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Now decides next:
Insights from the leading
edge of generative AI adoption

Deloitte's State of Generative AI in the Enterprise
Quarter one report

January 2024

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Now decides next

The arrival of generative AI heralds disruption and opportunity across industries. Organizations are exploring how generative AI can be used to unlock business value, supercharge efficiency and productivity, and open the door to entirely new products, services and business models. As business leaders contend with this new technology and make decisions about the future of the enterprise with generative AI, it is helpful to keep one's finger on the pulse of adoption.

To that end, *The State of Generative AI in the Enterprise: Now decides next*, captures the sentiments of 2,835 business and technology leaders involved in piloting or implementing generative AI in their organizations. In this inaugural release of the quarterly report series, leaders indicated persistent excitement for using generative AI and many expect substantial transformative impacts in the short term. Yet, they also acknowledged uncertainty about generative AI's potential imp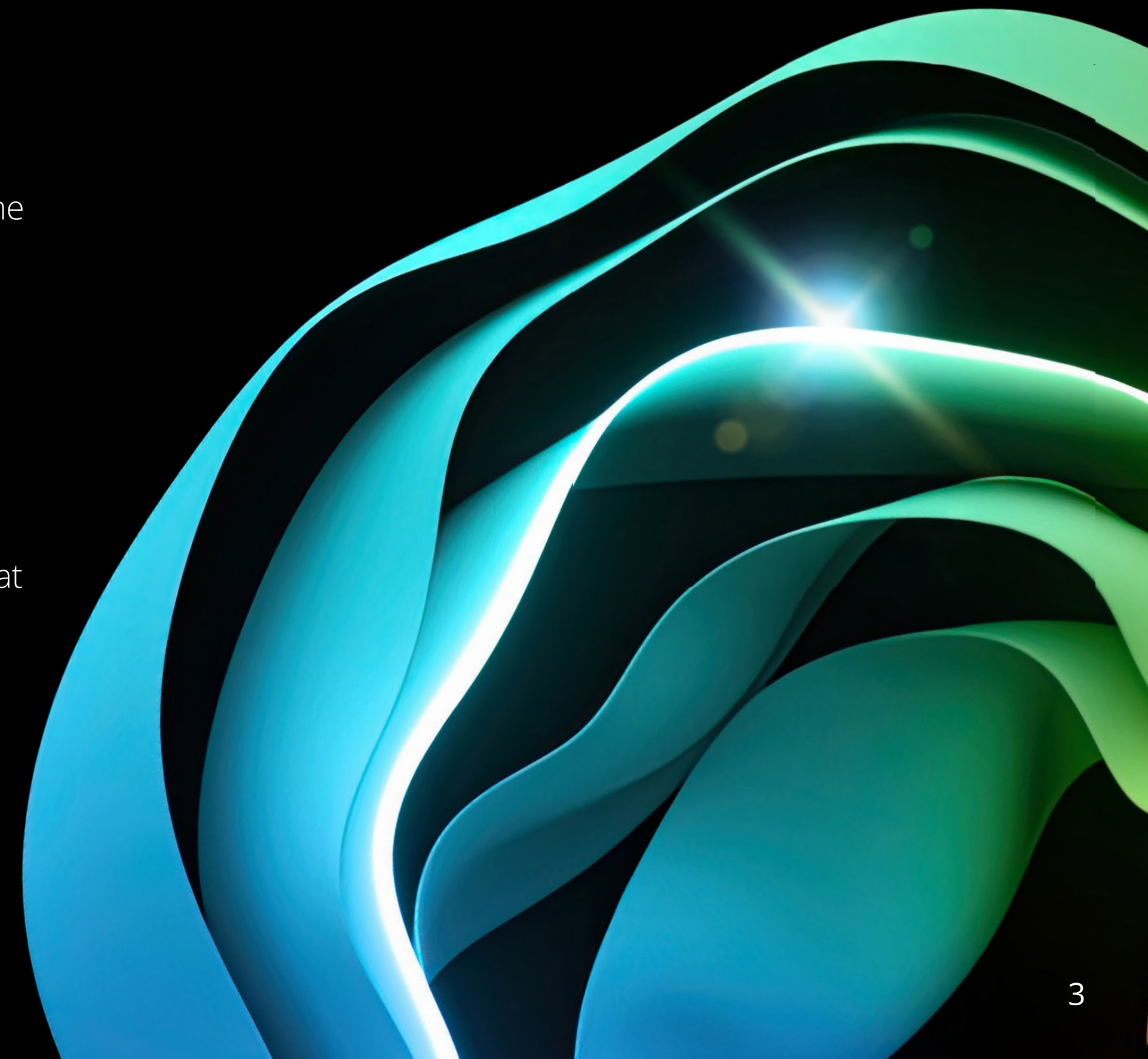lications on workforces and society as the technology is widely scaled, calling for greater investment in talent, governance and global collaboration.

From these wave one insights, we can gain a clearer picture of how leaders are using generative AI, challenges, and lessons learned thus far. This helps reveal some of the essential questions leaders should be asking now and actions they should be taking to prepare their enterprise for what comes next.

There is still much to discover with generative AI. As it matures and is deployed at scale for a litany of applications, new questions and challenges will become clearer. Our quarterly reports will be available to help you make sense of this fast-moving space, consider practical guidance based on what we have learned, and take a forward-looking view in your business future with generative AI.

Learn more about the series and sign up for updates at deloitte.com/us/state-of-generative-ai.

Deborshi Dutt, Beena Ammanath, Costi Perricos and Brenna Sniderman
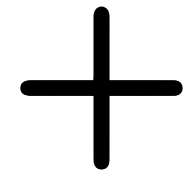
Now decides next: Insights from the leading edge of generative AI adoption

Will generative AI (gen AI) be the greatest, most impactful technology innovation in history? Will it completely transform how humans live and work? Or will it turn out to be just another *technology du jour* that promised revolutionary change but ultimately delivered only incremental improvement? Right now, we can't be certain.

What we do know is that many breakthrough technologies of the past have followed a common adoption pattern: initial awareness; excitement that led to hype; mild disappointment as hype met reality; and then explosive growth once the technology reached critical mass and proved its worth.

Generative AI seems to be following the same pattern, only much, much faster. ChatGPT was publicly released on November 30, 2022, largely as a technology demonstration. Two months later, it had already attracted an estimated 100 million active users— making it the fastest-growing consumer application in history.[1]

Since then, generative AI has continued to advance by leaps and bounds and many new tools and use cases have emerged—providing a powerful glimpse at the technology's vast potential to transform how people live and work.
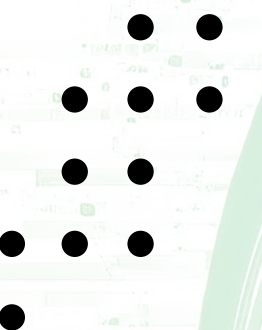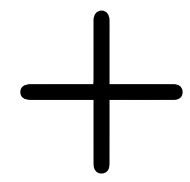
Insights from the leading edge (cont.)

