

# **AWS Study: Generative Al Adoption Index**

#### Insights on organizations in Canada

Generative Artificial Intelligence (AI) refers to a category of AI algorithms that generate new outputs based on the data the algorithms have been trained on. Unlike traditional AI systems that are designed to recognize patterns and make predictions, generative AI creates new content in the form of images, text, audio, and more.

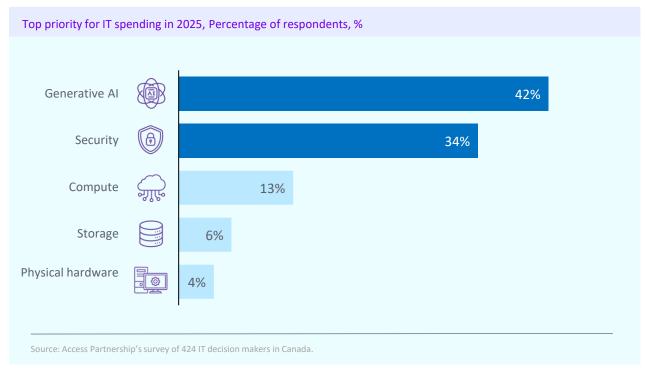
This report illustrates the emerging characteristics of the generative AI wave and provides critical insights on what corporate leaders and policymakers must focus on in order to best harness it. Findings show that organizations are investing their IT budgets in generative AI tools – ranking them alongside security tools as a top priority in 2025 IT budgets. Alongside this, a new class of C-suite leaders - Chief Al Officers (CAIOs) - will lead the generative Al revolution. While organizations are actively adopting and experimenting with generative AI, the talent shortage poses challenges in moving these experiments to production. Organizations will focus on training existing employees and hiring new talent to fill this talent shortage. Out-of-the-box AI models are anticipated to be highly valued, with the partnership between third-party vendors and in-house team being critical in their deployment.

These findings were from a survey conducted in January and February 2025 by Access Partnership in collaboration with Amazon Web Services (AWS). IT decision makers involved in technology investment and implementation at more than 3,739 organizations across nine countries - the United States of America (US), Brazil, Canada, France, Germany, Japan, India, South Korea, and the United Kingdom (UK) were surveyed. In Canada, 424 IT decision makers were surveyed.

# Generative AI solutions join security tools as a top priority in 2025

Generative AI and security tools are emerging as the primary focus areas in organizations' 2025 IT budgets, as businesses look to harness the cutting-edge potential of generative AI while ensuring robust security measures remain a top priority. 42% of IT decision-makers surveyed ranked generative AI tools as their top budget priority for 2025, while 34% indicated that security solutions were their top budget priority (Exhibit 1). In choosing generative AI tools or solutions to adopt, the ease of integration into workflows (60%) is the most important factor as organizations want to deploy tools that can be rapidly integrate into their operations. Interestingly, 37% of those surveyed indicated that responsible AI guardrails is a key factor when selecting generative AI tools, pointing to an increasing focus on addressing potential risks and promoting ethical practices in Al deployment. 87% of respondents indicated that their organizations either have guidelines for the responsible use of generative AI or plan to develop these guidelines in 2025.

EXHBIT 1 Organizations prioritize spending on generative AI and security tools



### The rise of the Chief AI Officer (CAIO)

Generative AI is creating a new class of C-suites who will drive change in organizations. As generative AI becomes an integral part of the workplace, organizations are creating new C-suite positions dedicated specifically to AI strategy to stay competitive and meet the growing demand for AI leadership. More than half (52%) of surveyed organizations have already appointed a Chief AI officer to lead generative AI deployment today, while an additional 23% intend to do so by 2026 (Exhibit 2). Today, 89% of organizations do not have a change management strategy to help employees navigate a future shaped by generative AI. However, that number is expected to decrease to just 32% by the end of 2026. This highlights a growing recognition of AI as a transformative technology that requires strategic oversight at the highest levels.

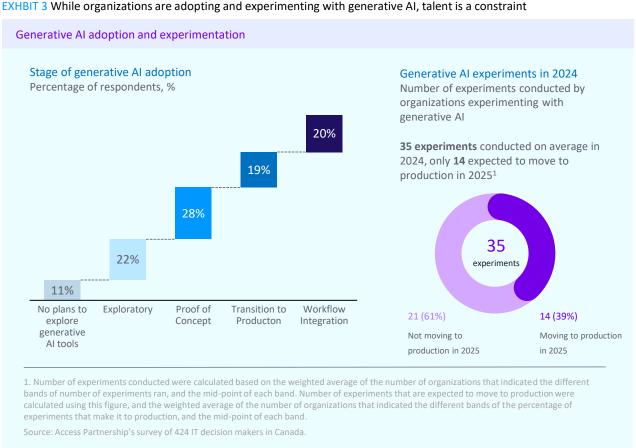
EXHBIT 2 More than half of organizations have already appointed a CAIO



# From experimentation to full integration – organizations are charging ahead

9 in 10 organizations in Canada have started to adopt generative AI tools. Organizations in Canada are moving fast with 89% adopting generative AI tools and 85% running generative AI experiments. 4 in 10 organizations have moved past the proof-of-concept and exploratory stages of adoption, and are looking at transiting to production or integrating generative Al tools fully into workflows (Exhibit 3). Today, out of the 35 generative Al experiments organizations conducted on average in 2024 to understand the capabilities and refine applications for generative AI solutions, only 14 experiments on average are expected to move to production in 2025. One of the key challenges hindering progress is the shortage of skilled generative AI professionals.

