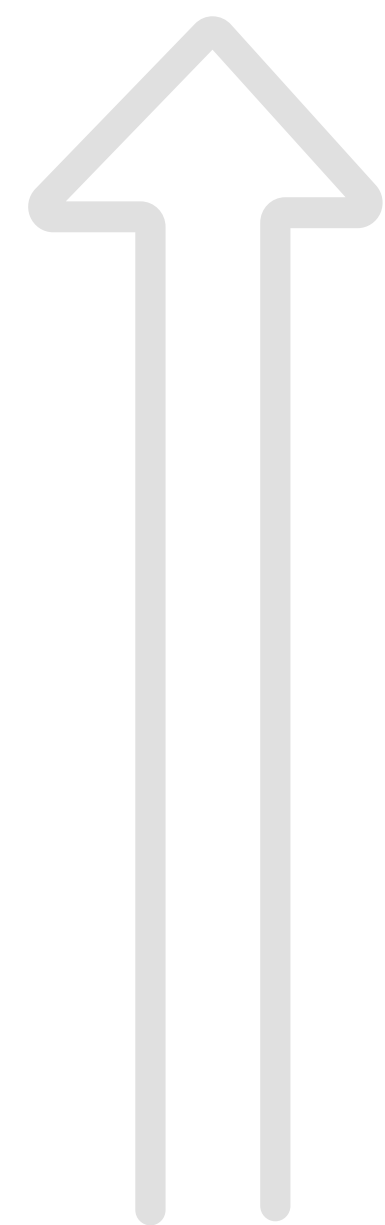


37% of the Canadian organizations that undertook AI digital transformation efforts over the last two years saw an increase in performance or profitability of 11% or over

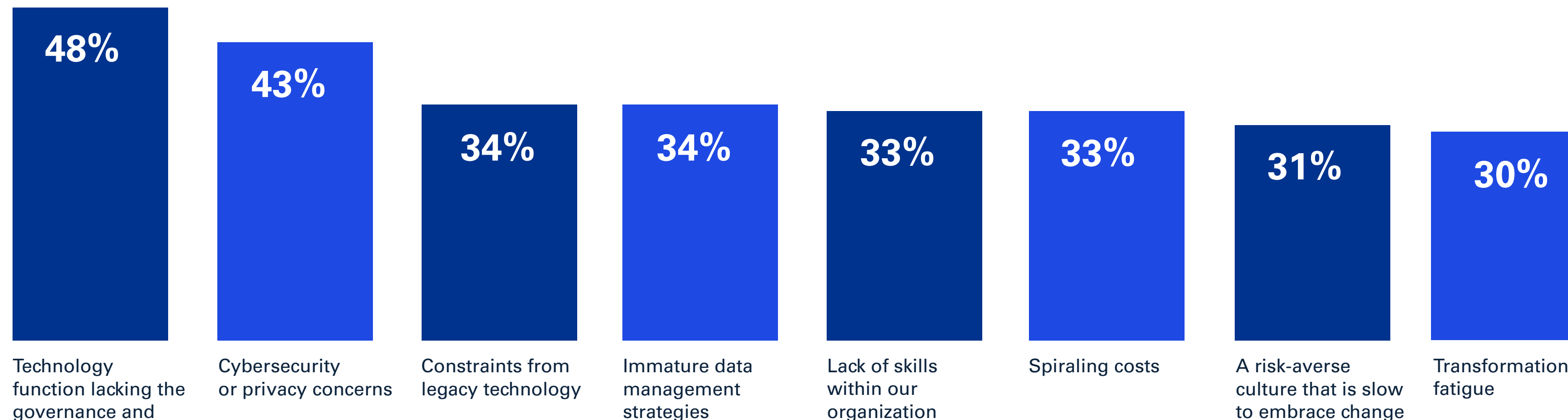
51% of Canadian respondents said advancing ESG priorities is a top goal for their digital transformation


Essential skills of tomorrow's tech leaders


-  **Ethical understanding (for working with AI, etc.)**
-  **Ability to persuade**
-  **Creativity and innovation**
-  **Agility**
-  **Collaboration**
-  **Strategic thinking**
-  **Leadership**
-  **Cost control**
-  **Technical / digital literacy**
-  **Ability to teach others**
-  **Data fluency**





Top transformation challenges for Canada



 **8/10** Canadian respondents felt they needed to be more proactive in integrating trust, security, and privacy into tech rollouts

 **7/10** believe the technology function has the ability and power to influence ESG

 **31%** of Canadian respondents describe their culture as risk-adverse

4 in 5  Canadian businesses plan to grow their use of Everything-as-a-service (XaaS) solutions as part of their cost reduction efforts in the next two years



say they need to get better at helping the board understand the potential of new technologies

Section 1:

Transforming with purpose



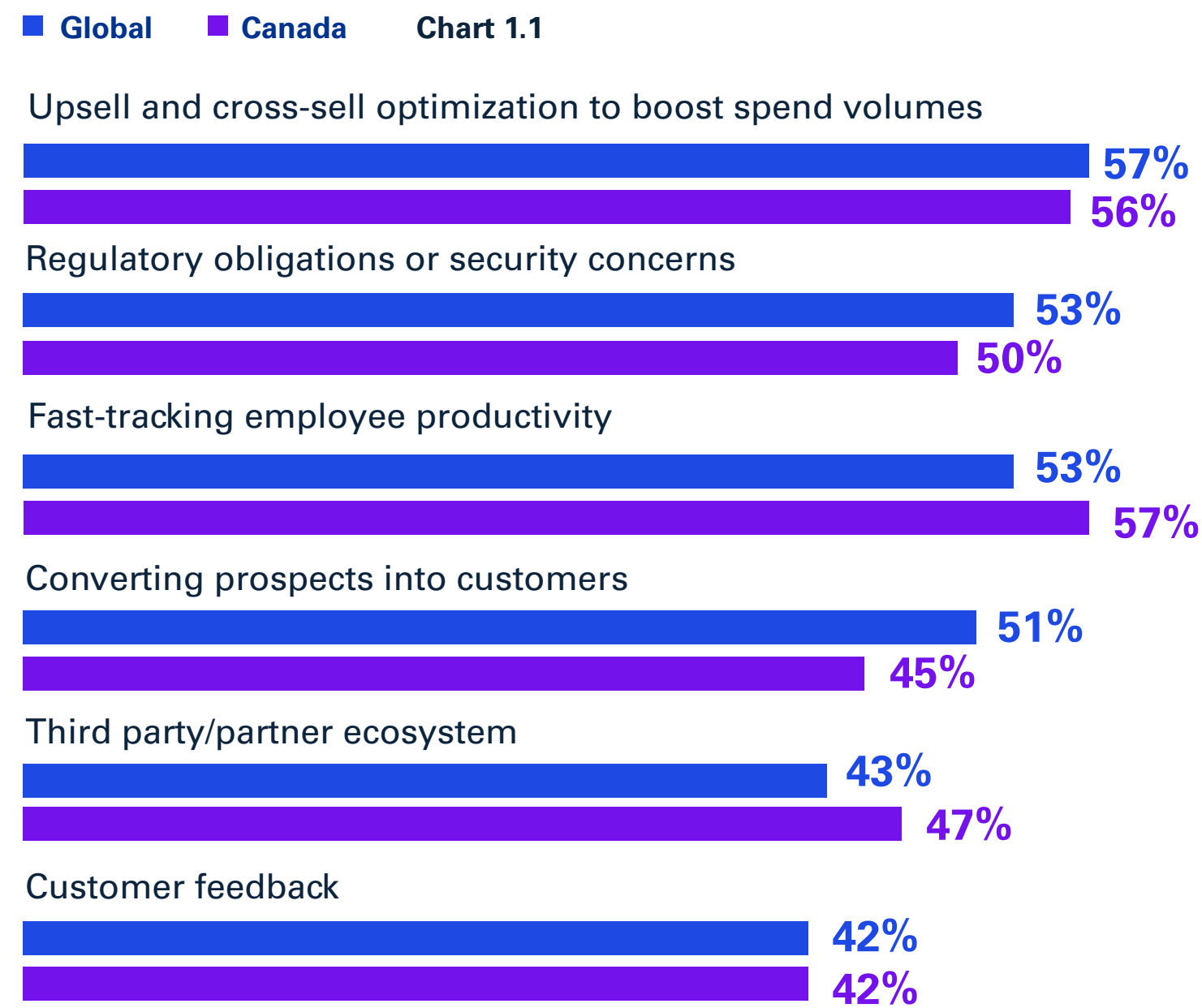
Organizations are being more intentional with their technology spend to earn performance gains, rather than doing digital for digital's sake.

