



Gen AI in Canada: Embracing the future with confidence

Canadian businesses show high levels of investment and enthusiasm for generative AI, according to our recent study, and are ready to accelerate AI momentum.

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Canadian businesses are moving thoughtfully in their generative AI investments. Businesses in the region report a median annual spend of \$15 million, higher than the global per-business median of \$12.5 million, signaling a strong momentum for adoption. In fact, 71% of Canadian business leaders express concerns about keeping pace with AI advancements, with 52% expressing high concern that competitors will gain an advantage as a result.

This sense of urgency underscores a recognition of the transformative potential of generative AI and a determination to harness its power to drive innovation and competitiveness within the Canadian market.

Our study also shows a relatively strong vote of support among Canadian respondents for the country's overall preparedness for generative AI. The fact is, regional variances—regulatory environment, country infrastructure and available talent, for instance—as well as internal factors like the business's own technology foundation, will influence success with implementing generative AI strategies and how businesses use this powerful technology. As a result, the pace of generative AI uptake and the way in which it's used will be uneven across the globe.

To better understand what generative AI adoption will look like globally, we conducted a study of 2,200 business leaders in 23 countries and 15 industries, including 200 in Canada. The study assessed a wide range of generative AI adoption trends, including investment levels, use cases, how critical gen AI strategies are to business success and organizational readiness to adopt the technology.

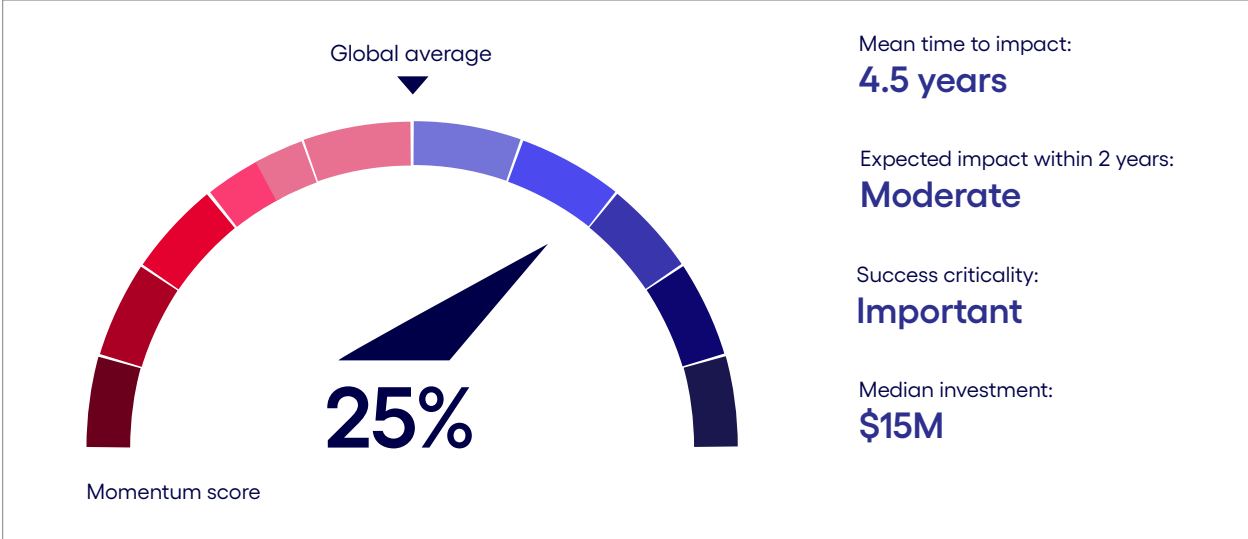
We also analyzed 18 regional and internal business factors that will either inhibit or accelerate business adoption of gen AI (see the end of the report for the full list of factors). Respondents evaluated each factor's potential impact on their generative AI strategy, rating it as either positive or negative on a scale of high to low impact.

From the results, we calculated a “momentum score” for each country or region. The momentum score represents the level of confidence business leaders have about their ability to roll out their generative AI strategy based on internal business factors and the prevailing local conditions of their country or region.

For all the regions covered, inhibitors to adoption outranked accelerators, meaning that all momentum scores skewed negative. In effect, businesses globally feel constrained by their operating environment. But to understand how different regions varied relative to each other, we averaged the ratings to establish a baseline global momentum score. This approach enabled us to identify regions that are more optimistic about their ability to adopt the technology compared with a global average.

In Canada’s case, the nation’s generative AI momentum score is 25% higher than the global average. The factors respondents felt the most optimistic about include Canada’s market demand for gen AI, their own data readiness, the flexibility of current operating models, and the relative affordability and availability of generative AI solutions to Canadian companies

Canada’s gen AI scorecard



Base: 200 senior business leaders in Canada
Source: Cognizant and Oxford Economics

Figure 1

To gauge the long-range momentum of nations’ gen AI adoption, we needed to know more than simply whether its business leaders are optimistic about gen AI’s potential. We wanted to understand the nature of their optimism, to understand what kind of changes they expect from technology now routinely labeled “revolutionary.”