During this frenzied period of generative AI advancement and adoption, leaders in business, technology and the public sector are under tremendous pressure to understand generative AI—and to figure out how to harness its capabilities most effectively (or at least avoid being disrupted). They also sense that *now decides next*; that their decisions and actions today will significantly affect how generative AI unfolds in the future, for better or worse.

It's been said that people tend to overestimate the effect of a technology in the short run and underestimate its effect in the long run. This phenomenon has occurred many times in the past and could very well happen again with generative AI. Note here that given generative AI's dizzying pace of change, the gap between the short run and long run might be measured in days, weeks or months—not years or decades.

To help make smart decisions, leaders need objective, timely information about current generative AI developments— and where things are headed. Which is why Deloitte is conducting this ongoing quarterly survey. Our goal is to take the pulse of generative AI adoption, offer a view of what's happening, track evolving attitudes and activities, and deliver practical, actionable insights that can help leaders like you make informed and confident decisions about AI, strategy, investment and deployment.

In this report, we examine our first quarterly survey findings in detail, supported by insights from Deloitte's AI-related work with organizations across every major industry and many geographic regions. We also offer a forward-looking view to help you decide what generative AI actions may make sense for your own organization and situation.

All statistics noted in this report and its graphics are derived from Deloitte's first quarterly survey, conducted October – December 2023; *The State of Generative AI in the Enterprise: Now decides next,* a report series. N (Total leader survey responses) = 2,835

Generative AI is an area of artificial intelligence and refers to AI that in response to a query can create text, images, video and other assets. Generative AI systems can interact with humans and are often built using large language models (LLMs). Also referred to as "gen AI."

About The State of Generative AI in the Enterprise

To help leaders in business, technology and the public sector track the rapid pace of generative AI change and adoption, Deloitte is conducting a series of quarterly surveys. The series is based on Deloitte's State of AI in the Enterprise reports, which have been released annually five years running. The wave one survey was fielded to more than 2,800 director- to C-suite-level respondents across six industries and 16 countries between October and December 2023. Industries included: Consumer; Energy, Resources & Industrials; Financial Services; Life Sciences & Health Care; Technology, Media & Telecom; and Government & Public Services. Learn more at deloitte.com/us/state-of-generative-ai.

Now: Key findings

This first pulse of our generative AI quarterly surveys was completed in December 2023, and included more than 2,800 AI-savvy business and technology leaders directly involved in piloting or implementing gen AI at major organizations around the world. Here's what they had to say about sentiment, use cases, challenges and more.
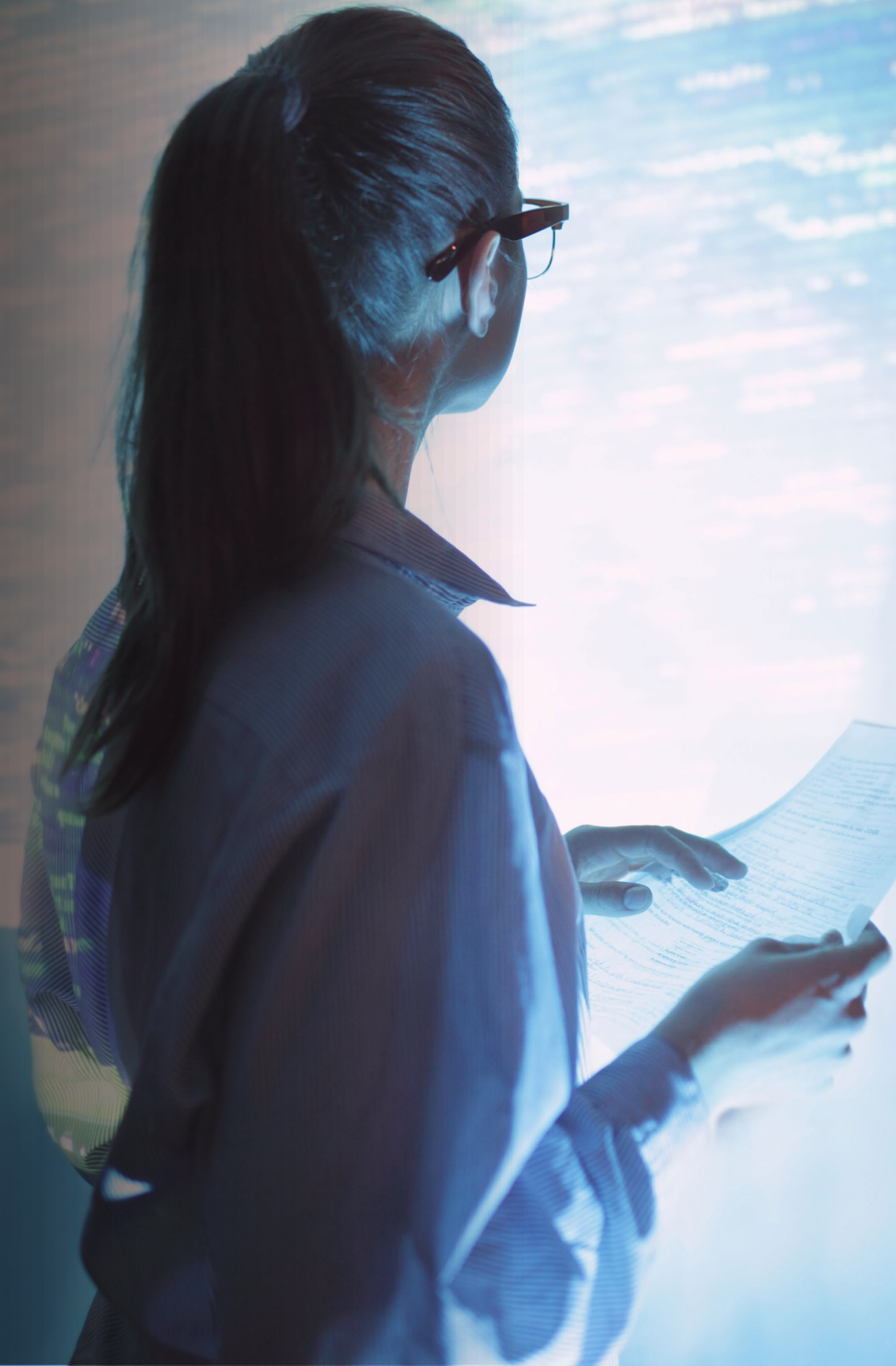
1 Excitement about generative AI remains high, and transformative impacts are expected in the next three years.