This is likely being influenced by Canadian technology executives' key concerns around managing the complexity of the regulatory environment and cost escalation. But also by the need to embark on digital transformation initiatives that support pressing business objectives, primarily fast-tracking employee productivity (57%), and enabling strategies to upsell and cross-sell to optimize revenue streams (56% - See Chart 1.1). This intentionality is serving them well, as the majority of this year's respondents (63%) say they have successfully used digital transformation to improve their profitability or performance in some way. Notably, the technologies that have driven the highest profitability and performance in Canada over the past 24 months, at 11% or more, are data and analytics, cybersecurity, AI and automation, and VR/AR. The most significant benefits linked to the adoption of these technologies include raised employee satisfaction levels and support for new business development (see Chart 1.2). Overall, the impact of digital transformation continues to exceed expectations.

Technology investments may be bearing fruit, but Canadian business transformation may be stunted by adopting a copycat

approach. [In last year's report](#), customer satisfaction was considered a top priority. And while it still ranks highly this year, the most important driver in prioritizing technology investments for Canadian respondents is "other people are doing it." In other words, they're more concerned about keeping up with market leaders and competitors, rather than innovating for the customer. While leaders may be looking to do more with less budget given the uncertainty of the current economic environment, choosing which technologies to invest in should be a strategic exercise that aligns with their own, unique organizational objectives and desired outcomes, rather than being driven by the actions of others.

Employee productivity and upsell optimization are the main triggers of digital transformation




Q: What are the main triggers of digital transformation in your business?

“
If Canadians want to be true global leaders, they need to focus on the enterprise value they intend to create. But having the conviction to act, to take risks in a holistic way, goes back to digital culture and digital leadership.”



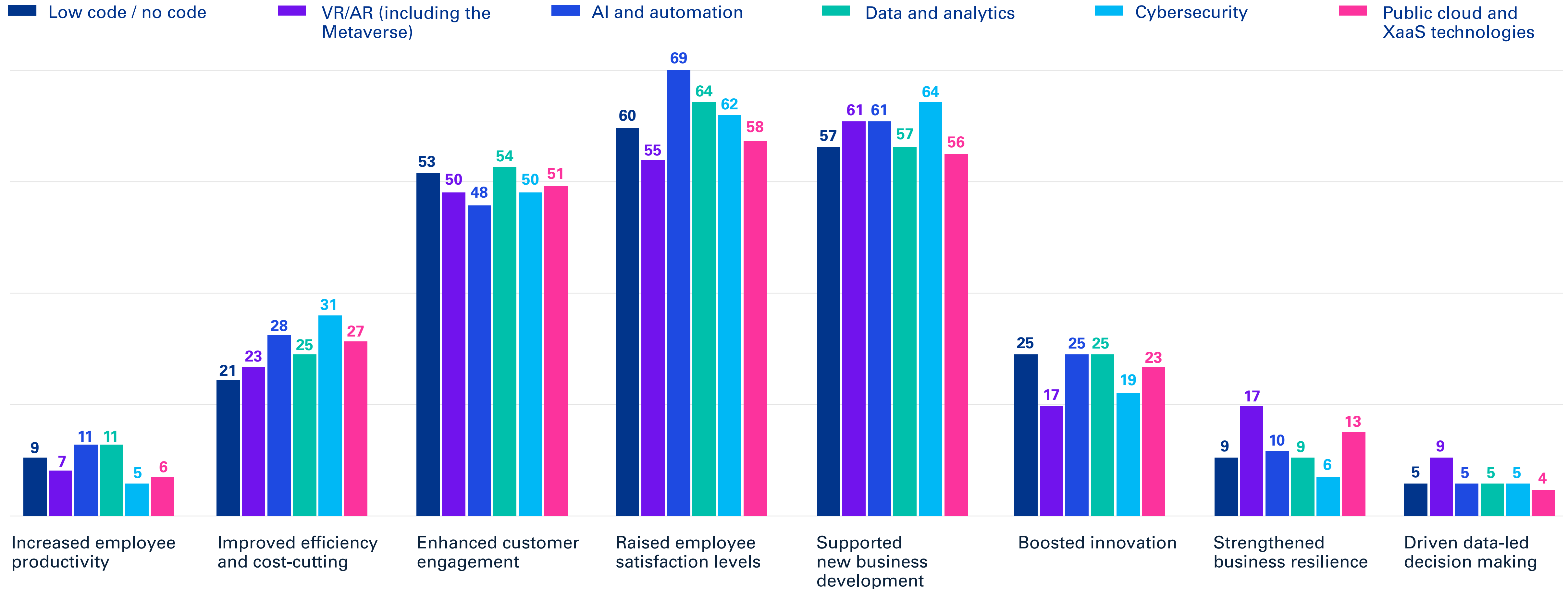
Sanjay Pathak,
 Partner and National Leader, Technology Strategy and Digital Transformation Services, KPMG in Canada

76% 
 say they're now expected to do more with smaller budgets than they were last year

57% 
 say fast-tracking employee productivity was a primary trigger for digital transformation

Technology investments are bearing fruit

Chart 1.2



Q: Of the technologies that have positively impacted your business' performance, can you please detail if these systems have generated any of the following benefits to date?