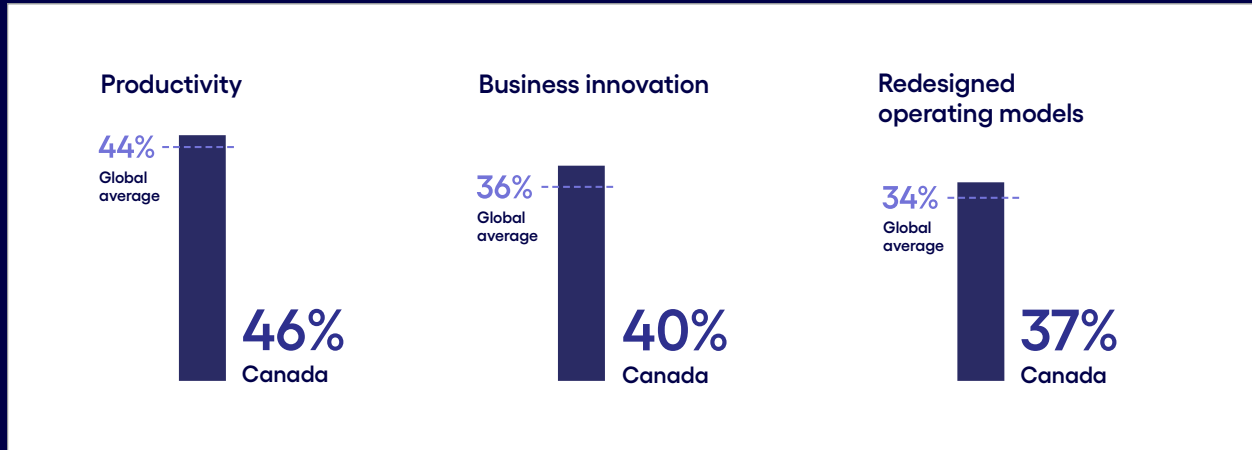
To that end, we asked leaders whether their near-term hopes for gen AI are centered more on:

- Productivity, or those applications that might help existing workers complete their existing tasks more quickly and efficiently, and get more done overall, or
- Innovation, those more transformative, futuristic use cases that would seem likely to entail more dramatic changes to business and operating models

Here, we find Canada in the same basic mindset as the rest of the world. Over the next two years, more respondents expect to use generative AI to boost productivity than to drive disruptive change (see Figure 2).

Greater focus on productivity than innovation

Q: Which of the following best describes the role generative AI will play in your organization's business strategy in the next two years? (Percent of respondents naming each as a top-3 choice)



Base: 200 senior business leaders in Canada
Source: Cognizant and Oxford Economics

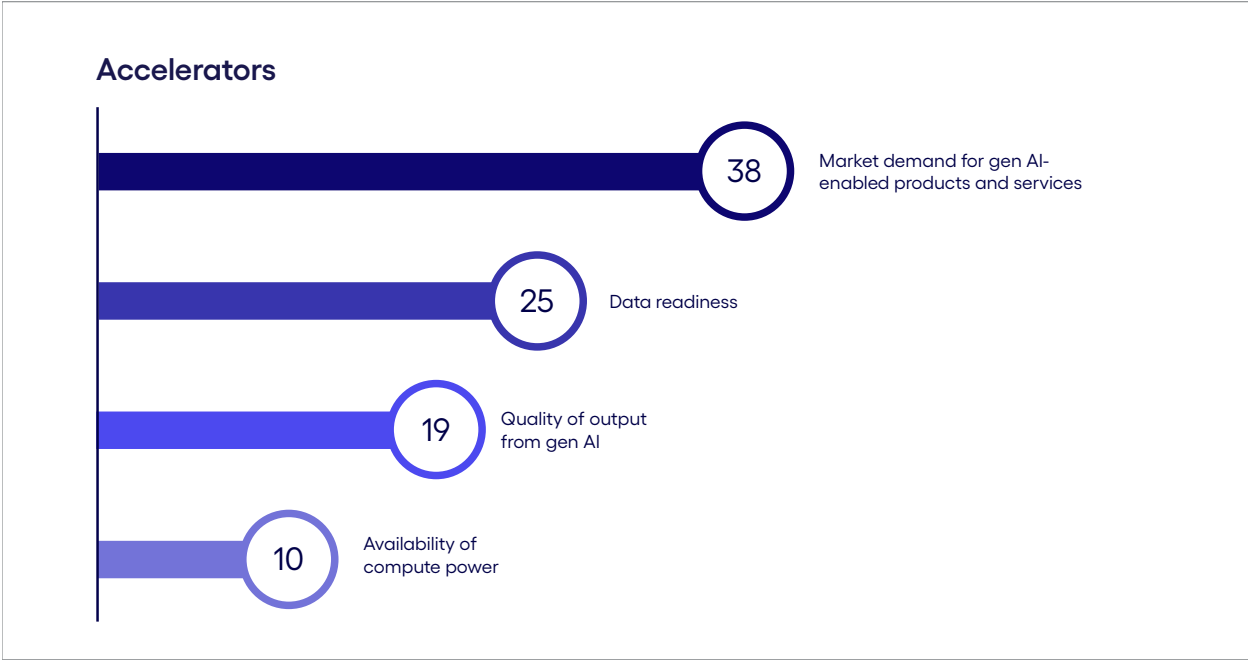
Figure 2

Our study also reveals a change in what productivity means when pursued with generative AI. The end goal is not efficiency and cost-cutting as has been the case with previous automation endeavors. Instead, the goal is to redirect productivity gains into funding endeavors that fuel growth. This new dynamic requires fresh thinking around understanding business use cases of generative AI, which we'll address later in this report.

