

Global study on generative Al adoption

Building momentum: The path to confident Al adoption

Our latest research highlights strong leadership commitment to generative AI but reveals gaps in business readiness. By addressing weaknesses and capitalizing on strengths, businesses can prepare for the next wave of gen AI adoption.

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Executive summary

2024 was the year generative AI moved from buzzword to business imperative—with large organizations worldwide spending an average of \$47.5 million this year on the technology, according to our recent global study on generative AI adoption.

This substantial commitment underscores its perceived importance. Nearly three-quarters of respondents in our study say it's vital to their continued success, which has spurred a pervasive sense of urgency, with almost 70% of leaders fearful they're not moving fast enough.

While recent headlines have fueled fears of Al-related job loss, our research tells a different story. Rather than cutting headcount, companies are redirecting productivity gains from gen Al into funding business growth. This shift highlights a broader trend: Organizations aren't just looking to do more with less—they're aiming to do more with what they already have.

The path to widespread adoption, however, is not without obstacles. Our study identified several factors that will either accelerate or inhibit generative AI momentum at a global and regional level. Knowing which levers to pull—and how these differ in various countries or regions—will be the difference between AI momentum and stagnation. Success will hinge on navigating these dynamics effectively.

For instance, although respondents voiced strong leadership commitment and business strategies, a critical gap remains: Many senior executives express doubts about the readiness of their technology infrastructures, talent/skills and organizational agility. This disconnect between leadership vision and operational readiness underscores the need for businesses to bolster their foundational capabilities to capitalize on Al's potential.

\$47.5 million

average per-company expenditures this year on gen Al



Executive summary

To obtain a comprehensive view of generative Al adoption around the world, we surveyed 2,200 business executives across 23 countries and 15 industries about their generative Al strategies.

Building on our previous "<u>New work, new world</u>" research, which highlighted the potential economic gains and challenges of generative AI in the US, this study delves deeper into global adoption trends, including investment levels, use cases, organizational readiness and strategies for business success.

By understanding these factors, businesses can identify where to focus their efforts and how to move forward in the evolving landscape.

In this report, we'll look at:

- **1.** The global factors that will inhibit or accelerate generative Al adoption
- 2. The regional and country differences in generative AI momentum
- **3.** How respondents rate themselves in five areas of business readiness for generative Al
- **4.** Key takeaways for moving forward

Global factors inhibiting or accelerating gen **Al adoption**

Global factors inhibiting or accelerating gen Al adoption

Generative Al adoption is driven by many factors, both globally and regionally, that will slow down or speed up its progress.

In our study, we asked respondents to rate 18 factors that we believe will have the greatest impact on generative Al momentum on a scale of positive to negative impact (see the sidebar for the full list).

Based on these ratings, we assigned each of the factors a score, calculating for both respondents' perception of its impact (accelerator, neutral, inhibitor) and the intensity level (high, medium and low). Here's what we found in terms of the main accelerators and inhibitors to generative Al adoption at a global level.

18 factors impacting gen Al momentum

Operating model flexibility Market demand for gen Al-enabled products and services Data readiness Quality of output from gen Al Availability of compute power Cost/availability of gen Al-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 Business model flexibility Maturity of gen Al-related technologies Consumer perceptions Cost/availability of talent

Global factors inhibiting or accelerating gen Al adoption

Catalysts for change: Factors boosting adoption

Topping the list of accelerators is **flexible operating models**. Business leaders expressed confidence in their overall ability to integrate innovative solutions into their workflows with relative ease.

This adaptability can be seen in the rapid rollout of pilots, proofs of concept and, in some cases, full deployment of generative Al across a wide range of use cases. Already, 96% of respondents say they are making progress on using the technology to add a new revenue source, while 93% are working on writing and testing software code. Another 90% are figuring out how to engage with customers directly.

The second driver is market demand. Respondents recognize that it's become essential to embed generative AI into their operations or product and service offerings, if they want to meet customer expectations. In our "New work, new world" study, we found the US economy alone will see \$1 trillion in annual productivity growth by 2032 through the use of generative AI, and businesses clearly don't want to miss out. By the 2026–2030 timeframe, we forecast an era of "confident adoption," in which over one-third of businesses will be in full utilization mode, spurring real generative AI change.

