AWS Study: Generative AI Adoption Index

Perspectives from global IT decision makers

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Executive summary

Generative AI is transforming how organizations work by automating routine tasks, enhancing creativity, and improving decision-making. As AI handles repetitive duties, employees can focus on strategic initiatives that drive innovation. The technology's affordability and accessibility through mobile devices has democratized access, enabling widespread adoption across organizations of all sizes.

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. Key findings include:

1 **Organizations aim to prioritize generative AI over security spending in 2025.** **45%** of IT decision makers surveyed selected generative AI tools as their top budget priority in 2025, over other IT spending categories like security tools (**30%**). When adopting generative AI solutions, ease of integration is a key criterion for most organizations. But those that operate in environments with a high level of regulatory oversight and strict compliance requirements also value advanced capabilities (**56%**) and robust privacy and security features (**48%**).

2 **Chief AI Officers (CAIOs) emerge as critical leaders.** Organizations are rapidly consolidating AI leadership, with **60%** already having appointed CAIOs and another **26%** planning appointments by 2026. While this demonstrates strong executive commitment, change management remains a concern - nearly **one-quarter** of organizations will still lack formal transformation strategies by 2026.

3 **Organizations accelerate from experimentation to integration.** While **90%** of organizations now deploy generative AI tools, **44%** have advanced beyond early testing to production deployment. Organizations conducted an average of **45** AI experiments in 2024, but only **20** will reach end-users by 2025, highlighting implementation challenges.

4 **Upskilling and hiring bridge the generative AI talent gap in 2025.** To accelerate generative AI deployment, organizations are pursuing dual strategies: internal training and external recruitment. **56%** have already developed generative AI training plans and a further **19%** will do so in 2025. However, around **half** said that limited understanding of employees' generative AI training needs hinders the creation of robust training plans. This drives aggressive hiring plans, with **92%** of organizations seeking AI-skilled talent in 2025.

5 **Organizations adopt hybrid build-and-buy strategies.** Rather than developing solutions from scratch, most organizations customize pre-existing AI models to fit their workflows and datasets. Industry preferences vary significantly - notably, **44%** of financial services firms plan to use out-of-the-box solutions, departing from traditional custom development approaches. Third-party vendors emerge as key partners, with **65%** of organizations planning vendor collaboration for deployment.

These findings were from a survey conducted 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, India, Japan, South Korea, and the United Kingdom (UK) were surveyed.

Detailed findings

INSIGHT 1

# Organizations prioritize generative AI over security spending in 2025

Organizations prioritize spending on generative AI tools over security tools in their 2025 IT budgets. 45% of surveyed IT decision-makers ranked generative AI tools as their top budget priority for 2025, surpassing traditional priorities like security tools (30%) (Exhibit 1). This shift underscores a growing focus on AI-driven innovation and growth across organizations. However, priorities differ by organization size. Large and medium-sized organizations favor generative AI tools over security and compute systems, reflecting a stronger focus on innovation. In contrast, small organizations prioritize security solutions, highlighting their need to secure operations before embracing AI advancements.

EXHIBIT 1   **Organizations prioritize spending on generative AI over security**

Top priority for IT spending in 2025
Percentage of respondents, %
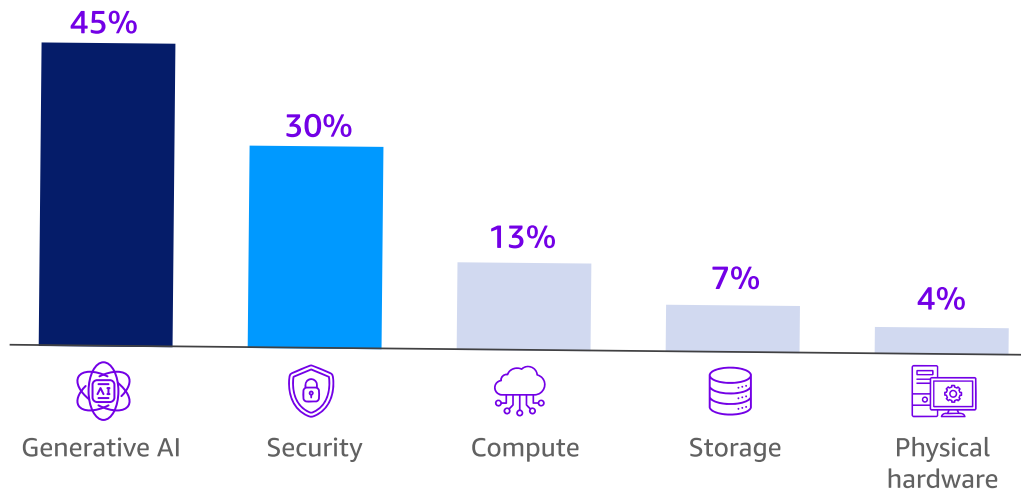
Generative AI	Security	Compute	Storage	Physical hardware
45%	30%	13%	7%	4%

Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.
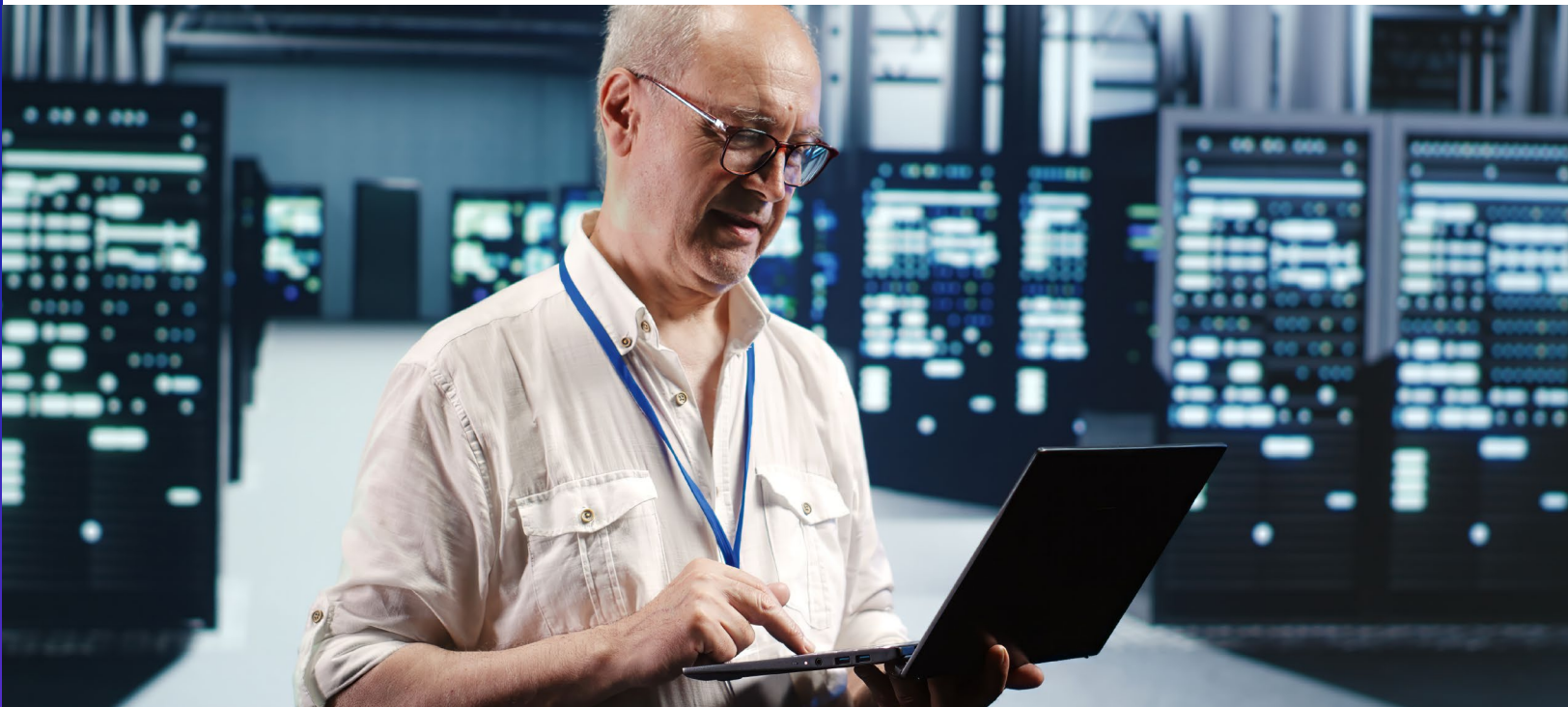
Organizations that face high levels of oversight prize advanced capabilities and security features. In selecting generative AI tools to spend their budgets on, ease of integration into existing workflows is a key requirement for organizations. 65% of those in industries with a high level of regulatory oversight and 63% of those in industries with lower levels of regulatory oversight named ease of integration as a key criterion in selecting generative AI tools. Interestingly, organizations that face high levels of oversight – for instance, organizations in the financial services and education sectors – place a higher premium on the advanced capabilities (56%) and security features (48%) of generative AI solutions. These industries, which often deploy AI in complex and sensitive use cases, prioritize robust security and advanced functionalities to meet rigorous safety and regulatory standards.[1] On the other hand, only around a third (34%) of organizations in less regulated environments see security and privacy features as important (Exhibit 2).

EXHIBIT 2   **Organizations that face high levels of oversight particularly value security features and advanced capabilities**

Most important factors when evaluating generative AI solutions
Percentage of respondents in each type of regulatory environment, %

Factor	Low to moderate level of oversight	High level of oversight
Ease of integration into workflows	65%	63%
Advanced capabilities	56%	42%
Privacy/Security	48%	34%
Responsible AI guardrails	47%	41%

Note: Organizations that face a high level of oversight are defined to be those that face extensive compliance requirements, frequent oversight and licensing requirements; while organizations that face a low to moderate level of oversight are those that face minimal compliance requirements, infrequent oversight, and limited licensing requirements. The number features the share of respondents who have selected each factor; each respondent was allowed to select up to three factors.

Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.
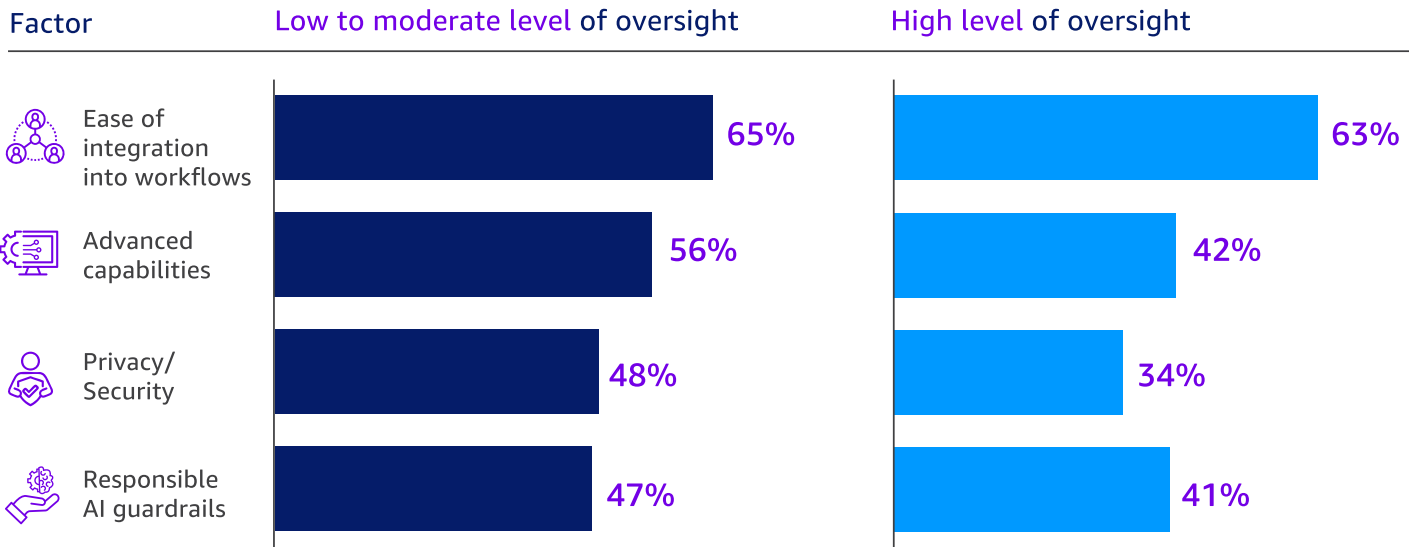
The rise of the Chief AI Officer (CAIO)

AI leadership will be crucial moving forward – CAIOs are being added to the C-suite to oversee integration, risk management, and value creation. As generative AI adoption continues to expand across industries, organizations are adapting to meet the growing demand for consolidated AI leadership to drive impactful organization-wide generative AI transformation. In a bold move to stay competitive, many are creating new C-suite positions dedicated specifically to AI strategy. 60% of organizations have already appointed CAIOs who will lead generative AI deployment. An additional 26% plan to appoint CAIOs in 2026. This trend reflects a fundamental shift in how organizations view AI – not merely as yet another technological tool – but a breakthrough that requires strategic oversight at the highest levels (Exhibit 3). This also opens up new corporate career opportunities for AI-skilled talent within organizations. Case in point, leading organizations such as Amazon and Airbnb have appointed AI leaders to their boards to provide strategic guidance.[2]