This report identifies the regional and business factors that could either inhibit or accelerate generative AI momentum in Canada. It also provides an industry-specific look at how generative AI will be used, a regional focus on business readiness and strategies for Canadian businesses to successfully implement generative AI.

Inhibitors and accelerators: The forces driving AI momentum

To dig deeper into these mechanics, rather than comparing to a global average, we'll now examine how business leaders rate inhibitors and accelerators within their region. By doing so, our study provides a detailed temperature check that leaders can use to take advantage of what's working well in their local environment, while strategizing on overcoming challenges.



Base: 200 senior business leaders in Canada
Source: Cognizant and Oxford Economics

Figure 3

Note: Respondents were asked which factors inhibit or accelerate their organization's adoption of generative AI. Score represents a percentage point difference to the country's momentum score compared to the global baseline.

A top driving force of gen AI momentum in Canada is **market demand**. In Canada, the overall awareness of AI and its importance to the economy is high, as the country was one of the first to introduce [a national AI strategy](#). Canadian prime minister Justin Trudeau recently unveiled a C\$2.4 billion funding package to support AI startups and provide training for workers negatively impacted by AI. According to Trudeau, [AI job growth in Canada increased by nearly a third in the past year](#), which was among the highest growths in any sector.

Further, [according to a Royal Bank of Canada report](#), Canada's three national AI institutes are recognized as world-leading, and the country is also home to a dynamic AI ecosystem of research labs, business incubators, accelerators, gen AI vendors and venture capital firms.

All this attention to AI at the top levels of government and business can't help but spur a high level of market enthusiasm, as well.

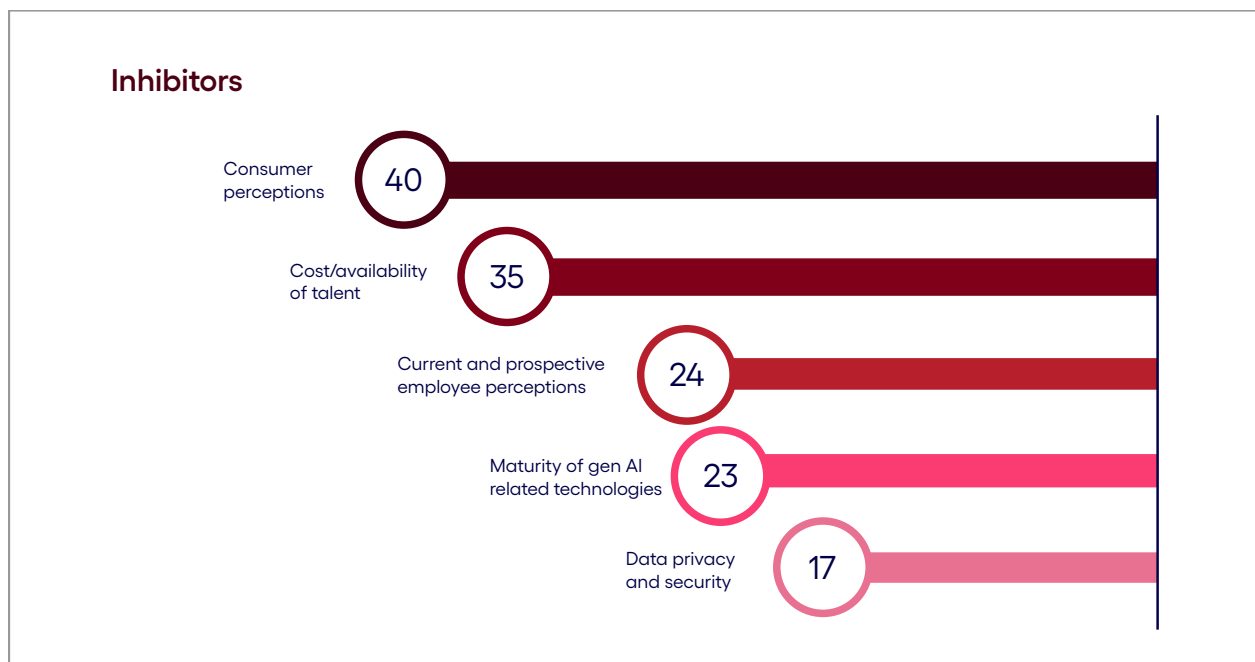
Quality of output is another accelerator, according to respondents. In both the public and private sectors, Canadian businesses are looking to generative AI to provide good answers to tough questions. The city of Kelowna in British Columbia, for instance, is using AI [to automate permit applications](#) and answer questions about municipal bylaws in hopes of speeding up building processes in the face of a housing crunch. Meanwhile, Royal Bank of Canada says it believes generative AI [has significant potential](#) to create vast policy and procedure libraries, supporting RBC advice centers in responding to client queries.

At the same time, many businesses aren't fully ready to offer customer-facing gen AI solutions. For example, one of Canada's largest airlines launched a generative AI chatbot that mistakenly offered a customer a full refund for a canceled flight. Despite misalignment with the airline's policies, this airline was forced to honor the refund and subsequently shut the chatbot down.