Respondents are also optimistic about the readiness of their data as a critical accelerator, with businesses confident in their ability to harness data for AI applications. This enthusiasm may, however, be dampened by concerns about technology infrastructure, with a scant 9% citing this as a gen AI accelerator, as the quality of data alone doesn't guarantee success without robust systems to support accessibility and security. In effect, businesses recognize they have huge amounts of valuable data but are unsure of their technological capabilities to enable generative AI to use it. Leaders are more likely to rate the quality and cleanliness of their data as either good or excellent (53% of respondents sit in this category). However, only 18% of respondents have a similarly positive view of the accessibility of their data. The risk is that any momentum gained through high data readiness will be stalled by challenges with legacy technology.



Global factors inhibiting or accelerating gen Al adoption

Barriers to progress: Factors slowing Al momentum

On the flip side, the most pressing inhibitor is the availability and cost of talent, which is set to bog down adoption efforts. In our study, no region is exempt from the shortage of skilled workers, whether in Al or other needed digital skills. By 2030, according to organizational management consultancy Korn Ferry, the global talent shortage <u>will reach 85.2 million</u>. Similarly, <u>Reuters reports</u> that this year there will be a 50% hiring gap for Al-related positions. Governments globally are working to fund skilling initiatives, overhaul visa rules and find other measures to fill the gap. Businesses will need to do the same.

Consumer perceptions are also a concern for executives—and understandably so. <u>According to our recent trust survey</u>, less than onethird of consumers in the US trust generative AI, and these numbers bear out globally as well. In that study, few believe they personally stand to benefit from the technology, although most believe businesses will enjoy significant returns.

Finally, the maturity of available gen Al solutions on the market further complicates the landscape. While market enthusiasm is high, the technology is still evolving, and many solutions are not yet fully equipped to reliably handle core business challenges. This understandable reservation points to a broader issue: the gap between strategic commitment and operational readiness, as executives express doubts about their existing infrastructures and their organizational ability to execute on their gen Al strategies.



Scores were calculated based on respondents' ratings of each factor's impact (accelerator, neutral, inhibitor) and intensity level (high, medium and low).

Base: 2,200 global business leaders Source: Cognizant and Oxford Economics Figure 2 Regional disparities: Unpacking generative Al momentum at the local level

What is true at the global level is not necessarily the case at a regional or country level.

In our analysis, there are significant differences in how these mechanics are either bolstering or hampering adoption in particular regions and countries. Understanding these differences is crucial for leaders seeking to tailor their strategies effectively.

While inhibitors and accelerators were very similar across all groups, there was considerable variation in the perceived impact of these factors.

For example, while all regions pointed to challenges with the cost and availability of talent, respondents in Saudi Arabia felt especially impacted. And while all regions believe high market demand for generative Al will fuel adoption, the UK and Ireland stand out on this dimension.

Other regions are more nuanced. Executives in Benelux weighed inhibitors more heavily across the board while also voicing a more subdued optimism about the impact of potential accelerators.

And there are also standout findings. France is one of the only regions to see data privacy and its regulatory environment as an accelerator—a nod to the country's robust governance frameworks that are providing clear guardrails for businesses to work toward.

We will explore how these different dynamics manifest in the 14 regions and countries studied in a separate series of reports.

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Business readiness is another critical indicator of generative Al momentum.

To gauge how prepared leaders feel about transforming their goals for generative Al adoption into practice, we asked respondents to rank their organization's maturity on a scale of 1 to 4 (from low maturity to high) across five critical areas.

- Leadership commitment
- Strategy and approach
- Organizational agility
- Skills and talent
- Technology and infrastructure

The message from business leaders is evident: Leadership commitment is high, and strategies are robust, but the fundamental, operational and technological building blocks necessary to adopt the technology are lacking (see Figure 3).

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: 2,200 senior business leaders Source: Cognizant and Oxford Economics Figure 3

Let's dig into each of these five areas to understand where the optimism and pessimism stem from, and where the greatest maturity gains are needed to move the needle on meaningful adoption.

#1: Strong leadership commitment highlights Al's strategic importance

With 71% of respondents rating their leadership commitment in the highest two levels of maturity, it is clear that leaders are prioritizing generative AI adoption. Executives recognize that generative AI is crucial to business success, with 74% of respondents rating it as important or critically important. The urgency is palpable, with 70% believing their business is not moving fast enough with adoption.

Investment figures underscore this commitment: The average expenditure on generative AI this year is \$47.5 million, and even the median spend of \$12.5 million is a substantial outlay.