Nearly two-thirds (62%) of the business and technology leaders surveyed reported excitement as a top sentiment with regard to generative AI; however, that excitement was tinged with uncertainty (30%) (figure 1). The vast majority of respondents (79%) said they expect generative AI to drive substantial transformation within their organization and industry over the next three years—with nearly a third expecting substantial transformation to occur now (14%) or in less than one year (17%) (figure 2).

The survey results suggest that many AI-fueled organizations are on the verge of scaling up their efforts and embracing generative AI in a more substantial way. This aligns with what we're seeing in the marketplace, where organizations around the world are racing to move from experimentation and proofs-of-concept to larger-scale deployments across a variety of use cases and data types—pursuing both speed and value capture while managing potential downside risks and societal impacts.

In future surveys, we will be closely monitoring progress in this area—particularly with regard to organizations' expertise, capabilities, tangible outcomes, and responses to rapidly emerging advances in generative AI technology.

31% of the leaders we surveyed expect substantial transformation in less than one year; 48% expect it in one to three years.

Generative AI elicits a range of strong emotions

- 62% Excitement
- Fascination 46%
- 30% Uncertaintly
- Trust
- 17%
- 16% Surprise
- Anxiety 10%
- 8% Confusion
- Fear 6%
- 4% Exhaustion
- Anger 1%
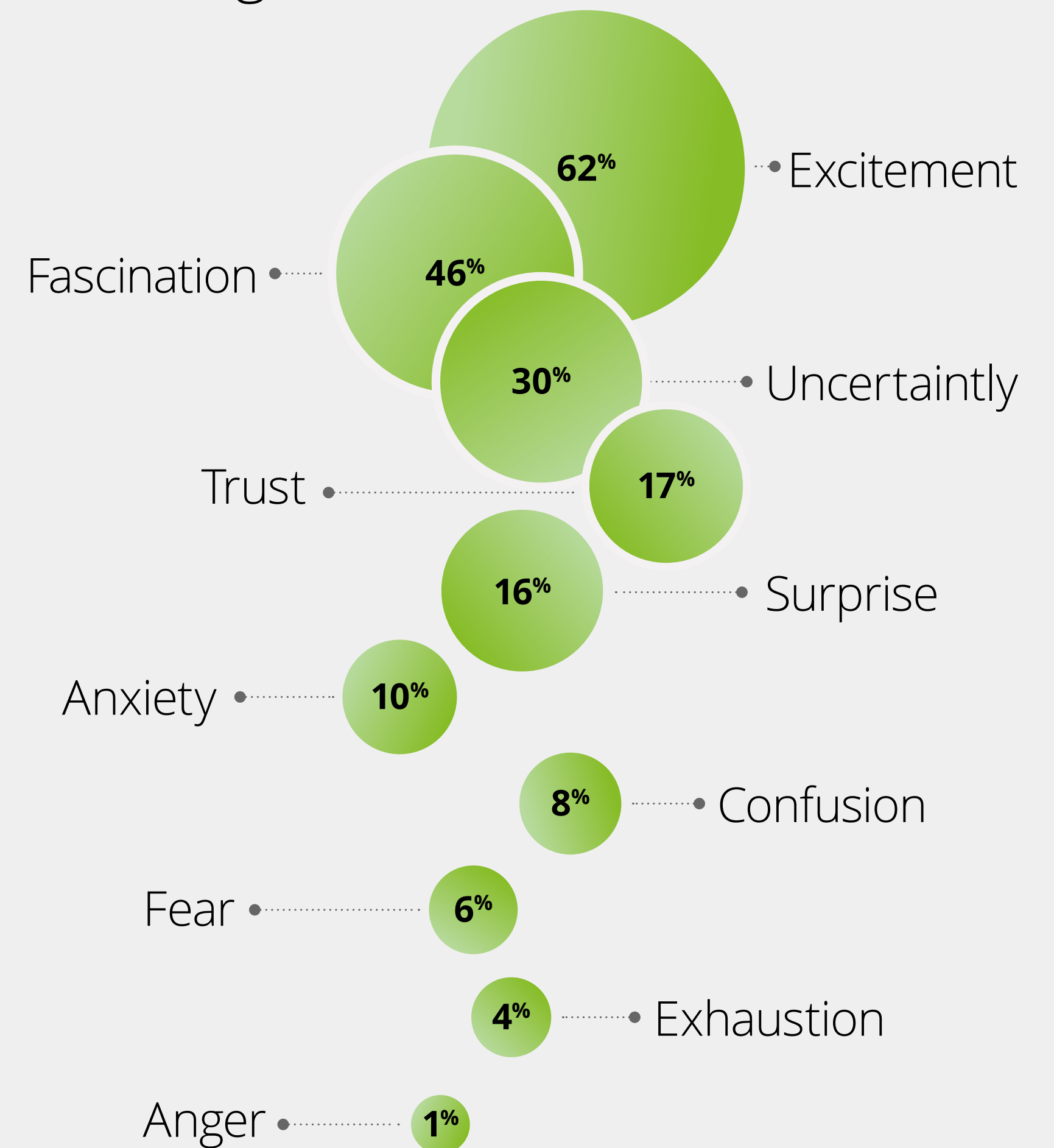
Figure 1

Q: Thinking about generative AI, what emotions do you feel most about the technology?

(Oct./Dec. 2023) N (Total) = 2,835

When is generative AI likely to transform your organization?