Canadian businesses are optimistic about their **data readiness**, with the majority (57%) rating their data quality and cleanliness as good or excellent. Delving deeper, however, data challenges remain. For instance, when it comes to data traceability and lineage, 37% of respondents gave it a "needs improvement" rating. Compliance with customer privacy and contracts didn't fare much better; 46% rated this area as needing improvement and 12% said it was nonexistent.

Further, a startling 58% of businesses mark their compliance with company rules as "nonexistent" or "needs improvement," highlighting a critical gap in internal data governance. This lack of internal compliance raises concerns about data security, ethical use and potential misuse of generative AI within organizations.

These additional data issues underscore the need for investment in robust data infrastructure, governance frameworks and internal compliance measures.



Base: 200 senior business leaders in Canada

Figure 4

Source: Cognizant and Oxford Economics

Note: Respondents were asked which factors inhibit or accelerate their organization's adoption of generative AI. Score represents a percentage point difference to the country's momentum score compared to the global baseline.

Consumer perception, meanwhile, threatens to slow down generative AI momentum. Concerns about data privacy were surging in Canada even before the advent of gen AI. Government [surveys](#) between 2012 and 2023 found a 150% increase (25% to 38%) in the share of Canadians “extremely concerned” about the privacy of their data. Then came gen AI, which for all its dazzling potential, quickly became implicated in more than half ([55%](#)) of corporate data breaches.

[The annual Edelman Trust Barometer](#) shows Canadians are more distrustful than their global counterparts about generative AI. Just 31% of Canadians surveyed said they trust the technology, 19 points lower than the global average. Further, nearly half (49%) of Canadian respondents [in an Ipsos study](#) said that products or services using AI make them nervous.

This wariness about data security has constrained consumers’ demand for AI-powered products and services—so far at least. Moving forward, Canada’s stringent privacy laws, such as the Personal Information Protection and Electronic Documents Act ([PIPEDA](#)), will leave businesses little choice but to prioritize transparency and robust data protection, which could mitigate consumers’ concerns and boost demand.

Another inhibiting factor is the **immaturity of gen AI** itself. While advancements have been rapid, the technology has a long way to go. Not even the field’s experts and pioneers have much more than guesses to offer about what gen AI will look like, its capabilities and its limitations, when it arrives at its “final” form.

Organizations like the Canadian Institute for Advanced Research ([CIFAR](#)) are actively working on research and development to address the technical challenges and ethical considerations associated with generative AI, highlighting the need for continued investment in this area to ensure the responsible and safe development of AI technologies.

The **cost and availability of talent** also pose a significant challenge. The field of AI requires specialized skills and expertise, which are in high demand globally. Even with Toronto and Vancouver becoming top go-to cities for tech companies, Canadian businesses might struggle to attract and retain top AI talent due to competition from larger tech hubs over the border in the US.

This is especially true for small and medium-sized businesses, which make up 98% of all businesses in Canada. While small companies might have an easier time retraining employees, they could have trouble affording the high salaries AI talent demands. This talent shortage could limit the ability of Canadian businesses to develop and implement generative AI solutions effectively.



Sector spotlight: Stark differences in industries' gen AI priorities

As we've seen, Canadian businesses are currently more focused on gen AI as a driver of productivity than as a disruptive source of new business and operating models, at least when they contemplate the next two years.

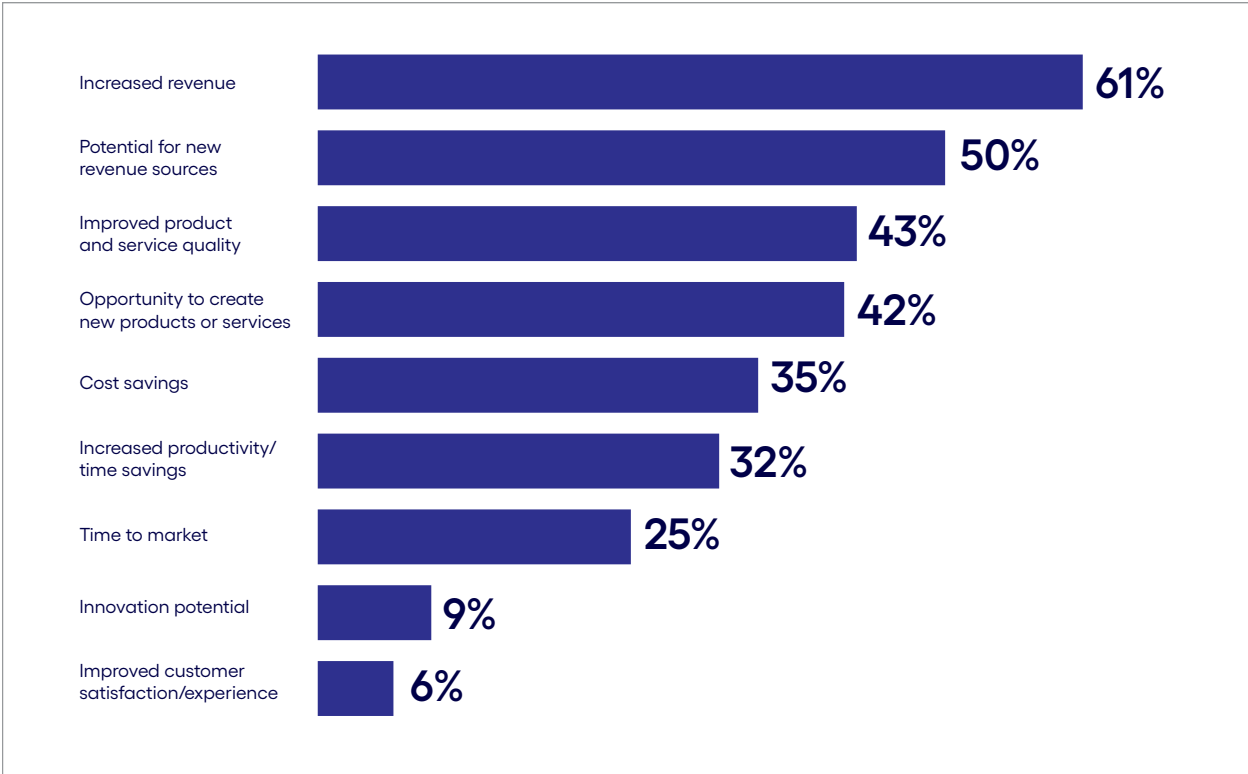
However, a look at what's driving their business cases sheds a new light on productivity from how it's been seen historically.