EXHIBIT 3 **60% of organizations have already appointed a Chief AI Officer**

Organizations plans for AI leadership
Percentage of respondents, %

No plans to appoint a CAIO

CAIO will be appointed by 2026

CAIO has been appointed

15%	26%	60%

Note: The sum may not add up to 100% due to rounding error.
Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.
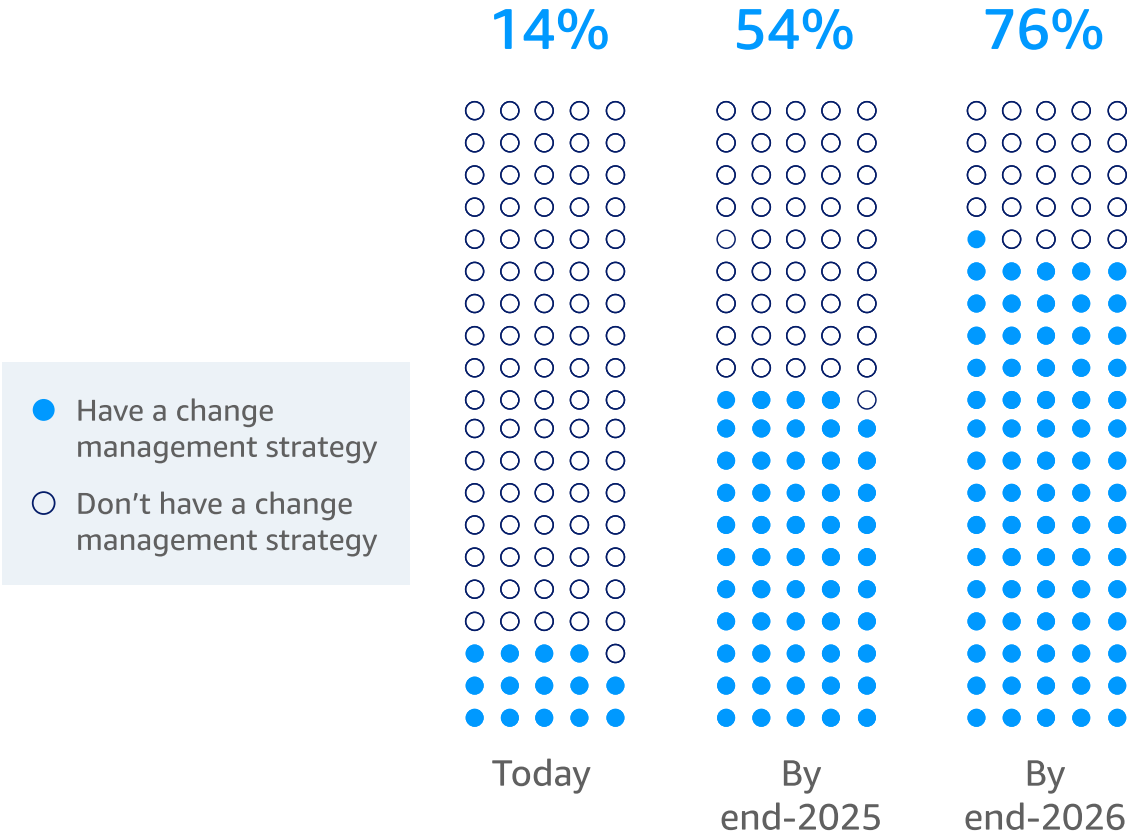
Implementing a change management strategy

Along with CAIOs who are set to play a pivotal role in driving organization-wide transformation, a thoughtful change management strategy will be critical. The ideal strategy should address operating model changes, data management practices, talent pipelines, and scaling strategies among a range of other dynamic factors associated with generative AI adoption.[3]

Today, just 14% of organizations have a change management strategy, but this will increase to 76% by end-2026, highlighting growing recognition of the need for structured adaptation (Exhibit 4). That said, a sizable proportion of organizations may still struggle to keep pace with AI-driven transformation with 1 in 4 organizations still lacking one in 2026.

EXHIBIT 4   **76% of organizations will have a change management strategy by the end of 2026**

Organizations that have a change management strategy
Percentage of respondents, %

- ● Have a change management strategy
- ○ Don't have a change management strategy

| 14% | 54% | 76% |
| Today | By end-2025 | By end-2026 |

Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.

Organizations aspire for equitable distribution of Gen AI benefits. 95% of IT decision-makers report that their organizations have implemented at least one strategy aimed at ensuring the equitable distribution of generative AI benefits across employee groups. Among the most commonly adopted approaches are ensuring diverse representation in the design and implementation of AI tools (53%) and promoting transparency in the algorithms that impact stakeholders (52%). These efforts reflect a growing commitment to fairness and accountability as organizations plan to expand on development and deployment of generative AI technologies (Exhibit 5).

EXHIBIT 5

95% of organizations have adopted at least one strategy for democratic distribution

Strategies adopted by organizations to ensure gains of generative AI are distributed democratically
Percentage of respondents, %

Diversity in teams that design and implement generative AI tools
53%

Transparency in algorithms that impact stakeholders
52%

Equitable access to training resources
43%

Putting in place feedback mechanisms
30%

Impact assessments on generative AI adoption
29%

95%
of respondents have adopted at least one strategy

Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.