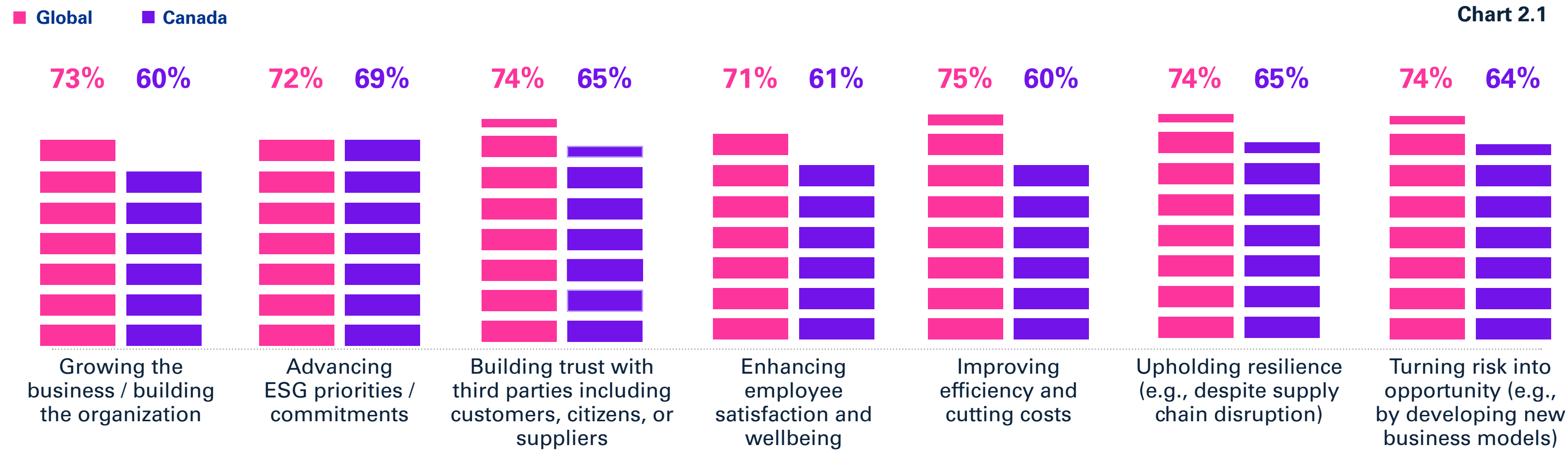
Section 2:

Digital ambitions and realities



Canadian technology leaders are fairly confident that their existing technologies will help them achieve business objectives. Of the various organizational ambitions, respondents indicated that they are most confident in their existing technology being able to advance their ESG priorities, building trust with third parties, and upholding resilience. But they're still less certain than their global counterparts (see Chart 2.1).

Advancing business ambitions with existing tech stack



Q: How confident are you that your organization will be able to achieve the following business and organizational ambitions using your existing technology?

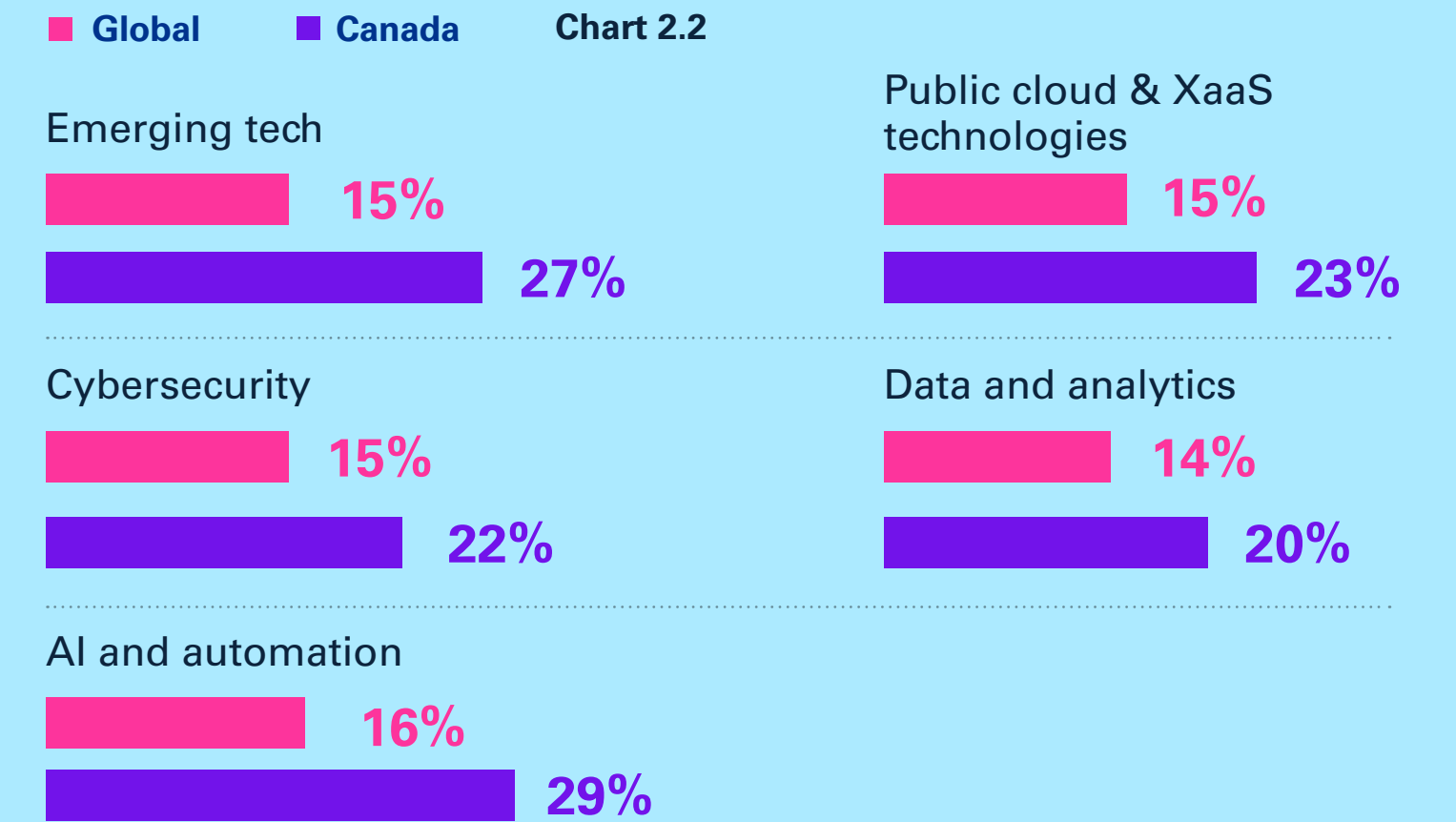
The reality is that many Canadian organizations aren't taking any action in relation to key technologies and methods and that might be influencing their confidence levels. In fact, Canada's technology implementation rates are significantly less when compared to the global average, regardless of technology type (see Chart 2.2).