The fear of losing ground is also prevalent, with 82% fearing competitors will gain an edge if strategies unfold too slowly. This sentiment is reflected in sectors like retail, where companies such as Amazon have set high standards by using Al for inventory management, personalized recommendations, and cashierless stores. Leaders understand that a slow adoption rate could not only hinder competitiveness but also limit productivity and the quality of offerings.

#2: Strategies emphasize productivity over cost cutting

A majority of respondents (60%) rate their gen AI strategies as mature or highly mature. Driving this is a clear strategic vision for the role generative AI will play in their business.

In our study, the productivity gains of generative AI were a bigger strategic priority than using the technology to revamp business and operating models or drive disruptive innovation (see Figure 4). This aligns with a key promise of generative AI: enhancing employee efficiency and enabling more output.

Greater focus on productivity than innovation

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



Base: 2,200 senior business leaders Source: Cognizant and Oxford Economics Figure 4

Examples abound, such as Emirates NBD in the UAE, <u>which uses generative</u> <u>Al</u> to automate an array of tasks and support complex decision-making, and Energy Queensland in Australia, <u>which employs Al</u> to improve customer interactions.

What productivity means with generative AI, however, is different from the traditional cost cutting mindset associated with business automation—the notion of doing more with less. Instead, businesses seem intent on redirecting savings from increased efficiency into business growth.

This is evident in the metrics respondents are prioritizing when it comes to justifying generative AI use cases: 76% of respondents see generative AI as a way to create new revenue streams, and another 58% point to increasing revenue. Meanwhile, only 35% are focused on cost savings.

In essence, leaders recognize that generative AI is not merely a tool to reduce costs while maintaining the status quo. Instead, it represents a catalyst for business growth.

#3: Organizational agility remains a major challenge

Organizational agility is where confidence drops sharply, with just 36% rating this area as mature. These low ratings were based on respondents' assessment of their change management capabilities and the new processes needed to manage AI lifecycles and scale AI initiatives.

This stands in contrast to respondents' naming "operating model flexibility" as an accelerator to adoption. Perhaps this is because while it might be relatively easy to embed technology to automate repetitive processes (79% are doing this) and enhance decision-making (70% are doing this), that's not the case as use cases expand. To scale these initiatives, businesses will require both change management maturity and process agility. And yet, only 43% of businesses currently have formal policies and guidelines in place for Al deployment, and just 12% have established governance models that include ethics considerations.

Ultimately, integrating generative AI will require a fundamental rethink of existing processes to leverage these innovations. Few organizations currently feel prepared to undertake this challenge.

What productivity means with generative AI is different from the traditional cost-cutting mindset associated with business automation. Instead, businesses seem intent on redirecting savings from increased efficiency into business growth.

#4: Talent management shifts toward reskilling over reduction

Only 35% of respondents rate their skills and talent as mature, reflecting the challenges in building a workforce equipped for Al. A look at respondents' talent strategies reveals a mix of practical skill-building endeavors and some wishful thinking.

More than half (54%) are focusing on upskilling employees for roles that critically need AI capabilities, while 25% plan organization-wide training programs to instill foundational AI skills across the board.

Interestingly, only 2% of businesses anticipate layoffs due to Al-driven displacement, defying the narrative of mass job losses (see Figure 5). Instead, 44% prefer to reassign employees within the organization, and 32% are investing in tools and training to help workers transition into new roles. This focus on reskilling and internal mobility indicates a strategic shift toward valuing and redeveloping existing talent rather than resorting to workforce reductions.

Despite these internal training efforts, however, 38% of businesses still plan to address skills gaps through external hiring—a potentially challenging and costly prospect given the global shortage of skilled workers.

Businesses see many alternatives to layoffs for displaced workers

Q: How do you plan to handle employees displaced by generative AI?



Base: 2,200 senior business leaders Source: Cognizant and Oxford Economics Figure 5

#5: Turning tech debt into opportunity

Technology infrastructures ranked the lowest of the five factors in terms of maturity, with just 32% rating their technology as mature. These low ratings reflect respondents' concern that their business had not yet evolved their tech infrastructure and data to accommodate generative AI needs.

While 54% gave their data quality and cleanliness ratings of "excellent" or "good," respondents were much less confident in their organization's ability to access and secure data, with half of the respondents rating these areas at the lowest maturity levels. This gap illustrates that even if it's of high quality, data is useless if it's not accessible and secure for use in AI applications.