Traditionally, businesses have equated automation productivity gains with cost-cutting: driving down the cost of output by reducing the number of people needed to get work done. While generative AI-driven automation will likely lower headcount to some degree, that is no longer the end goal. Instead, as seen through the metrics respondents will use to drive business cases, we see a shift toward redirecting productivity gains into funding endeavors that increase revenues or lead to entirely new revenue streams.

The metrics Canadian respondents say will be most important for justifying generative AI expenditures include more ambitious goals, such as increasing revenues, discovering new revenue sources and improved product and service quality—all of which were listed as "most important" by at least 43% of respondents (see Figure 5). Conversely, metrics like cost savings, time-to-market and productivity were cited by 35% of respondents or fewer. In other words, the concept of productivity no longer stops at cost-cutting—businesses appear to be redirecting productivity gains into initiatives aimed at growth.

Revenue is a top metric for justifying generative AI use cases

Q: Which of the following metrics are most important in terms of justifying your organization's generative AI business cases? (Percent of respondents naming each as a top-three choice)



Base: 200 senior business leaders in Canada
Source: Cognizant and Oxford Economics

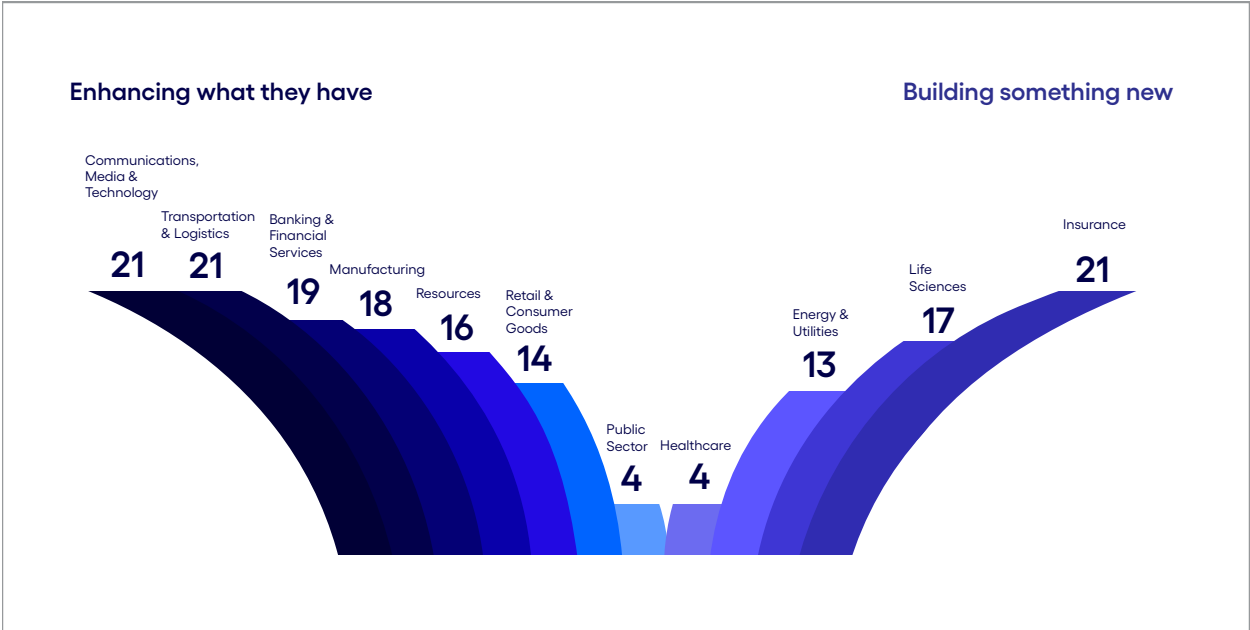
Figure 5

Using this more granular view of productivity goals and business drivers, we analyzed the differences in how industries intend to use the technology. Rather than focusing on the distinction between productivity vs. innovation, we grouped the metrics into two high-level categories of business use cases:

- **Enhancing current business performance** (revenue, cost savings, time-to-market, productivity)
- **Building something new** (new revenue sources, new or improved products, innovation)

We then assigned each of the metrics a score to see the relative gap between a number-one-ranking metric and a number-three-ranking metric. By calculating the average score across industries, we could clearly see how each industry’s responses deviated from the baseline. Our analysis reveals stark differences among Canadian industries in terms of the business use cases they’ll likely prioritize (see Figure 6)

Canadian industries diverge on gen AI use cases



Base: 200 senior business leaders in Canada
Source: Cognizant and Oxford Economics

Figure 6

Note: This figure depicts each industry’s relative deviation from a baseline of “zero,” using a ranked scoring of the top three metrics respondents cite as important for justifying their generative AI use cases. It reveals a weighted view of each industry’s overall priorities for gen AI deployment.