From one vantage point the data indicates that Canada is adopting a delayed or reactive stance when it comes to technology implementation, being on average 9.2% more likely to take "no action" when it comes to implementing key technologies when compared to global peers. That said, Canadian executives

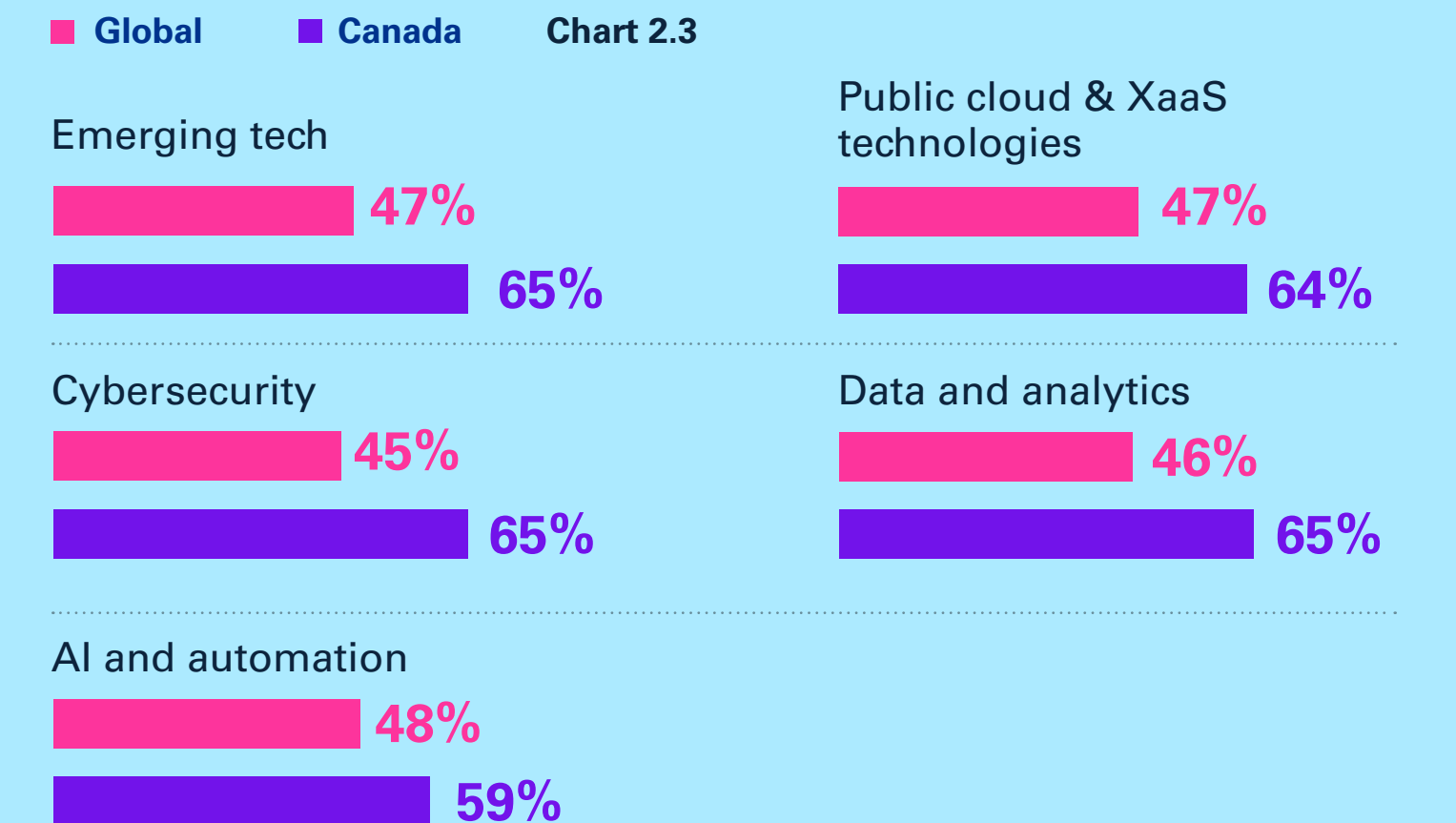
have indicated that their teams are currently in the process of designing and testing tech adoption strategies (Chart 2.3).

Global respondents also seem to be further ahead with exploring use cases for emerging technologies and advanced data analytics. Findings show that Canada is significantly less mature (4.6%) than the global average of 15.5% at embedding data and analytics into culture and operations. The exception to this was in the category of data governance, where 18% indicated it was embedded. However, 65% of respondents did indicate that a strategy and implementation plan is in the works, and the majority of businesses have earned returns from data and analytics investments.

Organization's position - no action on tech adoption



Organization's position - tech strategy and investment approval



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

Businesses lean into the AI boom

Web3 and augmented/virtual reality (including the Metaverse) were seen as top priorities in last year’s research. This year, artificial intelligence (AI) has taken over as the primary area of investment.

Generative AI (GenAI) wasn’t even part of the equation up until recently. Its explosive launch has changed technology priorities, and more than half of Canadian respondents (55%) believe AI and machine learning, including GenAI, will be important in helping them achieve their business objectives over the next three years (see Chart 2.4). Moreover, of the Canadian organizations that undertook AI digital transformation efforts over the last two years, 37% saw an increase in performance or profitability of, or over 11%, indicating a significant value gain (see Chart 1.2).

This is not to say that AI adoption is a one-size fits all solution. In fact, a worrying trend might be surfacing with Canadian businesses naming “other companies already having adopted the technology” as their main reason for prioritizing AI adoption (63%). As previously mentioned, business priorities should guide the selection of technology investments, rather than simply a fear of missing out on the next boom.

55% 

of Canadian tech executives believe AI, GenAI, and machine learning will be important in helping them achieve their business objectives over the next three years.

37% 

of respondents in Canada, whose organizations undertook AI transformation efforts in the last twenty-four months, saw a profitability/performance increase of 11% or more.

Organizations prioritizing AI, automation & IoT

■ Global ■ Canada Chart 2.4

AI / machine learning (including generative AI)



Edge computing (inc. IoT)



Robotics/automation



VR / AR (including the Metaverse)



Quantum computing



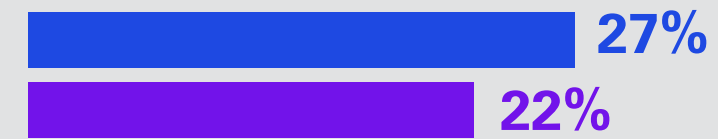
Web3 (inc. tokenization)



XaaS technologies (inc. public cloud or multi-cloud)



5G



Q: Of the following technologies, which do you think will be most important in helping your business achieve its short-term ambitions (over the next 0-3 years)?