1%
Never

14%
Now

20%
Beyond
three years

17%
Less than
one year

48%
In one to
three years
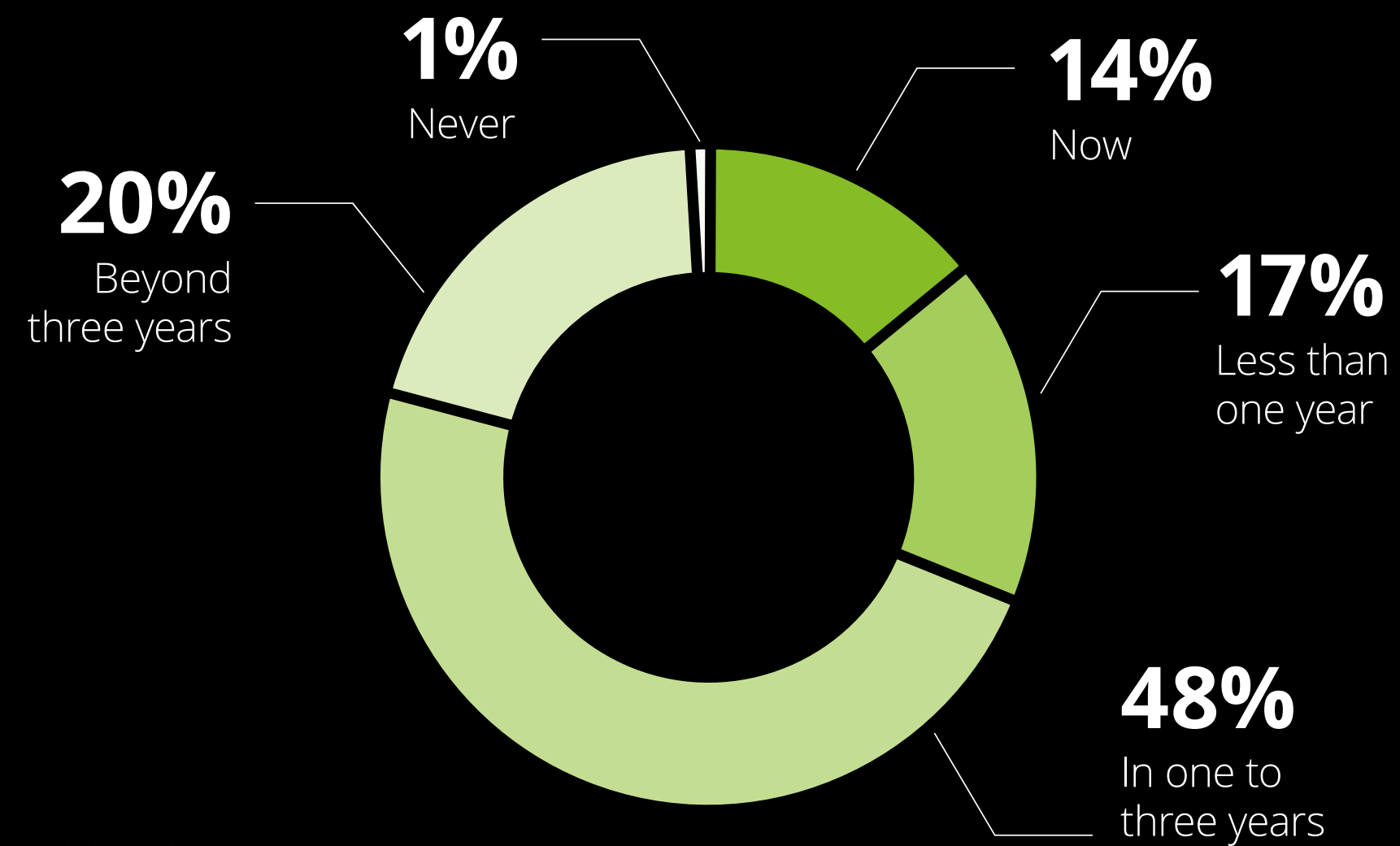
Figure 2

Q: When is generative AI likely to substantially transform your organization and your industry, if at all?
(Oct./Dec. 2023) N (Total) = 2,835

2

Many leaders are confident about their organization's generative AI expertise.

A large percentage of our survey respondents (44%) said they believe their organizations currently have high (35%) or very high (9%) levels of expertise with generative AI. This result is somewhat surprising given how rapidly generative AI is evolving (figure 3).

But within the specific context of our survey, high levels of confidence seem entirely reasonable since we deliberately chose experienced leaders with direct involvement in AI initiatives at large organizations already piloting or implementing generative AI solutions. However, given how rapidly the field is unfolding, it may be worth questioning the extent to which *any* leader should feel highly confident in their organization's expertise and preparedness. In fact, even today's foremost AI experts who are personally developing generative AI technologies at times seem genuinely surprised by their own creations' capabilities.[2]

Do some leaders consider their organizations to have high expertise based largely on the knowledge and experience gained from small-scale pilots with a small number of generative AI tools? If so, leaders and organizations might actually become *less* confident over time as they gain experience with the larger challenges of deploying generative AI at scale. In other words, the more they know, the more they might realize how much they don't know. This is a trend we've seen time and again with other technological advancements, and one we'll be watching closely in our future surveys.

44% rate their organization's generative AI expertise as high or very high, but is such expertise even possible given the pace of the technology's advancement?