Nearly half of organizations have passed the proof-of-concept stage

Organization's stage of adoption for Generative AI
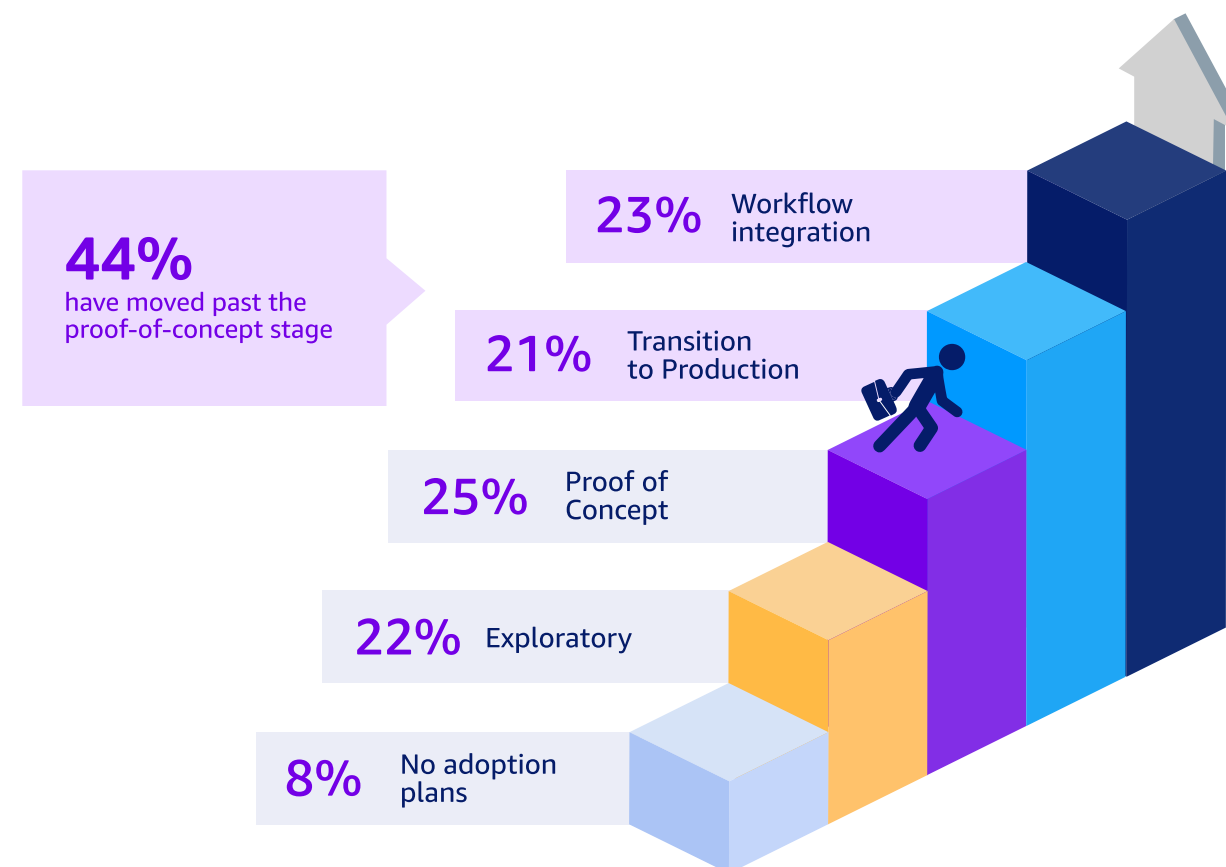Percentage of respondents, %

INSIGHT 3

From experimentation to full integration – organizations are charging ahead

Close to half of organizations have moved generative AI deployment past the proof-of-concept stage. Nine in 10 organizations have started to deploy generative AI tools and close to half (44%) have moved past the proof-of-concept and exploratory stages of adoption, and are looking at transiting to production or integrating generative AI tools fully into workflows (Exhibit 6). This trend underscores the accelerating commitment to generative AI, as organizations move beyond experimentation toward full-scale implementation and integration.

44%
have moved past the proof-of-concept stage

23% Workflow integration

21% Transition to Production

25% Proof of Concept

22% Exploratory

8% No adoption plans

Note: The sum may not add up to 100% due to rounding error.
Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.

In 2024, organizations ran an average of 45 experiments with generative AI but there are roadblocks in moving towards production. Organizations boldly pursued their ambitions and actively experimented with generative AI to understand its capabilities and refine its applications. However, only 44% or 20 experiments on average are expected to reach end users by 2025.

Generative AI talent and clean data are critical to move experiments to production. Those from organizations engaged in generative AI experiments reported that a lack of a skilled generative AI workforce is the biggest barrier preventing them from taking generative AI experiments into production (55%). Other key barriers include the perceived high costs of development (48%) and biases and hallucinations (40%). Clean, high-quality data will be vital to reduce bias and hallucinations going forward and support the transition towards full-scale implementation (Exhibit 7).

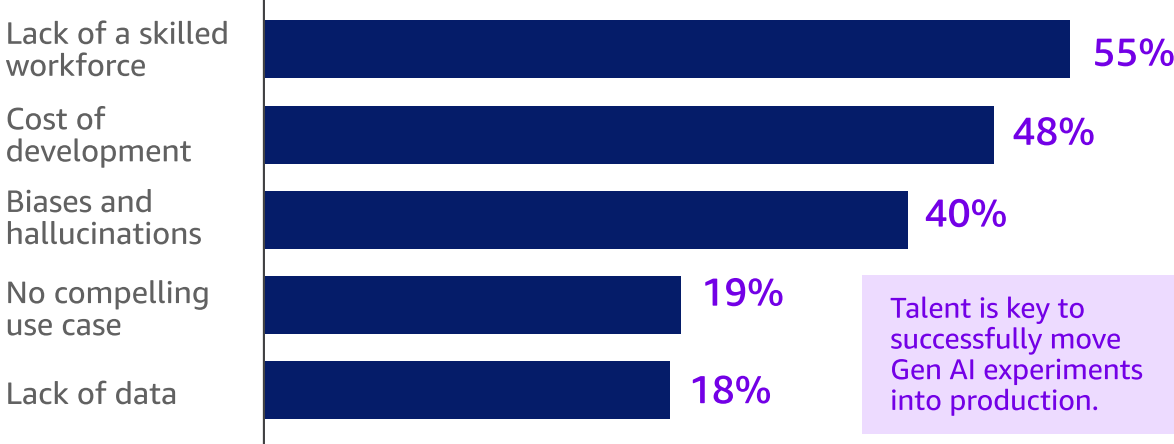EXHIBIT 7   **While organizations are experimenting with generative AI, talent is a constraint**

Generative AI experiments conducted by organizations in 2024
Average number of experiments[1]

45 experiments conducted

20 Experiments moved to production

44% of experiments ran by organizations are expected to move to production[2]

Top barriers to moving generative AI experiments to production
Percentage of respondents from organizations experimenting with generative AI, %

Barrier	%
Lack of a skilled workforce	55%
Cost of development	48%
Biases and hallucinations	40%
No compelling use case	19%
Lack of data	18%

Talent is key to successfully move Gen AI experiments into production.

1. Calculated based on the weighted average of the number of organizations that indicated the different bands of number of experiments ran, and the mid-point of each band.
2. Calculated based on the weighted average of the number of organizations that indicated the different bands of the percentage of experiments that make it to production, and the mid-point of each band.
Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.

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

Talent is the key to turning generative AI experiments into real-world success and 1 in 2 organizations have developed training plans. Around three quarters of organizations have plans to upskill their workforce through training and equip workers with generative AI skills. Already, 56% of organizations have already rolled out generative AI training plans. A further 19% are set to do so by end-2025 (Exhibit 8).