Worth keeping at the forefront are the potential risks associated with this emerging technology. Rapid advances in AI, [and GenAI in particular](#), have forced many businesses to reassess their AI strategies—and many are struggling to keep up, especially with the lack of a formal regulatory framework. While this emerging technology has the potential for significant productivity gains, it also comes with significant risks, including data privacy, potential misinformation or ‘made-up’ facts, as well as ethical repercussions. More than a quarter of Canadian executives (35%) say their progress with automation has been delayed because of concerns around how AI systems make decisions.

“The data, policies, and frameworks that need to be aligned with Generative AI are creating a brand-new paradigm that organizations are struggling to keep up with. But if done correctly, it represents a significant opportunity for increased productivity”



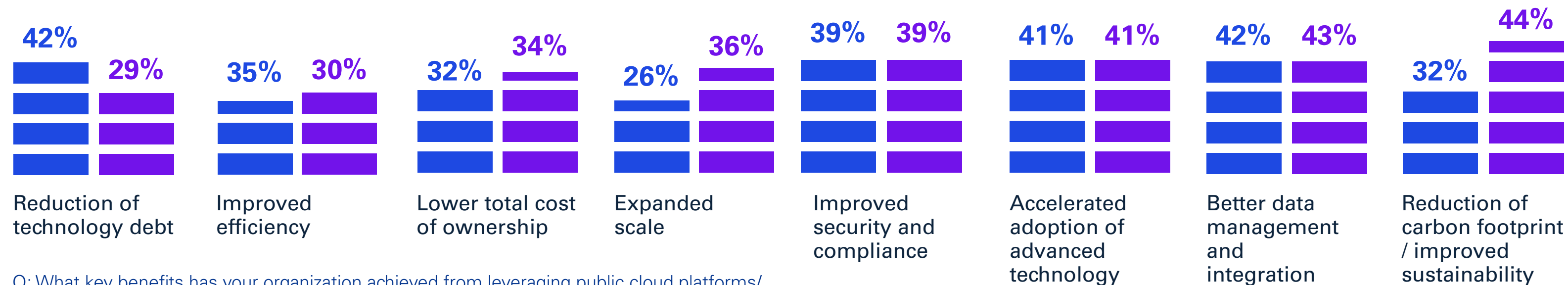
Kathy Penner,
Partner and National Leader, Technology Enterprise Solutions, KPMG in Canada

The promise of XaaS

In the context of economic uncertainty and budget constraints Everything-as-a-service (XaaS) solutions offer potential productivity and cost benefits. Nearly 80% of Canadian businesses plan to grow their use of XaaS solutions as part their cost reduction efforts in the next two years, but there's a lot to be learned about managing these environments. In fact, there's still risk-aversion to XaaS among Canadian businesses. Only 37% of Canadian respondents say the risk of moving to XaaS is worth

it for the opportunities, versus 63% globally. The organizations that saw beyond the risks however and have adopted XaaS, are seeing significant benefits, including better data management and integration, accelerated adoption of new technology, as well as clear ESG benefits around reducing their carbon footprint and improving sustainability, especially when compared to their global peers (44% vs 32% global – See Chart 2.5).

ESG, data management & accelerated tech adoption are top key XaaS benefits



Q: What key benefits has your organization achieved from leveraging public cloud platforms/ XaaS technologies over the past 12 months?

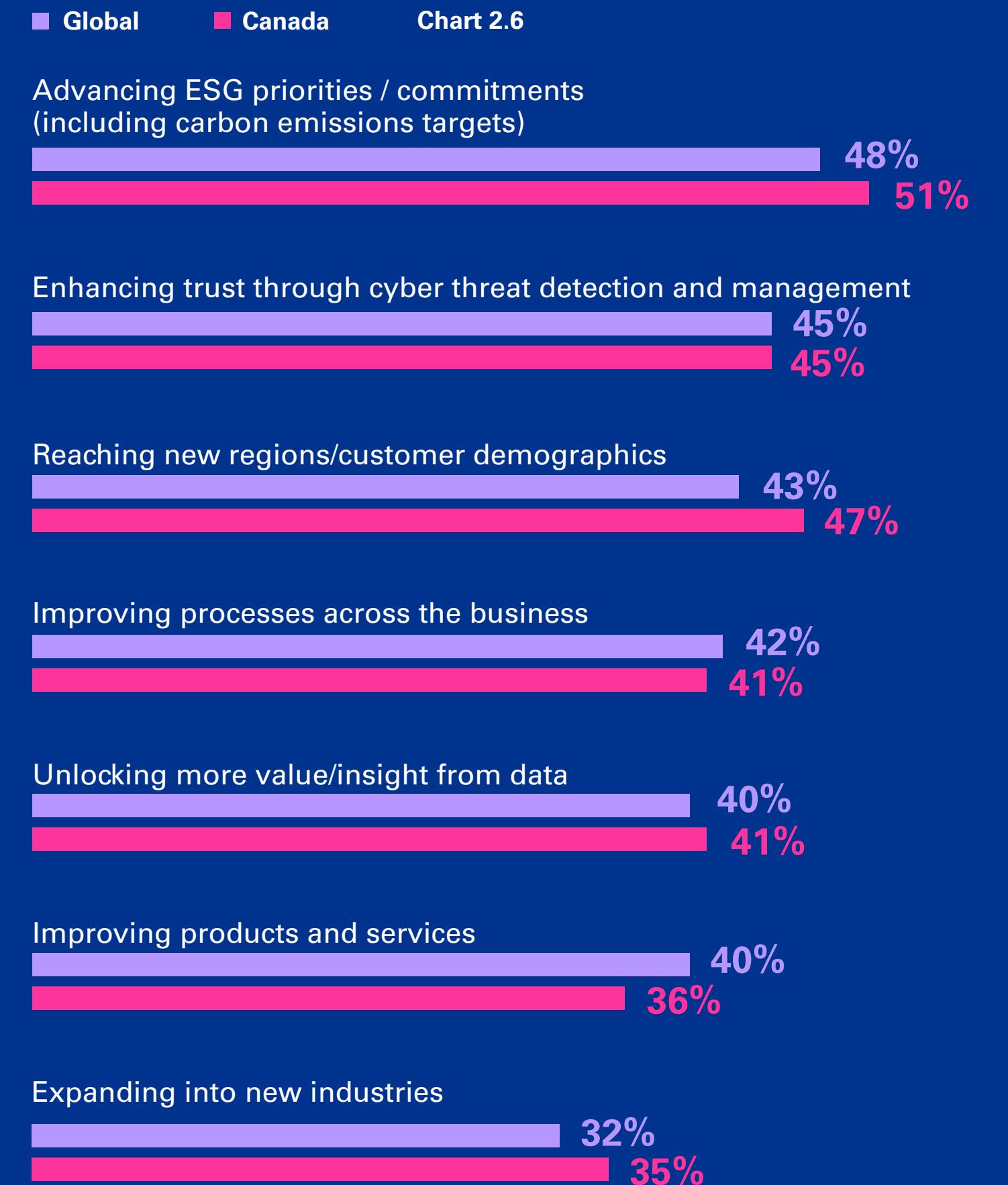
ESG progress drives the innovation agenda

Businesses are increasingly elevating the ESG imperative — and this focus is driving the technology innovation agenda, too. More than half of Canadian respondents (51%) say that advancing ESG priorities will be a primary innovation goal for their technology functions over the next two years—ranking higher than attracting customers or improving their business (see Chart 2.6). And 69% are confident they can make progress on these goals using their existing technology stack, such as data and analytics tools that track performance and manage reporting. Canadian businesses see advances in technology as a means to reduce carbon emissions, through efficiencies and development of new products and services, as well as contribute to social and diversity outcomes.