Self-assessed expertise with generative AI runs high

1%
No expertise

10%
Little expertise

9%
Very high expertise

35%
High expertise
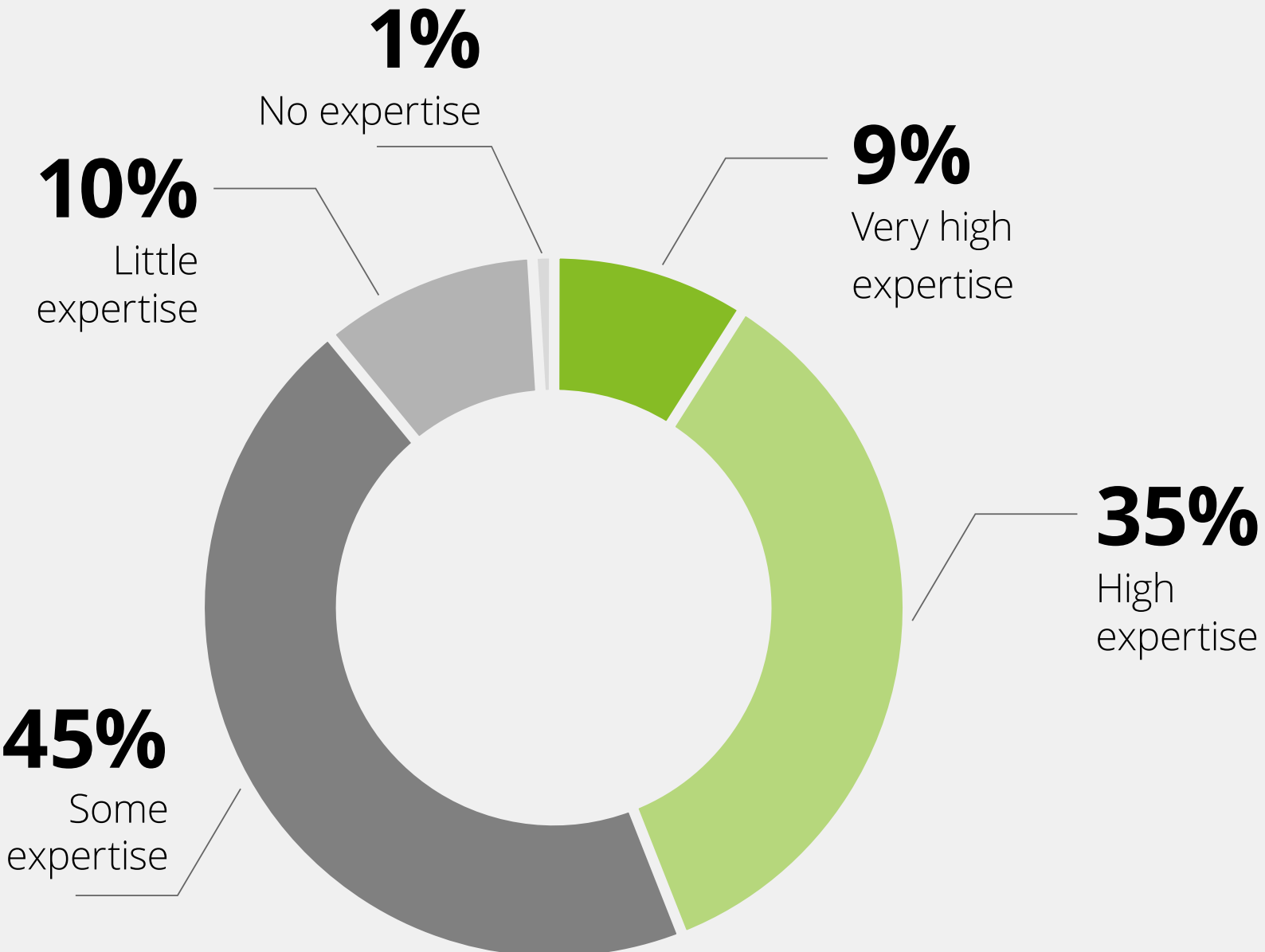
45%
Some expertise

Figure 3

Q: How would you assess your organization's current level of overall expertise regarding generative AI?

(Oct./Dec. 2023) N (Total) = 2,835

3 Organizations that report very high expertise in generative AI tend to feel more positive about it—but also more pressured and threatened.

Relative to other respondents, leaders who rated their organization's overall generative AI expertise as "very high" tended to feel much more positive about the technology; however, they also feel more pressure to adopt it—*and* see it as more of a threat to their business and operating models (figure 4).

Analysis showed this group using more modalities, deploying generative AI across more enterprise functions, and pursuing more use cases. As you can see in the figure 4, leaders who reported very high levels of expertise were also more likely to report higher levels of trust and lower levels of uncertainty. They also tended to show broader interest in generative AI and expected faster transformation for their organizations.

At the same time, these respondents' greater understanding of generative AI appears to be shaping their perspective on potential impacts—positive and negative. Many reported they viewed widespread adoption of the technology as a threat to how their organizations operate and conduct business, amplifying the pressure and urgency they felt to adopt generative AI and scale it.

> **Leaders of organizations** with very high expertise are more likely to view generative AI as a threat to their business and operating models.

Expertise with generative AI drives attitudes toward adoption

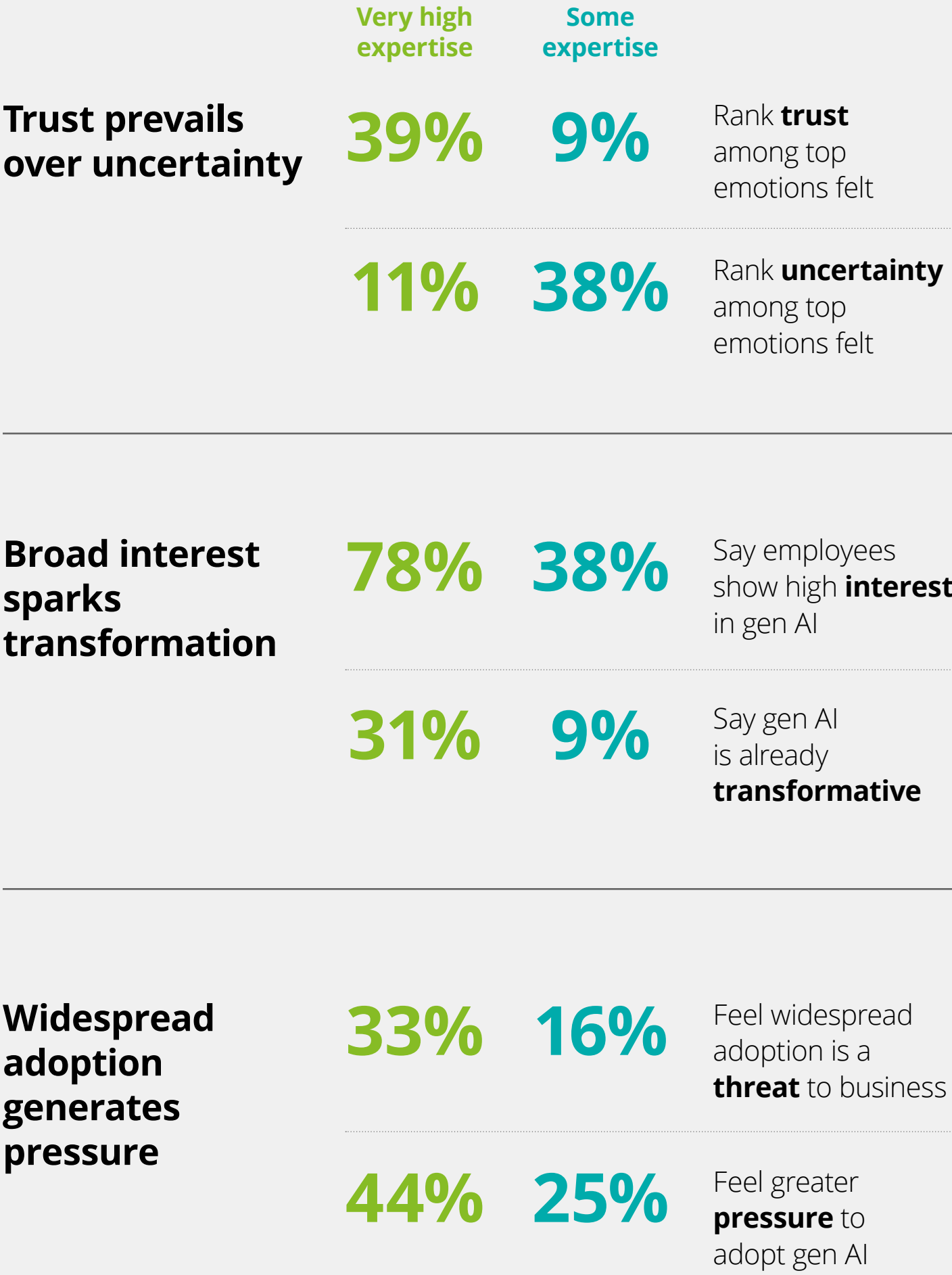|	Very high expertise	Some expertise	
Trust prevails over uncertainty	39%	9%	Rank **trust** among top emotions felt
	11%	38%	Rank **uncertainty** among top emotions felt
Broad interest sparks transformation	78%	38%	Say employees show high **interest** in gen AI
	31%	9%	Say gen AI is already **transformative**
Widespread adoption generates pressure	33%	16%	Feel widespread adoption is a **threat** to business
	44%	25%	Feel greater **pressure** to adopt gen AI

Figure 4

(Oct./Dec. 2023) N (Total) = 2,835, N (Very high) = 267; N (Some) = 1,273

10

4

Current generative AI efforts remain more focused on efficiency, productivity and cost reduction than on innovation and growth.