EXHBIT 3 While organizations are adopting and experimenting with generative AI, talent is a constraint



# 4

### Bridging the generative AI talent gap – upskilling and hiring in 2025

To bridge the gap between experimentation and implementation, organizations want to train and hire generative AI talent. Almost 7 in 10 (68%) have plans to upskill their workforce through training. Already, half of the surveyed organizations in Canada have developed generative AI training plans, with a further 18% set to develop one by end-2025 (Exhibit 4). However, some roadblocks are expected. The biggest challenges cited by IT decision makers in the development of training plans are a limited understanding of employees' generative AI skilling needs, budget constraints, and lack of knowledge on how to implement training programs. Given these barriers, training is unlikely to be sufficient to meet skill needs fully and organizations will be hiring generative AI-skilled talent in 2025. 87% of organizations expect to hire for roles that require generative AI skills in 2025.

EXHIBIT 4 Organizations are planning to train generative AI talent, but face challenges



5

# Buy vs Build – organizations take a blended approach

## Types of generative AI

Organizations may deploy a range of generative AI solutions:



In-house solutions involve training a generative AI model from scratch using data produced or acquired by the organization.



Out-of-the-box applications involve using existing applications as is for the organization's uses.



Custom applications built on out-of-thebox model involve simply adding a 'wrapper' or a user interface on top of pre-existing models without having to update the model's weights via additional training.

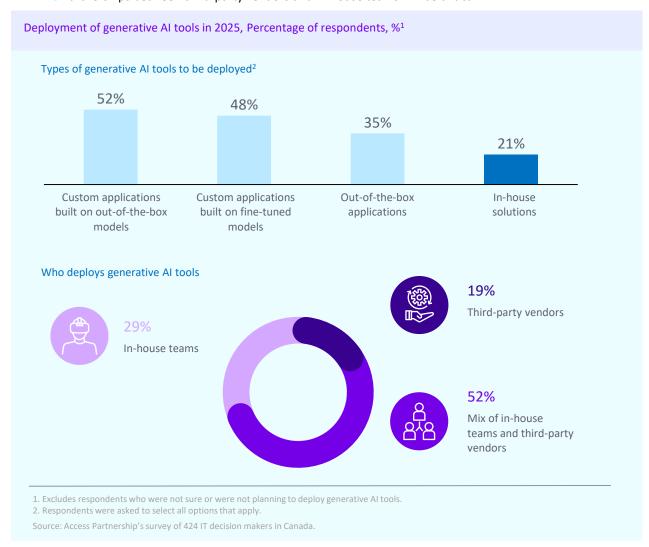


Custom applications built on finetuned models involve training preexisting generative AI models on new data to adjust the weights of the model.

As organizations are still developing generative AI talent, they will depend on pre-existing models to maintain the strong momentum in the deployment of generative AI. Only 21% will deploy solutions developed in-house from scratch in 2025. 35% of organizations have plans to deploy out-of-the-box generative AI applications wholesale, and most also intend to build custom applications, either on out-of-the-box models (52%) or on fine-tuned models (48%). (Exhibit 5).

A combination of external expertise and internal capabilities will be needed for successful generative AI deployment. 19% of organizations deploying generative AI tools in 2025 intend to rely on third-party vendors fully, while 52% plan to rely on a mix of external vendors and in-house teams (Exhibit 5). This means that around 71% of organizations will rely on third-party vendors in some way.

EXHBIT 5 Partnerships between third-party vendors and in-house teams will be critical



#### Conclusion

Generative AI is set to reshape Canada's business landscape, with organizations seeing investment in generative AI tools as a priority. The rise of CAIOs marks a shift towards dedicated AI leadership, as organizations actively explore and implement generative AI. However, overcoming the talent shortage will be crucial for large-scale deployment. To do so, organizations are focusing on training, recruitment, and investing in AI tools that can be rapidly deployed and integrated into their existing workflows. Rather than solely building or buying solutions, a hybrid approach that combines internal expertise with external capabilities will be essential to reap the full benefits of AI. To maximize long-term value, organizations should ensure strategic oversight at the highest levels, prioritize workforce preparedness, and adopt scalable AI solutions that seamlessly fit into existing workflows.