- **Transportation and logistics:** This sector exhibits the highest focus on enhancing current business performance of all those we surveyed—but there’s nothing conservative about the way that goal is being pursued. Generative AI is being used to optimize complex operations such as route optimization, delivery time accuracy and last-mile routing. Canadian companies like [Waabi](#) are developing self-driving truck technology that utilizes generative AI to make real-time decisions and navigate complex traffic scenarios, demonstrating the potential for AI to revolutionize the logistics industry.

- **Retail and consumer goods:** Here, too, all eyes are on enhancing current business performance vs. building something new. Canadian company Shopify has created Sidekick, a virtual assistant intended to enhance customer engagement, improve productivity and drive sales, whether it's helping users improve the customer experience, create product descriptions and images, or turn chatbot interactions into checkouts.

Even established retailers are getting onboard; [Canadian Tire](#) now offers a virtual shopping assistant, CeeTee, that helps customers select and purchase the right tires for their vehicle using a natural language interface. The tool uses a combination of large language models and the company's own product and store data to answer customer questions, offer real-time local inventory updates, facilitate purchases and interact with customers in a natural and human way. CeeTee was also recently recognized as a [2024 CIO Awards Canada winner](#)

- **Banking and financial services:** This sector is focused on leveraging AI internally in areas such as learning and development, chatbots that act as live information aids and the software development lifecycle, including code companion tools for code generation and automated test script creation. For example, [TD Bank](#) has launched a gen AI pilot in its contact centers to help service agents obtain quick answers to customers' banking queries. Another pilot is aimed at its software engineering staff, who are experimenting with Microsoft's GitHub Copilot.

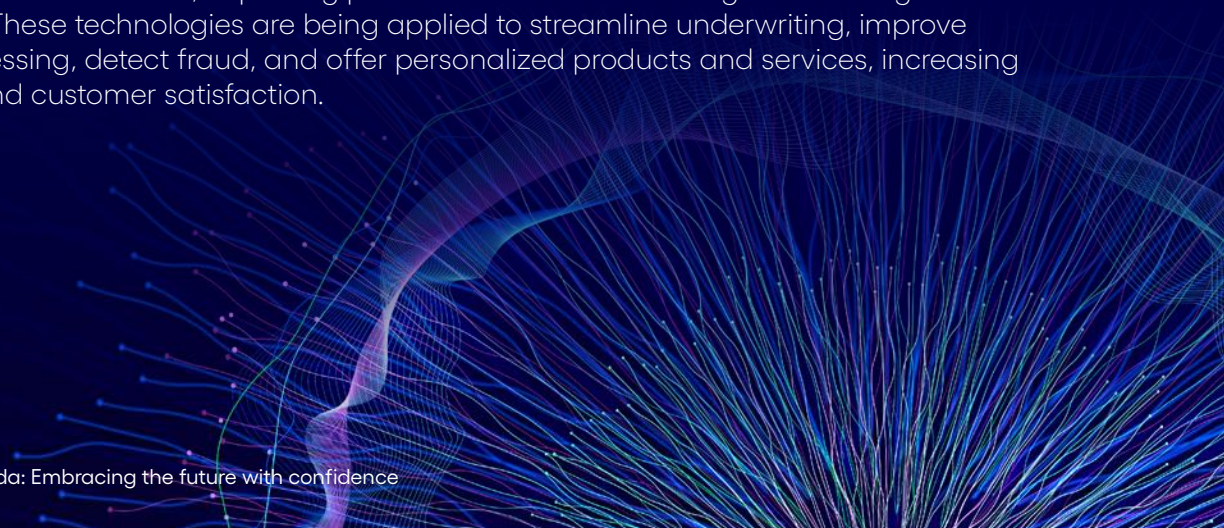
Some banks, such as [RBC](#), are supporting banking clients with a digital banking assistant. RBC's [NOMI](#) uses AI and data-driven insights to help retail customers better manage their finances by tracking spending, automating budgeting, suggesting opportunities for saving and forecasting future cash flow.

On the wealth management side, robo-advisors have been part of the Canadian investment landscape for over 10 years. A robo-advisor is a digital platform that provides automated, algorithm-driven financial planning and investment services, based on factors such as risk tolerance, income needs and retirement date.

[Wealthsimple](#) and [Questrade](#) are two of many mainstream services currently offered in Canada. Banks also offer this service, such as BMO SmartFolio and RBC's InvestEase. The difference is that some banks require a minimum amount to launch an account; for example BMO SmartFolio has a \$1,000 baseline.

In Canada, the robo-advisor market [is experiencing rapid growth](#), driven by a tech-savvy population and increasing demand for low-cost investment options. This is one area where AI has proved efficient with real-world success.