In 2025, 9 out of 10 organizations are expected to hire talent with generative AI expertise, with a quarter of organizations forecasting that at least half of their new hires will need these skills. In addition to training their own workforce, the majority of organizations will turn to hiring to fill the generative AI skills gap. 92% of respondents revealed that their organizations are preparing to recruit for new roles that specifically require generative AI expertise. For a quarter (26%) of those surveyed, at least half of the new positions in their organization will demand generative AI skills (Exhibit 9). However, some industries are set to take a more aggressive approach to AI hiring. In the ICT sector, 35% of organizations plan to make generative AI skills a requirement for at least half of their new roles, while 28% of organizations in the manufacturing sector will follow suit.

EXHIBIT 8 **56% of organizations already have a generative AI training plan**

Organizations with generative AI training plans
Percentage of respondents, %

Don't know	No training plan	Will develop training plan by end-2025	Have a training plan
2%	23%	19%	56%

75% will have generative AI training plan by end-2025
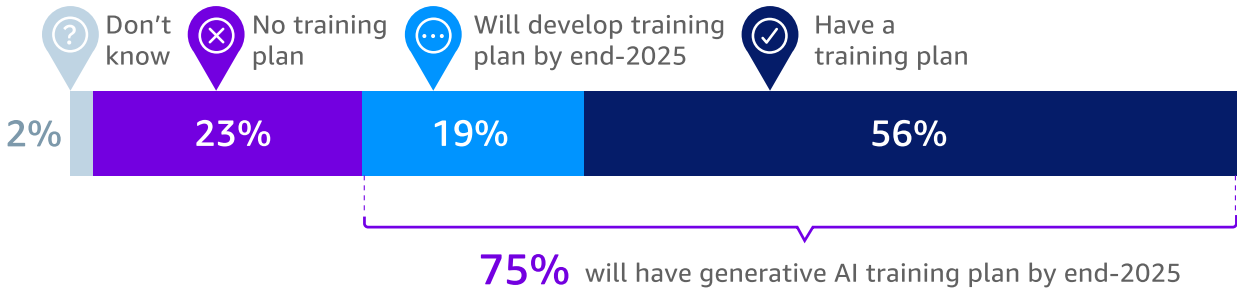
EXHIBIT 9 **92% of organizations want new generative AI talent in 2025**

Percentage of open job roles with generative AI skills as a requirement in 2025
Percentage of respondents, %
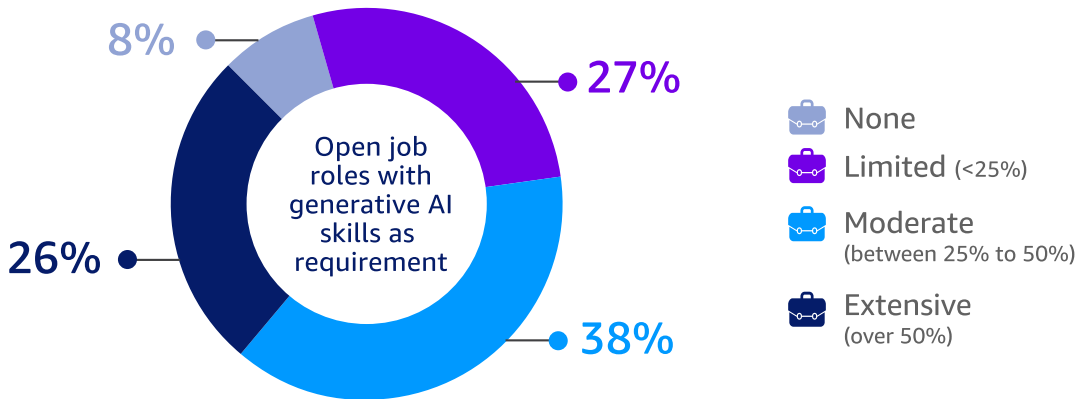
Open job roles with generative AI skills as requirement

- 8%
- 27%
- 38%
- 26%

- None
- Limited (<25%)
- Moderate (between 25% to 50%)
- Extensive (over 50%)

Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.

Priority Action 2:

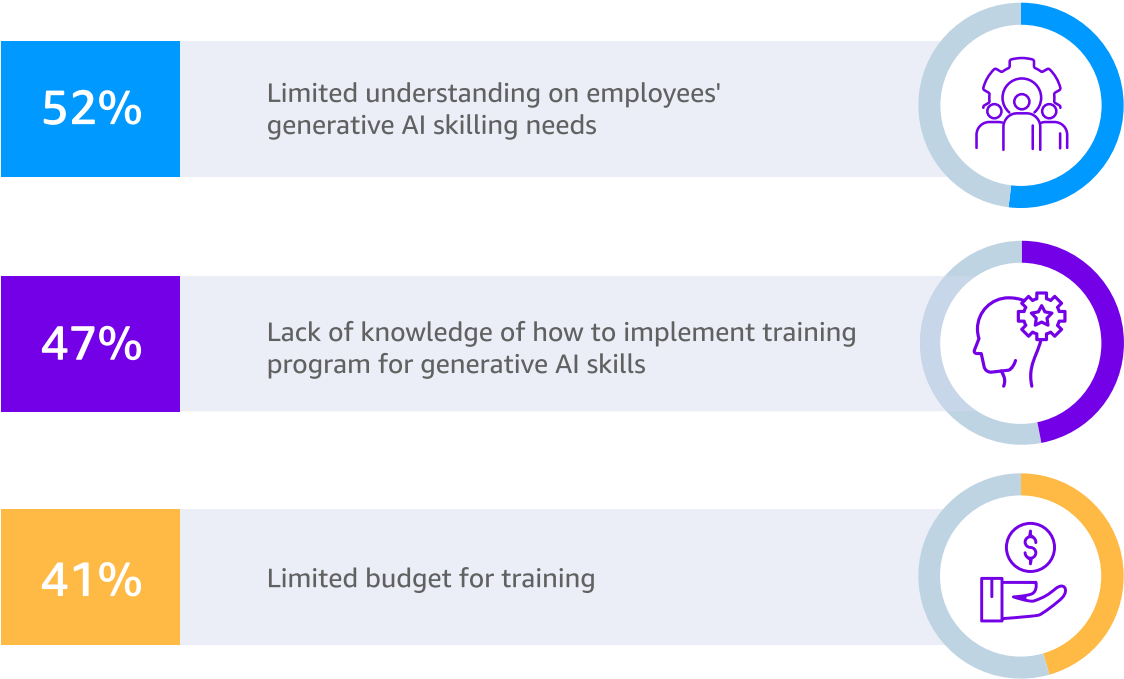# Overcoming barriers to training

Even as organizations acknowledge the importance of training plans, there will be barriers to developing these plans. IT decision makers report that the top challenge to developing generative AI training plans is a limited understanding of employees' training needs (52%). 47% also report a lack of knowledge of how to implement relevant training programs while 41% say that limited training budgets are a hindrance (Exhibit 10).