69%

believe the technology function has the ability and power to influence ESG

ESG leads the way in the technology function's contribution to firmwide innovation goals



Q: Which of the following innovation goals will your tech function primarily contribute towards in the next two years?

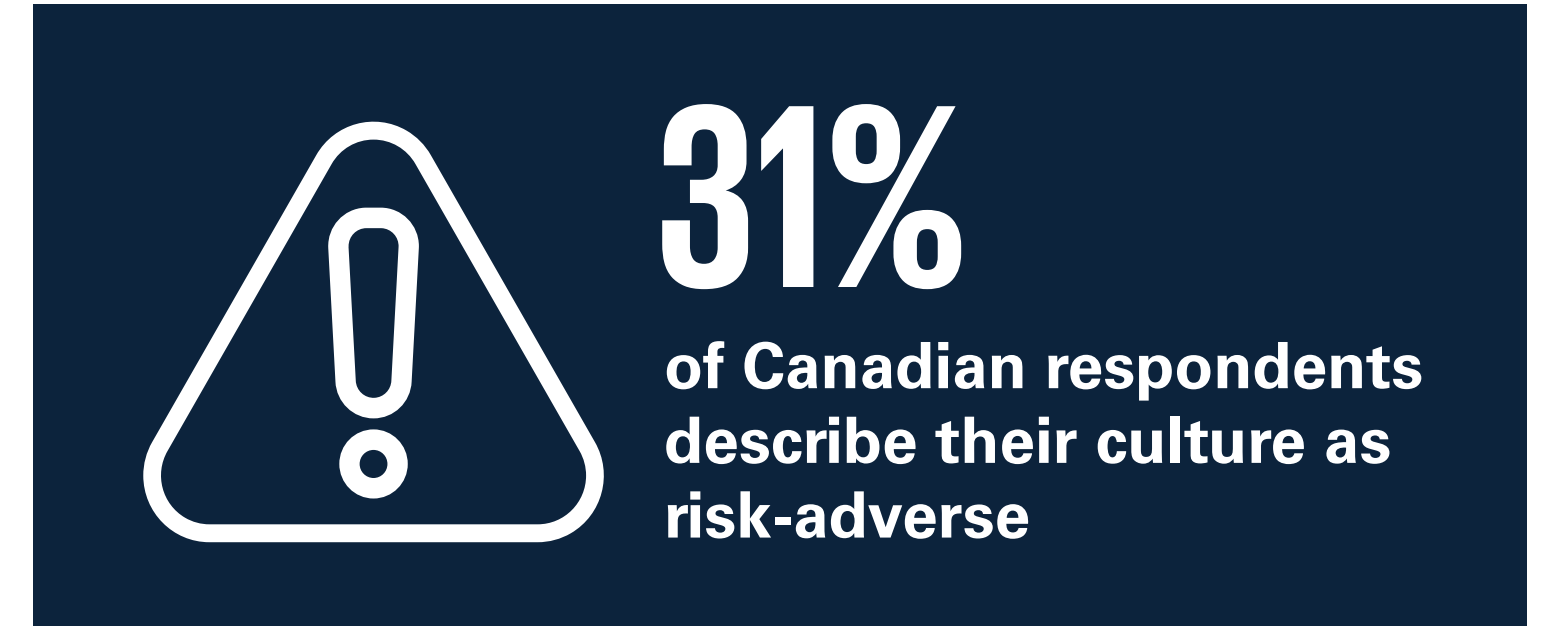
Section 3:

Communication, culture, and collaboration

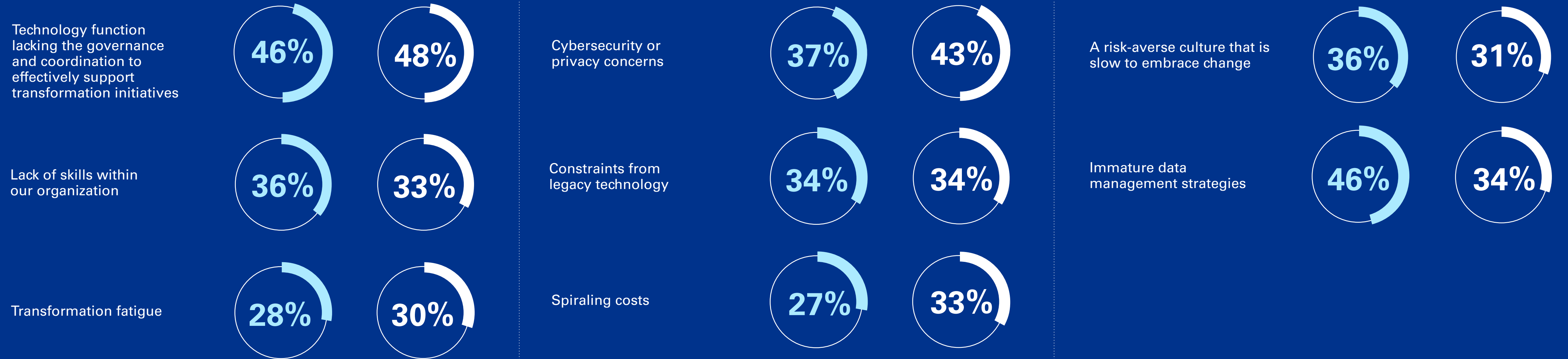


The survey found that digital transformation momentum isn't threatened so much by technical factors, but rather by culture, collaboration, and communication. While technical talent skills are still a concern, they're not the top barrier as they were last year. Almost half of Canadian respondents (48%) revealed their technology function lacks the governance and coordination it needs to support transformation initiatives—this was the top challenge globally as well (46%) —with more than a third (31%) describing their culture as risk-adverse (see Chart 3.1).

Canadian technology leaders say they need executive buy-in to succeed with their digital transformation initiatives. But improving communication extends to the board—and to external partners. A large majority of Canadian respondents (81%) indicated they need to get better at helping the board understand the potential of new technologies (versus 69% globally), and 77% agree that greater diversity on the IT team can support collaboration with the wider business. To set digital transformation projects up for success, businesses in Canada and globally will need to take ownership in troubleshooting collaboration and cultural challenges.