The majority of organizations surveyed are currently targeting *tactical* benefits such as improving efficiency / productivity (56%) and/or reducing costs (35%). Also, 91% said they expect generative AI to improve their organization's productivity, and 27% expect productivity to increase significantly. A smaller percentage of organizations reported targeting *strategic* benefits such as innovation and growth (29%) (figure 5).

This is consistent with past technology adoption patterns. Initially, most organizations logically focus on incrementally improving their existing processes and capabilities—capturing value from low-hanging fruit while building knowledge, experience and confidence with the new technology. Later, they expand or shift their focus to improvements that are more innovative, strategic and transformational—using the new technology to drive growth and competitive differentiation and advantage through capabilities that simply weren't possible before.

Surveyed leaders that cited higher levels of AI expertise show earlier signs of moving up this curve. They are more focused on uncovering new ideas and insights (23% vs. 19% for the overall respondent pool), with less emphasis on efficiency and productivity (44% vs. 61% for the overall respondent pool) and cost reduction (26% vs. 38% for the overall respondent pool)—although those tactical benefits continue to be

Key benefits organizations hope to achieve with generative AI

Improve efficiency and productivity • • • • • **56%**

35% • • • • Reduce costs

Improve existing products and services • **29%**

29% • • • • Encourage innovation and growth

Shift workers from lower to higher value tasks • **26%**

26% • • • • Increase speed and/or ease of developing new systems / software

Increase revenue • **25%**

23% • • • • Enhance relationships with clients / customers

Uncover new ideas and insights • **19%**

18% • • • • Detect fraud and manage risk

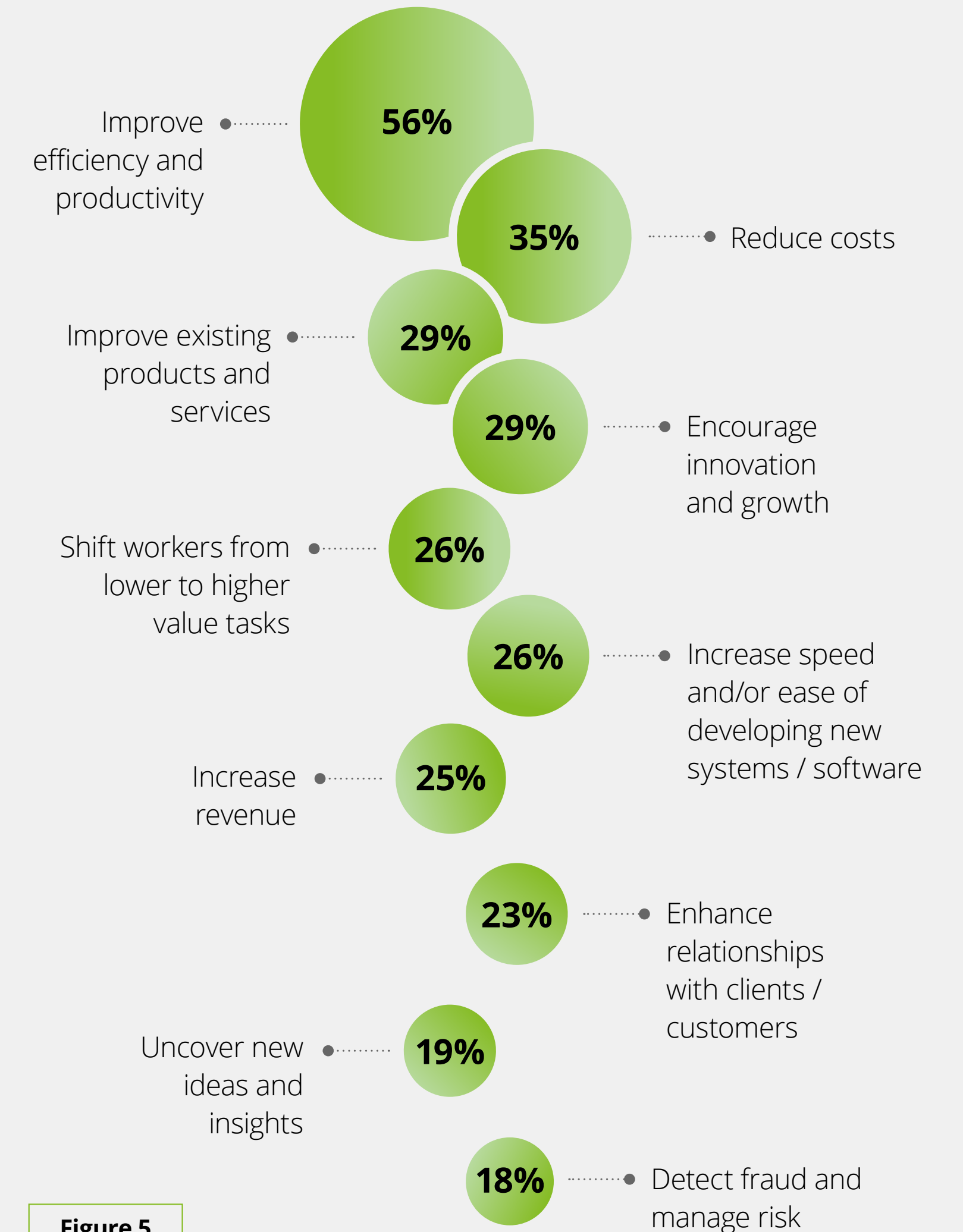<div style="border:1px solid green; display:inline-block; padding:4px;">**Figure 5**</div>

Q: What are the key benefits you hope to achieve through your generative AI efforts?