Digital modules developed by leading tech organizations can help to bridge these knowledge gaps for businesses and individuals. For instance, the AWS Skill Builder Platform provides online courses, including courses focused on machine learning and generative AI, tailored for a range of competencies and work functions.[4]

EXHIBIT 10 — **Over half of organizations say they have a limited understanding of employees' generative AI skilling needs**

Top three challenges in developing generative AI plans
Percentage of respondents, %

52% Limited understanding on employees' generative AI skilling needs

47% Lack of knowledge of how to implement training program for generative AI skills

41% Limited budget for training

Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.
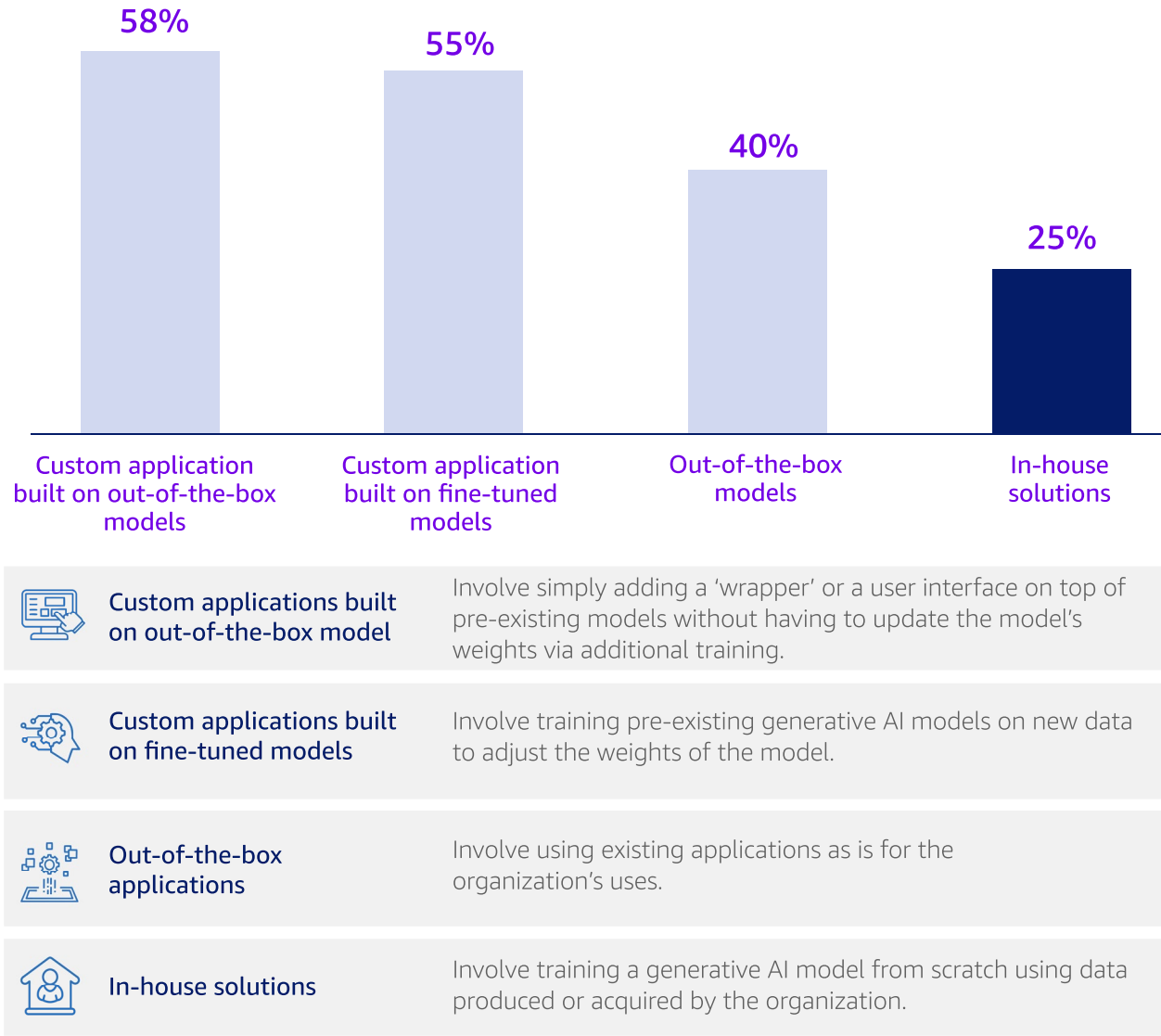
Build vs buy – organizations take a blended approach

As organizations push towards generative AI adoption, most will use custom applications built on pre-existing models. Given the lack of generative-AI skilled workers and the active push towards deploying generative AI, most organizations intend to depend on pre-existing models. However, they will build their own custom applications on these models to ensure that they can be fully integrated into workflows. On the whole, 40% of organizations using generative AI tools intend to deploy out-of-the-box models wholesale while 58% intend to build custom applications on out-of-the-box models and 55% intend to build custom applications on fine-tuned models. Only 25% intend to deploy solutions developed in-house from scratch (Exhibit 11).

EXHIBIT 11   **Only 25% of organizations will deploy in-house solutions**

Types of generative AI tools to be deployed in 2025
Percentage of respondents, %

	58%	55%	40%	25%
	Custom application built on out-of-the-box models	Custom application built on fine-tuned models	Out-of-the-box models	In-house solutions