Top transformation challenges for Canada



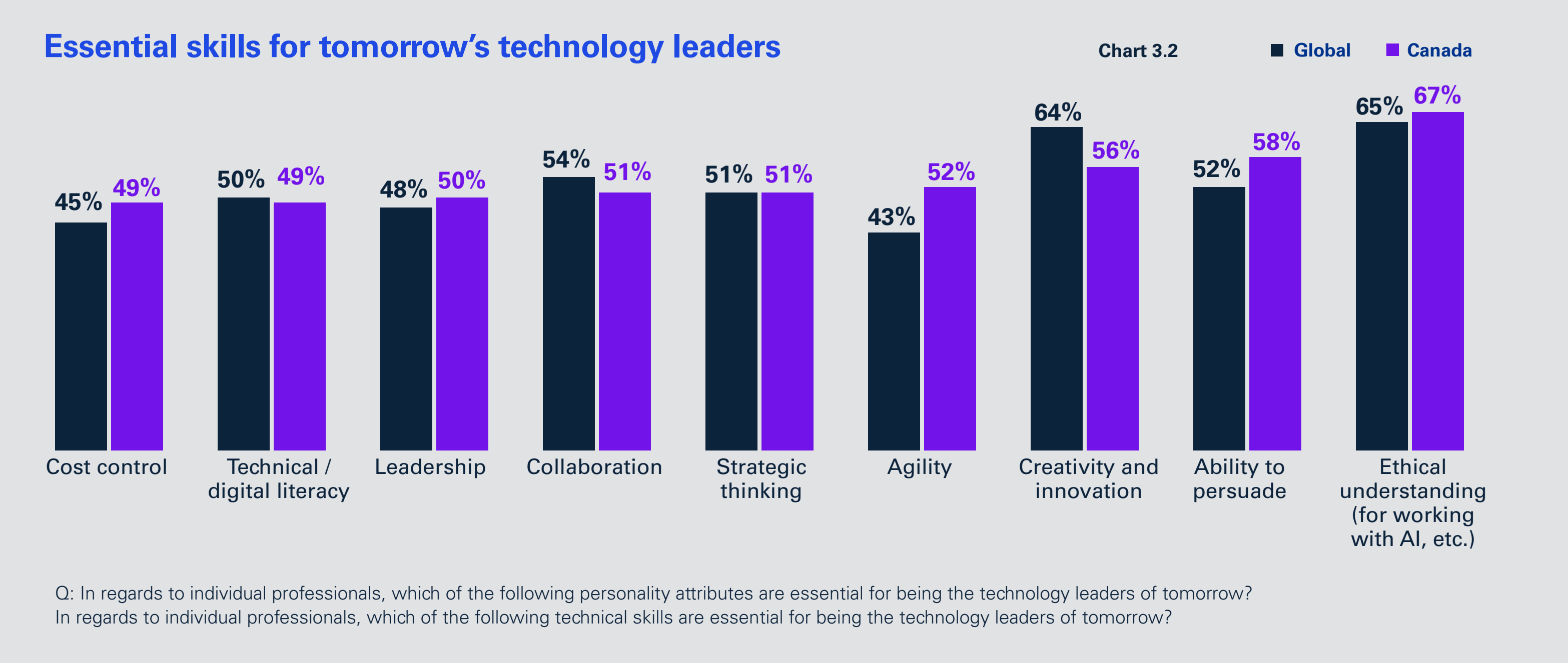
Q: Which of the following challenges are most likely to slow down your transformation?

The future of digital leadership

Effective leadership sets the tone for transformation and helps shape and reinforce the desired tech adoption culture. When asked to identify the top personality attributes essential for a technology leader of tomorrow, 67% of Canadian respondents (and 65% globally) said that ethical understanding will be the most important skill necessary to navigate the AI-enabled world. Ability to persuade, creativity and innovation, and agility identified as the next top skills (see Chart 3.2).

When it comes to organization-wide attributes foundational for future success, respondents identified increased empathy and communication between business functions (39%), high stamina in maintaining change momentum, and embedded cybersecurity and privacy into tech selection and staff education (both at 38% respectively).

67%  think that ethical understanding will be the most important personal attribute to navigate the AI-enabled world



“The future of digital leadership is at the intersection of risk, technology, and business intent. They’ve got to work together.”



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

Section 4:
**Leading
with trust**



Enhancing resilience and trust through cybersecurity is one of the top innovation goals for technology functions. While cybersecurity priorities were largely aligned across all countries, Canadian respondents were less concerned about reinforcing consumer trust compared to their global peers. Canada is still reactive when it comes to technology implementation needs like cybersecurity, with a much higher proportion of “no action taken” compared to the global average. That said, 43% of Canadian respondents say that cybersecurity and privacy concerns are one of the top factors most likely to slow down their transformation and 82% acknowledge that they need to be more proactive in integrating trust, security, and privacy into their tech rollouts. It’s clear that cybersecurity is still top of mind for Canadian organizations.

Findings also reveal enthusiasm around security-by-design to address cybersecurity and privacy concerns, which can slow down transformation efforts. Nearly half (49%) of respondents said that improving cybersecurity and privacy will help provide a loyalty-winning customer experience.