Respondents do, however, seem to embrace generative Al's potential for helping them evolve their technology stack—in effect, using this new technology to improve their existing technology. Nearly half (47%) of the respondents believe generative Al will positively impact their future technology investments, and nearly one-quarter (24%) expect it to improve their current technology stack.

As said earlier, the vast majority of respondents (93%) are already using generative AI to assist with writing and testing code. This use case is one of the most rapidly adopted, likely driven by a global shortage of developers and a great need to both improve or refactor legacy code and produce higher quality programs. For example, GitHub's Copilot not only speeds up the development process but also helps bridge the skills gap by enabling less experienced developers to produce high-quality code.



Strategic actions for navigating gen Al adoption

Strategic actions for navigating gen Al adoption

There is no doubt businesses globally are enthusiastic about pursuing generative Al initiatives. But we will soon be leaving the piloting and preparation stage and entering the era of confident adoption, which we believe will happen in the 2026-2030 timeframe

While the urgency is clear, there's ample time to understand the factors that will drive or constrain the success of generative AI strategies, shore up weaknesses and leverage strengths. Key takeaways from our research include:

Close the gap between leadership enthusiasm and organizational readiness. A key insight from our study is the strong leadership commitment to generative AI, demonstrated by significant investments and attention to strategic initiatives. Now it's time to take a close look at what's needed to turn that enthusiasm into tangible results.

To shore up technology infrastructures, businesses should invest in data management systems to improve data accessibility and implement robust security measures. Additionally, new processes will be needed to support new ways of work and help people evolve into new roles. Improving these areas will create a solid foundation for effective AI applications.

• Focus on growth over cost cutting. When work is done more quickly and accurately, it introduces opportunities to seek new revenue channels and improve products and services rather than only pursuing cost savings. After all, generative Al initiatives are complex and—in some cases—costly. As such, the main rationale for pursuing them needs to be business growth, not workforce reductions.

- Move fast, but don't break things.
 Respondents expressed concern they weren't moving fast enough with generative Al, but they also have low confidence in their organization's ability to adhere to gen Al guardrails when it comes to ethics and compliance. This is a delicate balance—but one that comes out strongly in favor of getting governance systems in place before accelerating execution of strategies.
- Value the talent you have by investing in skill development.

Most businesses will need to look outside their four walls to some degree for AI expertise. But for many roles, upskilling and reskilling will pay huge dividends. Given the premium pay levels that AI talent can demand, it will be essential to be strategic in where to place those bets and where to invest in the staff you've already got.

• Adapt to regional variances in Al adoption. Knowing which levers to pull—and how these differ in various countries or regions—will be the difference between Al momentum and stagnation. In our upcoming reports, we provide insights into 14 countries and regions, including the biggest challenges to overcome at the local level, as well as the main business use cases being pursued by industries.

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About the study

Cognizant partnered with Oxford Economics to design and conduct a survey of 2,200 C-suite and senior executives, including individuals at the C-suite and VP levels, from large corporations around the world. The focus was on those who play a significant role in shaping, contributing to or making final decisions on their organization's generative AI strategy. The survey was conducted in June 2024 via computer-assisted telephone interviewing (CATI).

Countries: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, India, Ireland, Japan, Luxembourg, New Zealand, Norway, Saudi Arabia, Singapore, Spain, Sweden, Switzerland, The Netherlands, United Arab Emirates, UK, US

Industries: Banking and financial services, communication/media/technology, energy and utilities, healthcare, insurance, life sciences, manufacturing, public sector, resources (mining and oil), retail, and transportation and logistics *The full list of regional factors we evaluated includes: the flexibility of the existing operating model, market demand for gen Al-enabled products and services, data readiness, quality of output from gen Al, availability of compute power, cost/availability of gen Al-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 Alrelated technologies, consumer perceptions and cost/availability of talent.

Learn more

Dive into the latest gen Al insights to uncover its transformative potential



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At Cognizant Research, we help leaders make sense of today's volatile socio-economic climate. We bring quality research and insights rooted in Cognizant's deep industry and technology expertise, helping leaders make the decisions that fuel their companies' success. Visit us at www.cognizant.com/us/en/insights.

Learn more about how we're working with generative AI and the people who use it to engineer modern businesses and improve everyday life.

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Cognizant (Nasdaq: CTSH) engineers modern businesses. We help our clients modernize technology, reimagine processes and transform experiences so they can stay ahead in our fast-changing world. Together, we're improving everyday life. See how at www.cognizant.com or @cognizant.

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