(Oct./Dec. 2023) N (Total) = 2,835

their bigger focus. In addition, nearly three-quarters of organizations that cited very high generative AI expertise had already begun integrating the technology into their product development and R&D activities, which are key drivers of innovation and growth.

As more organizations gain expertise and experience with generative AI, will they reinvest their dividends from improving efficiency and productivity toward pursuing more strategic benefits such as innovation and growth? Or will they use those dividends in other ways? This is another area we'll be monitoring closely in future pulse surveys.

Certainly, productivity and efficiency can be transformational, especially given the massive scale generative AI has the potential to enable. However, the greatest value and strategic differentiation will likely come from using the technology to innovate. First, by helping to generate new products, services and capabilities that wouldn't be possible otherwise. And, second, by enabling new business models and ways of working across an enterprise.

In addition, organizations that cited very high generative AI expertise were already taking a much more comprehensive approach than average, with significantly higher adoption levels across a broad range of functional areas. In specific areas such as HR, and legal, risk and compliance, those organizations' generative AI adoption rates were nearly three times higher than for the total respondent pool (figure 6).

91% of all organizations expect their productivity to increase due to generative AI.

Level of generative AI adoption

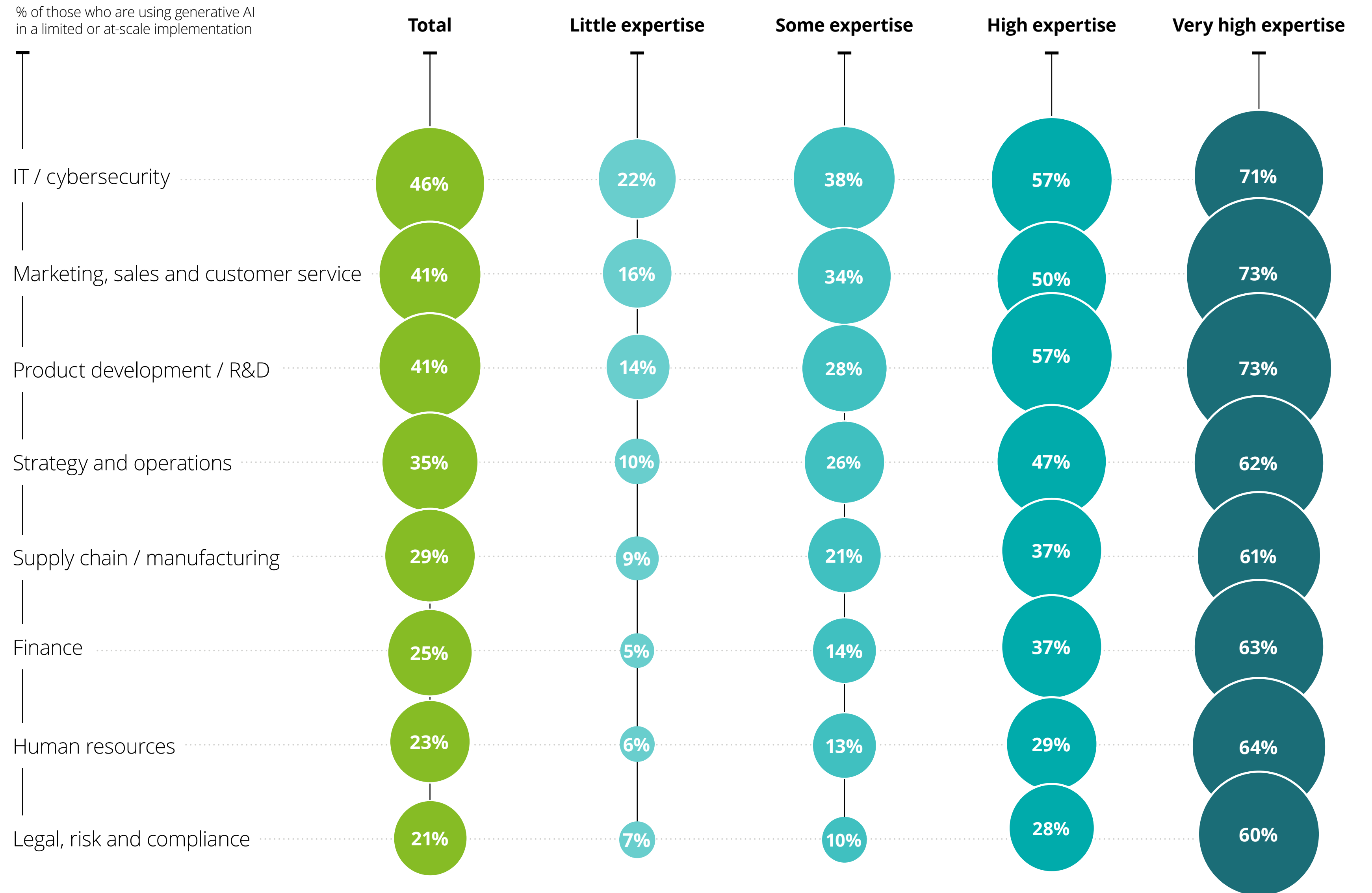% of those who are using generative AI in a limited or at-scale implementation

	Total	Little expertise	Some expertise	High expertise	Very high expertise
IT / cybersecurity	46%	22%	38%	57%	71%
Marketing, sales and customer service	41%	16%	34%	50%	73%
Product development / R&D	41%	14%	28%	57%	73%
Strategy and operations	35%	10%	26%	47%	62%
Supply chain / manufacturing	29%	9%	21%	37%	61%
Finance	25%	5%	14%	37%	63%
Human resources	23%	6%	13%	29%	64%
Legal, risk and compliance	21%	7%	10%	28%	60%

Generative AI: Have we seen this movie before?

The term "unprecedented" is often thrown around when talking about business and technology, to the point of being cliché. However, in describing the pace of generative AI's emergence and advancement—and its massive potential impact on business (and humanity as a whole)—unprecedented could be an understatement.

Generative AI is already widely available to the public and has a running start toward critical mass. Also, similar to smartphones, it's easy for an average person to use without much training—and can help with activities they already engage in every day—so the barriers to adoption are low. What's more, generative AI has the strong potential to assist with its own future development, which could trigger a cycle of exponential improvement at exponential speed.

Generative AI's speed factor may give organizations less time to ruminate or dabble with small-scale pilots—while reducing the margin for error—*and* increasing the consequences of inaction. It also creates opportunities to generate extraordinary business value very quickly.

Despite generative AI 's greatly accelerated pace, understanding typical adoption patterns based on previous breakthrough technologies can provide valuable lessons that leaders can use to help them understand and fully capitalize on the technology's rapid advancement.