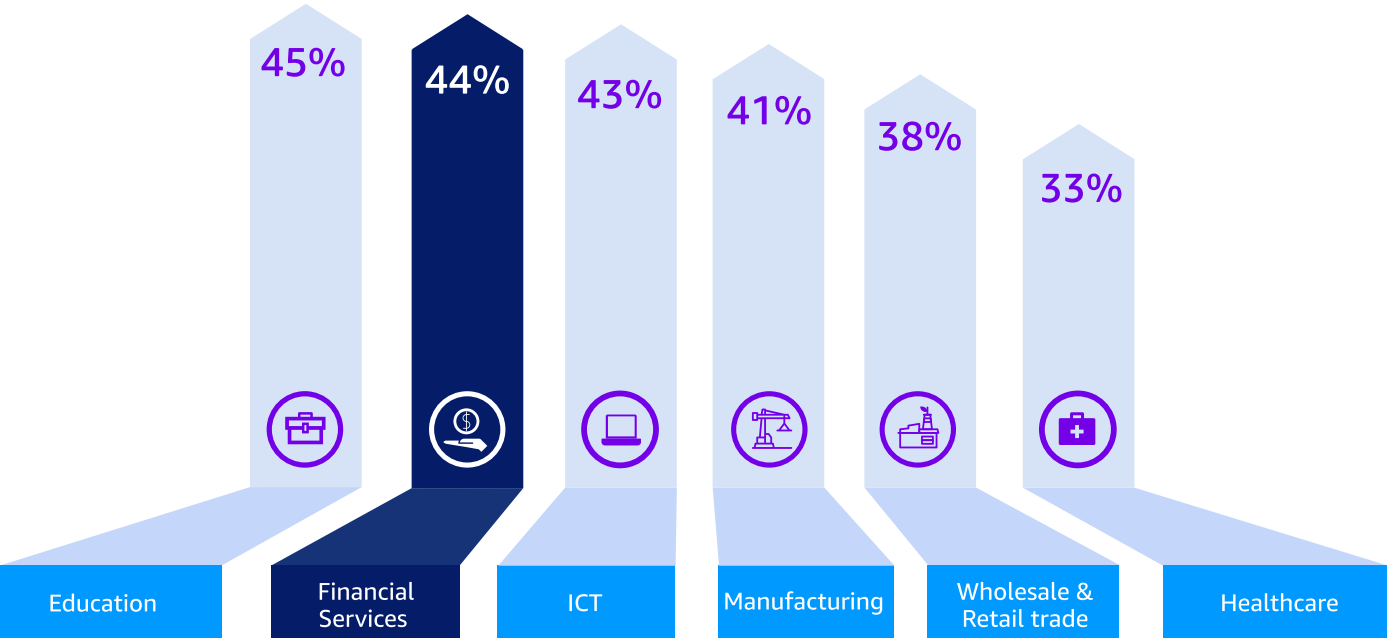|		
Custom applications built on out-of-the-box model	Involve simply adding a 'wrapper' or a user interface on top of pre-existing models without having to update the model's weights via additional training.
Custom applications built on fine-tuned models	Involve training pre-existing generative AI models on new data to adjust the weights of the model.
Out-of-the-box applications	Involve using existing applications as is for the organization's uses.
In-house solutions	Involve training a generative AI model from scratch using data produced or acquired by the organization.

Note: Excludes respondents who were not sure or were not planning to deploy generative AI tools. Respondents were asked to select all options that apply.
Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.

Organizations in the education, financial services and ICT sectors want to deploy out-of-the-box applications. At the industry level, education (45%), financial services (44%) and ICT (43%) organizations are most keen to deploy out-of-the-box applications wholesale. Interestingly, close to half of organizations in the financial services sector are keen to deploy out-of-the-box applications wholesale despite their traditional reliance on proprietary data and tailored solutions. This reflects the growing recognition of the benefits of faster deployment, cost efficiency, and access to advanced AI capabilities that out-of-the-box applications can offer. (Exhibit 12).

EXHIBIT 12   **Nearly half of organizations in financial services will deploy out-of-the box applications**

Organizations that will deploy out-of-the-box applications in 2025
Percentage of respondents by sector, %

Education	Financial Services	ICT	Manufacturing	Wholesale & Retail trade	Healthcare
45%	44%	43%	41%	38%	33%

Note: Excludes respondents who were not sure or were not planning to deploy generative AI tools.
Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.

Priority Action 3:

Working with strategic partners to accelerate deployment

Third-party vendors are emerging as powerhouses enabling the generative AI transformation for organizations globally. From using outsourced talent to providing services like cloud computing and storage, third-party vendors fill crucial technological and talent gaps for organizations.

As such, strong partnership between external expertise and internal capabilities will be critical for generative AI deployment. 15% of organizations deploying generative tools in 2025 intend to solely rely on third-party vendors for deployment, while 50% plan to rely on a mix of in-house teams and third-party vendors (Exhibit 13). Overall, around two thirds (65%) of organizations will rely on third-party vendors to some extent in 2025. These external vendors will need to collaborate closely with in-house teams, who are better positioned to manage and leverage proprietary data effectively.

| EXHIBIT 13 | **Partnerships between third-party vendors and in-house teams will be critical** |

Who deploys generative AI tools
Percentage of respondents, %

Third-party vendors	Mix of in-house teams and third-party vendors	In-house teams
15%	50%	34%

65% will rely on third-party vendors in some capacity
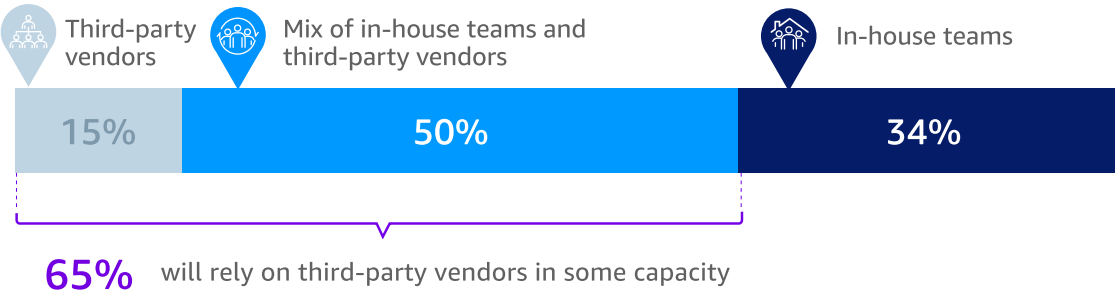
Note: The sum may not add up to 100% due to rounding error. Excludes respondents who were not sure or were not planning to deploy generative AI tools.

Source: Access Partnership's survey of 3,739 IT decision makers in the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK.

Conclusion

Generative AI represents a major inflection point for organizations worldwide. Those that successfully adopt and integrate the technology stand to gain significant benefits—from accelerating product ideation and go-to-market strategies to optimizing internal operations. Recognizing this potential, companies are increasingly directing their budgets toward generative AI adoption while also strengthening their AI leadership by appointing CAIOs and implementing change management strategies.

As organizations experiment with and deploy AI tools, the demand for generative AI-skilled talent and external expertise is becoming increasingly evident. To fully capitalize on the generative AI wave, organizations must prioritize three key actions:

1. Implementing a change management strategy
2. Overcoming barriers to training
3. Working with strategic partners to accelerate deployment
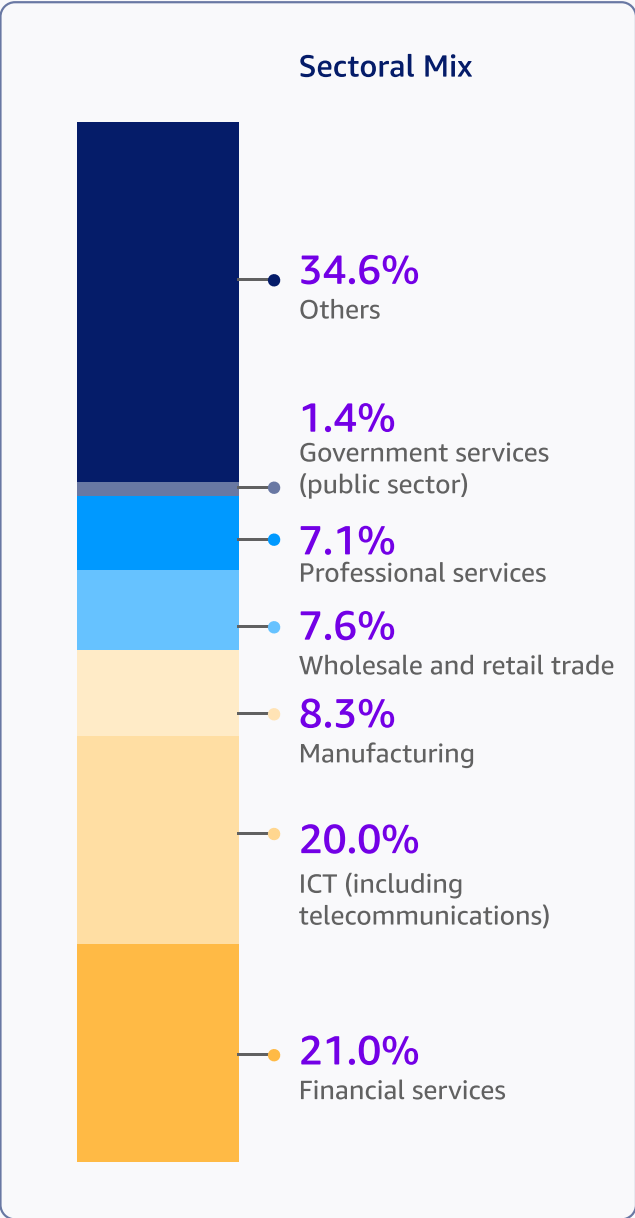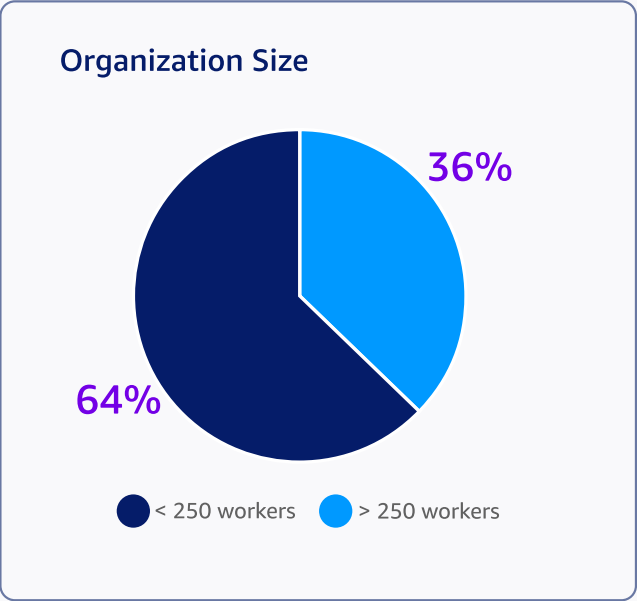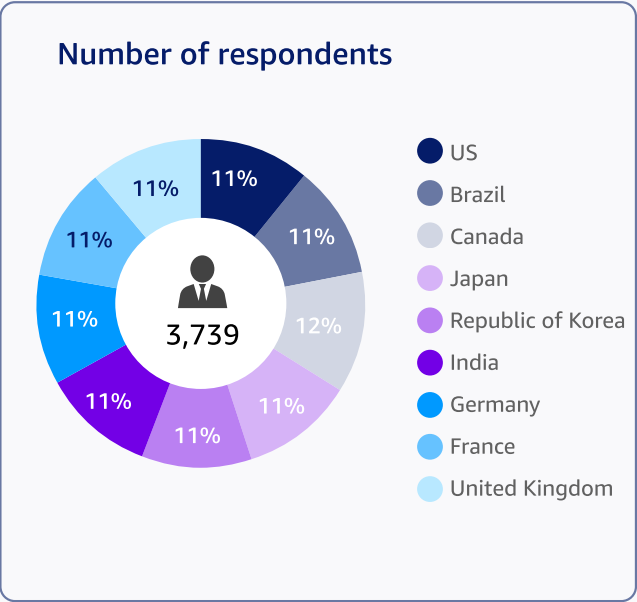
Appendix

METHODOLOGY

Survey

This survey was conducted at the national level in nine countries, including the US, Brazil, Canada, France, Germany, India, Japan, South Korea, and the UK. Pools of respondents in the surveys drew on C-suite executives involved in ICT decisions across countries. Specifically, they are comprised of senior IT decision makers who play a significant role in the selection and implementation of IT solutions for their organizations.

The surveys were conducted online in January and February 2025. They asked respondents for their views on the following: (1) Current momentum of generative AI adoption; (2) Motivations and factors for deployment of generative AI; (3) Current and future generative AI skilling needs; (4) The future of generative AI transformation across organizations.

A total of 3,739 individuals participated in the survey. Exhibit 14 contains detailed statistics on the survey respondents' profiles. For the survey, a minimum of 407 respondents at the national level were surveyed in each of the nine countries to ensure statistically significant results at a 95% significance level and 5% margin of error. At the regional level, results were not weighted by the contributions of each country.

RESPONDENT PROFILES

EXHIBIT 14

Number of respondents

3,739

- US
- Brazil
- Canada
- Japan
- Republic of Korea
- India
- Germany
- France
- United Kingdom

11% / 11% / 11% / 12% / 11% / 11% / 11% / 11% / 11%

Organization Size

36%

64%

- < 250 workers
- > 250 workers

Sectoral Mix

34.6%
Others

1.4%
Government services
(public sector)

7.1%
Professional services

7.6%
Wholesale and retail trade

8.3%
Manufacturing

20.0%
ICT (including
telecommunications)

21.0%
Financial services

Endnotes

1. SAP (2024), "AI guardrails for highly regulated industries." Available at: https://www.sap.com/resources/ai-guardrails-for-highly-regulated-industries
2. Sources include: Amazon (2024), "Dr. Andrew Ng appointed to Amazon's Board of Directors." Available at: https://www.aboutamazon.com/news/company-news/dr-andrew-ng-joins-amazon-board-of-directors; Airbnb (2023), "James Manyika to join Airbnb's Board of Directors." Available at: https://news.airbnb.com/james-manyika-to-join-airbnbs-board-of-directors/
3. McKinsey (2024), "Rewired to outcompete." Available at: https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/rewired-to-outcompete;
4. AWS (n.d.), "Learn about AI/ML." Available at: https://aws.amazon.com/training/learn-about/machine-learning/?p=train&c=tc&z=4

aws

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