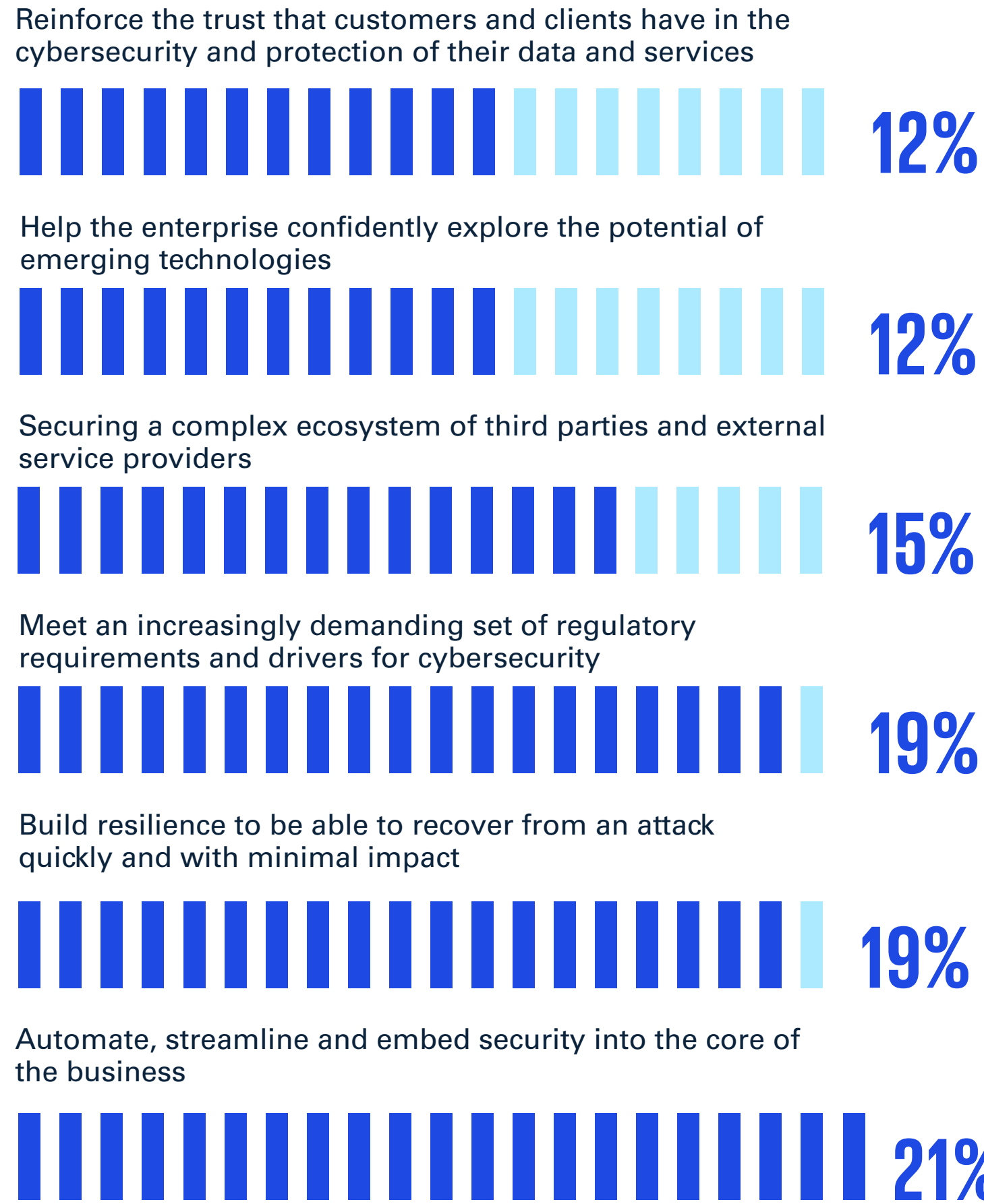
Over the next two years, Canadian cybersecurity teams plan to focus on automating, streamlining, and embedding security into the core of the business; building resilience to be able to recover from an attack quickly and with minimal impact; and meeting an increasingly demanding set of regulatory requirements and drivers for cybersecurity, in order to meet their tech risk ambitions (see Chart 3.3)

82% 

of Canadian respondents feel they need to be more proactive in integrating trust, security, and privacy into their tech rollouts.

Top tech risk ambitions for Canada’s cyber teams over the next 24 months

Chart 3.3



Q: Thinking of your cybersecurity team’s focus areas over the next 24 months, please rank the following tech risk ambitions in order

“**These days, there’s less forgiveness for lapses in security. Regulators are coming down harder and the penalties are more severe. So, with any digital transformation, security should be built in by design and not as an afterthought—that has to be the way going forward.**”



Hartaj Nijjar,
Partner, National Service Line
Leader, Cybersecurity,
KPMG in Canada

Conclusion



The main lesson of the past year for Canadian organizations is clear: Digital transformation should be done with intent. To continue building momentum, technology leaders must break down communication and collaboration barriers with business leaders and external partners to align innovation efforts—especially as those efforts might be impacted by the lighting pace (and democratization) of emerging technologies.

At least a third of Canadian respondents indicated that in recent years their transformation efforts have delivered outcomes that have exceed expectations, increasing efficiency, productivity, customer engagement, employee satisfaction, cost optimization, as well as new business development. But there's more business impact to be generated. If Canadian organizations are to create and preserve more value in this uncertain economic climate and accelerate their business transformation journeys, they'll need to place their innovation and technology bets with confidence and intentionality.

The time to act is now

Here are a few tangible recommendations to consider as you assess your next steps:



Map any potential technology investments against your business priorities, needs, realities, and aspirations. Act with intention.



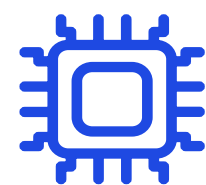
Manage functional silos in the organization to support fast-paced, seamless collaboration, and communication across the organization.



Address foundational security principles that reinforce the trust that customers and clients have in the protection of their data. Make security a part of your culture, while reducing the workload on your operations and help desk teams.



Develop a policy on the use of AI within your organization, and clearly communicate that policy to employees and clients. Deploy robust training on GenAI, so employees will be empowered to make better informed and intentional decisions.



Refine and enhance data governance and data management guardrails to account for how data will and won't be shared and used for AI initiatives. Complete an AI risk assessment, which will be invaluable in identifying next steps to protect and augment your teams and data.



Automate, streamline, and embed security into the core of your business. A security-by-design approach, which allows you to be proactive rather than reactive in managing risks, should extend to your ecosystem of third parties and external service providers.

Ready to get started? Our KPMG in Canada team can help.

[Connect with our team](#)

Transformation never stops. Neither do we.

At KPMG we believe that business transformation is too good an opportunity to miss. Combining the right tech and the best processes with people whose insight is as broad as it is deep are essential ingredients to successfully transform. KPMG member firms have worked at the heart of global businesses for many decades, helping our clients realize the full potential of their people and technology, working together to achieve real-world outcomes. Because when people and technology are in harmony, great things can happen.

Making a world of difference:

KPMG people can make all the difference on your transformation journey. Together we can help you to orient your business around the customer, optimize functions for a new era, manage enterprise risk and regulation for a safer future, rise to a new level of value creation, and create an environment for managing ongoing change.

Transforming for a future of value

KPMG in Canada's [suite of business transformation technology solutions](#) can help you engineer a different future—one of new opportunities that are designed to create and protect value.

KPMG Connected Enterprise:

Our customer-centric, agile approach to digital transformation, tailored by sector.

KPMG Powered Enterprise:

Our suite of services to transform functions, with target operating models designed and pre-configured on leading SaaS platforms.

KPMG Trusted:

Build and sustain the trust of your stakeholders.

KPMG Elevate:

Unlock financial value quickly and confidently.

Contact us



Sanjay Pathak

Partner, National Leader,
Technology Strategy and Digital
Transformation, KPMG in Canada
E: sanjaypathak1@kpmg.ca



Kathy Penner

Partner, National Leader,
Technology Enterprise Solutions,
KPMG in Canada
E: kpenner@kpmg.ca



Hartaj Nijjar

Partner, National Leader,
Cybersecurity,
KPMG in Canada
E: hnijjar@kpmg.ca

kpmg.com/ca/advisory



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 KPMG LLP, an Ontario limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.