- **Insurance:** The insurance sector in Canada shows the most focus on leveraging gen AI for new revenue streams, improving products and service offerings and driving innovation. These technologies are being applied to streamline underwriting, improve claims processing, detect fraud, and offer personalized products and services, increasing efficiency and customer satisfaction.



We've seen many insurers leveraging AI to enhance their underwriting process. For example, BMO Insurance recently announced the launch of its new [AI-powered digital assistant](#), designed to enhance the field underwriting process for life insurance advisors. This digital assistant was created to streamline the underwriting process by delivering instant access to critical information that empowers advisors to help address their clients' insurance needs, reducing the time spent on complex queries and document searches.

In addition, AI has been implemented internally across many insurers to drive productivity for employees. For example, Sun Life was recently recognized for its innovative employee gen AI chatbot "[Sun Life Asks](#)," winning a 2024 CIO Award. The chatbot enables employees to find quick answers and general assistance with daily tasks, from summarizing text to organizing ideas for a presentation or analyzing the purpose or sentiment of an article.

- **Telecommunications:** Canada's telecommunications sector is increasingly leveraging artificial intelligence to reduce costs, streamline customer experiences, and enhance revenue generation. Our study revealed that respondents surveyed identified the highest focus on enhancing current business performance. For example, TELUS, one of the largest telcos in Canada, has launched a gen AI support tool that enables customers to access fast and intuitive responses to their queries, providing them with a more convenient and seamless digital experience. This tool [has made history](#) by becoming the first company globally to achieve ISO 31700-1 Privacy by Design certification and later, its gen AI customer support tool became the first chatbot in the world to be internationally certified in Privacy by Design. TELUS is also the first telecom in Canada to sign the [voluntary AI code of conduct](#) introduced by the federal government.
- **Healthcare:** Given the "first, do no harm" mindset inherent to medicine, we might expect to find the healthcare sector proceeding cautiously with gen AI, prioritizing the low-hanging gains of better productivity and efficiency while leaving it to more adventurous sectors to chase innovation.

The reality is very different, and exciting. Buoyed by a flow of Canadian investment into healthtech, gen AI applications are being developed and deployed to provide new levels and new types of patient care. Montreal-based [AlayaCare](#), for example, is a gen AI-powered platform that helps healthcare agencies manage everything from referrals to appointments to retaining vital caregivers and identifying patients at high risk of rehospitalization. Toronto-based [Mutuo Health](#), meanwhile, has developed AutoScribe, a gen AI medical scribe that transcribes doctor-patient conversations and takes accurate notes in real time.

Coming of age: Gen AI maturity and talent

Finally, we wanted to know whether businesses are ready to drive real value from these use cases and how prepared executives feel their businesses are to adopt generative AI in a way that yields tangible results.

This time, we asked respondents to rank their organization's AI maturity on a scale of 1 to 4 in the following five areas:



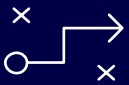
**Organizational
agility**



**Leadership
commitment**



**Skills and
talent**



**Strategy and
approach**

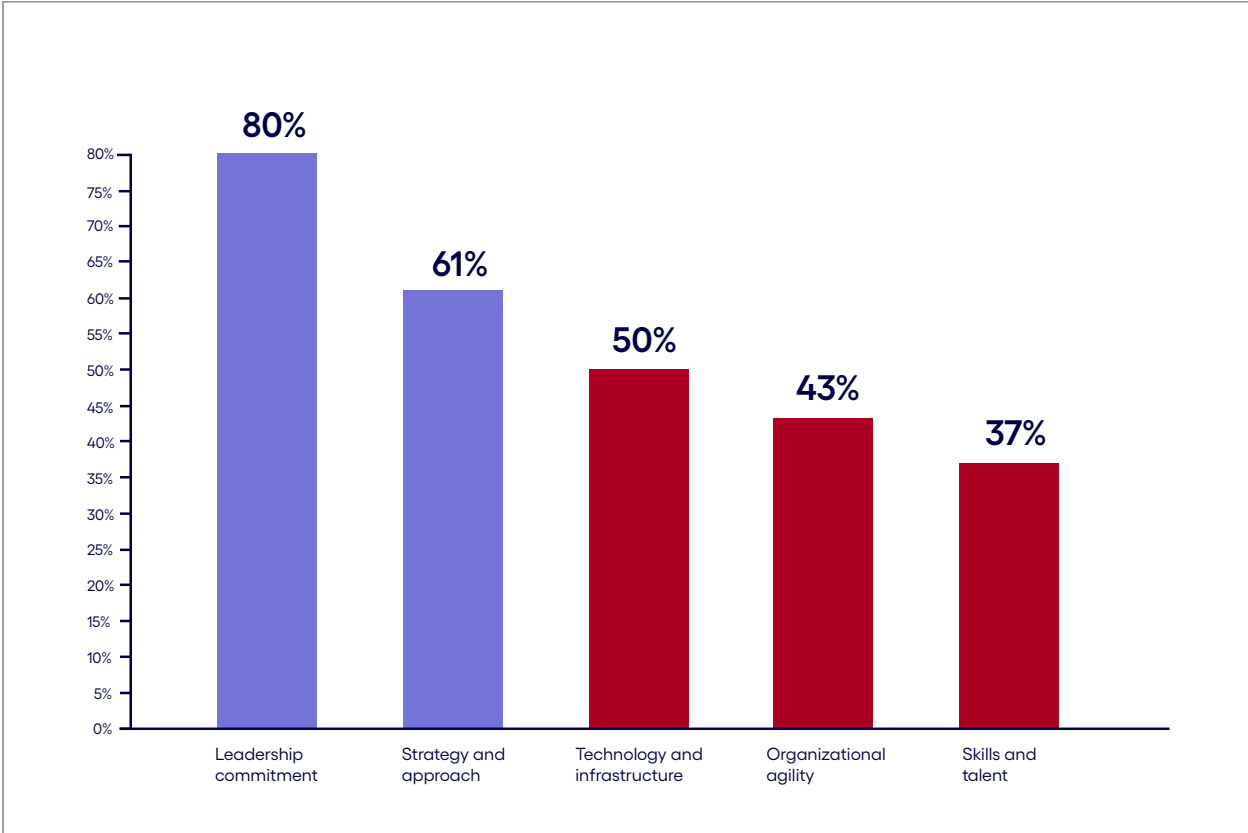


**Technology and
infrastructure**

Respondents were asked to award themselves a 4 only in areas where they believe they are fully ready for prime time, with lower scores in areas where they feel they will need to evolve considerably to make gen AI pay dividends.

Leadership support is sound, but fundamentals are lacking

Respondents were asked to rate the maturity of their organization’s operations in relation to generative AI. (Percent of respondents rating each as a 3 or 4, with 4 representing the highest level of maturity).



Base: 200 senior business leaders in Canada
Source: Cognizant and Oxford Economics

Figure 7

The picture here is mixed. Canadian respondents express a high degree of confidence in their strategic vision and in leadership’s commitment to generative AI, with most rating these aspects favorably (see Figure 7). But a closer look reveals some concerns, particularly when it comes to technological building blocks and organizational readiness.

A key factor undermining this confidence is the accessibility of data. Although a large majority of respondents (92%) believe their data is in at least “adequate” condition, 53% believe significant improvements are needed to make it readily available for use with generative AI. If data isn’t accessible to gen AI, needless to say, gen AI cannot use that data to drive insights and innovation.

The talent landscape also presents a significant challenge. While 55% of Canadian respondents plan to provide training for specific segments of their workforce, only 31% say they’ll institute an enterprise-wide training program, raising the prospect of a looming skills gap in harnessing this technology. This shortfall underscores the need for increased investment in training and development to ensure organizations have the human assets needed to fully realize gen AI’s potential.

Strategic recommendations for Canadian businesses

When it comes to gen AI, Canadian businesses already have the strong momentum, strategic vision and institutional commitment to see significant short- and medium-term advancements. However, to fully harness the potential of this technology and overcome existing hurdles, executives need to prioritize the following actions:

- **Cultivate an enterprise-wide AI talent pipeline:** Addressing the skills gap in AI expertise is essential for successful AI adoption in Canada. As said above, Canada has invested over \$2 billion since 2017 to support AI and innovation, including skill training for workers affected by generative AI.

Now, businesses need to play their part. This includes not only investing in internal, enterprise-wide training programs to upskill their existing workforce but also actively recruiting and retaining top AI talent from both domestic and international sources. Fostering a collaborative environment between academia and industry can further strengthen the talent pipeline and ensure a steady stream of skilled AI professionals.

- **Prioritize transparency and ethical AI development:** Building public trust is crucial for the widespread acceptance, adoption and strict regulatory measures of generative AI in Canada. The country's proposed Artificial Intelligence and Data Act ([AIDA](#)) should help to do just that.

AIDA provides Canadian companies with common standards and enables them to demonstrate, voluntarily, that they are developing and using generative AI systems responsibly until formal regulation is in effect.

Businesses should focus on developing and deploying AI systems that are transparent, explainable and aligned with ethical principles. Engaging in open dialog with stakeholders—including consumers, employees and policymakers—about the potential benefits and risks of AI can help build trust and foster a responsible AI ecosystem.

- **Focus on practical applications and measurable outcomes:** While the enthusiasm for generative AI is high, Canadian businesses must focus on practical use cases and pilot projects to demonstrate tangible value. By identifying and prioritizing AI applications that address specific business challenges and deliver measurable outcomes, companies can build a strong foundation for AI adoption. This approach will not only justify continued investment in AI but also create a culture of innovation and experimentation within the organization.
- **Enhance data accessibility and quality:** Canadian businesses know the value of their data, and a significant proportion know there's a need for improved accessibility. Investing in robust data management solutions that streamline data access, while maintaining stringent privacy and security measures in compliance with PIPEDA, will result in data that is not only clean and reliable but also easily retrievable and usable.

Given the centrality of data to these tools that Canadian businesses seem poised to embrace, this action alone could be the key to a successful gen AI future.

**The full list of regional factors we evaluated includes the flexibility of the existing operating model, market demand for gen AI-enabled products and services, data readiness, quality of output from gen AI, availability of compute power, cost/availability of gen AI-related technologies, shareholder/investor sentiment, regulatory environment, sustainability, national infrastructure, cost/availability of capital, data privacy and security, existing technology infrastructure, current and prospective employee perceptions, flexibility of the existing business model, maturity of gen AI-related technologies, consumer perceptions and cost/availability of talent.*

Learn about the impact of generative AI on jobs and the economy in our report [New work, new world.](#)

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