As in the past, organizations' initial efforts will likely center around efficiency, productivity, cost savings and other incremental improvements. This is expected to help the workforce get accustomed to using generative AI, and will show people how it can help make their jobs easier. Also, early wins will likely help produce cost savings and momentum that then can be channeled into higher value opportunities that are more strategic and differentiated in nature, such as enabling new products, services, business models and ways of working that simply weren't possible before generative AI.

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5

Most organizations are primarily relying on off-the-shelf generative AI solutions.

In line with their current emphasis on tactical benefits from generative AI, the vast majority of respondents were currently relying on off-the-shelf solutions. These included productivity applications with integrated generative AI (71%); enterprise platforms with integrated generative AI (61%); standard generative AI applications (68%); and publicly available large language models (LLMs) (56%), such as ChatGPT.

Relatively few reported using more narrowly focused and differentiated generative AI solutions, such as industry-specific software applications (23%), private LLMs (32%), and/or open-source LLMs (customized to their business) (25%).

Reliance on standard, off-the-shelf solutions is consistent with the current early phase of generative AI adoption, which is primarily focused on improving the efficiency and productivity of existing activities. However, as use cases for generative AI become more specialized, differentiated and strategic, the associated development approaches and technology infrastructure will likely follow suit.

When will we see complex, high-value use cases that are truly differentiated and tailored to the specialized needs of specific companies, functions and industries? How will organizations combine internal and external resources to create customized generative AI tools that enable such strategic differentiation? In particular, will we see off-the-shelf technology offerings be supplemented by private or hybrid public/private development approaches and technology infrastructures capable of delivering and supporting those differentiated solutions?

Where off-the-shelf generative AI is used most

71% Productivity applications

68% Standard applications

61% Enterprise platforms

56% Public LLMs

6 Talent, governance and risk are critical areas where generative AI preparedness is lacking.

In this initial quarterly survey, 41% of leaders reported their organizations were only slightly or not at all prepared to address talent concerns related to generative AI adoption, while 22% considered their organizations highly or very highly prepared. Similarly, 41% of leaders reported their organizations were only slightly or not at all prepared to address governance and risk concerns related to generative AI adoption, while 25% considered their organizations highly or very highly prepared (figure 7).

Larger percentages of leaders reported high to very high levels of preparedness in technology infrastructure (40%) and strategy (34%); however, the survey results show there is still significant room for improvement.

Generative AI barriers related to risk and governance

When it comes to risk and governance, generative AI is definitely not "just another technology." The fundamental challenge is how to capitalize on artificial intelligence's power without losing control of it. After all, the capability people seem to find most enthralling about generative AI is its ability to so convincingly simulate human thinking and behavior. Of course, human thinking and behavior aren't always perfect, predictable or socially acceptable—and the same is true for the technology, itself.

Preparedness for generative AI

Respondents claimed the highest levels of **preparation in technology and strategy**, while feeling far less prepared in risk and talent.
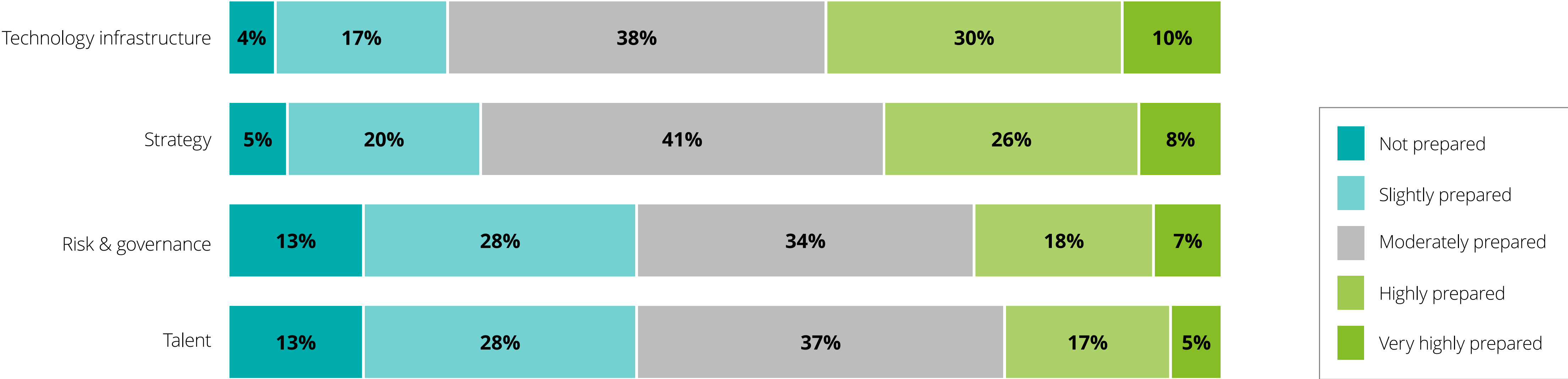

	Not prepared	Slightly prepared	Moderately prepared	Highly prepared	Very highly prepared
Technology infrastructure	4%	17%	38%	30%	10%
Strategy	5%	20%	41%	26%	8%
Risk & governance	13%	28%	34%	18%	7%
Talent	13%	28%	37%	17%	5%

Figure 7

Q: Consider the following areas. For each, rate your organization's level of preparedness with respect to broadly adopting generative AI tools / applications?

(Oct./Dec. 2023) N (Total) = 2,835

Now: Key findings

Specific generative AI risks and concerns include inaccurate results and information (i.e., "hallucinations"); legal risks such as plagiarism, copyright infringement, and liability for errors; privacy and data ownership challenges; lack of transparency, explainability and accountability; and systemic bias. The latter exemplifies another category of risk in which AI amplifies and exacerbates a problem that already exists, such as propagating and systematizing existing social biases, facilitating and accelerating the spread of misinformation, helping criminals commit crimes, or fanning the flames of political divisiveness.

According to the business and technology leaders we surveyed during fourth quarter 2023, the biggest concerns related to governance were: lack of confidence in results (36%), intellectual property issues (35%), misuse of client or customer data (34%), ability to comply with regulations (33%), and lack of explainability / transparency (31%).

Some of the surveyed organizations were already actively managing generative AI implementation risks through actions such as monitoring regulatory requirements and ensuring compliance (47%), establishing a governance framework for generative AI (46%), and conducting internal audits and testing on generative AI tools and applications (42%) (figure 8). However, such organizations are in the minority and their actions barely scratch the surface of the challenge. This is especially true given that regulatory requirements typically lag behind the pace of technology innovation—although a US presidential executive order and the European Union's ambitious Artificial Intelligence Act are clear signs government leaders in many parts of the world are taking the issue of AI risk very seriously.

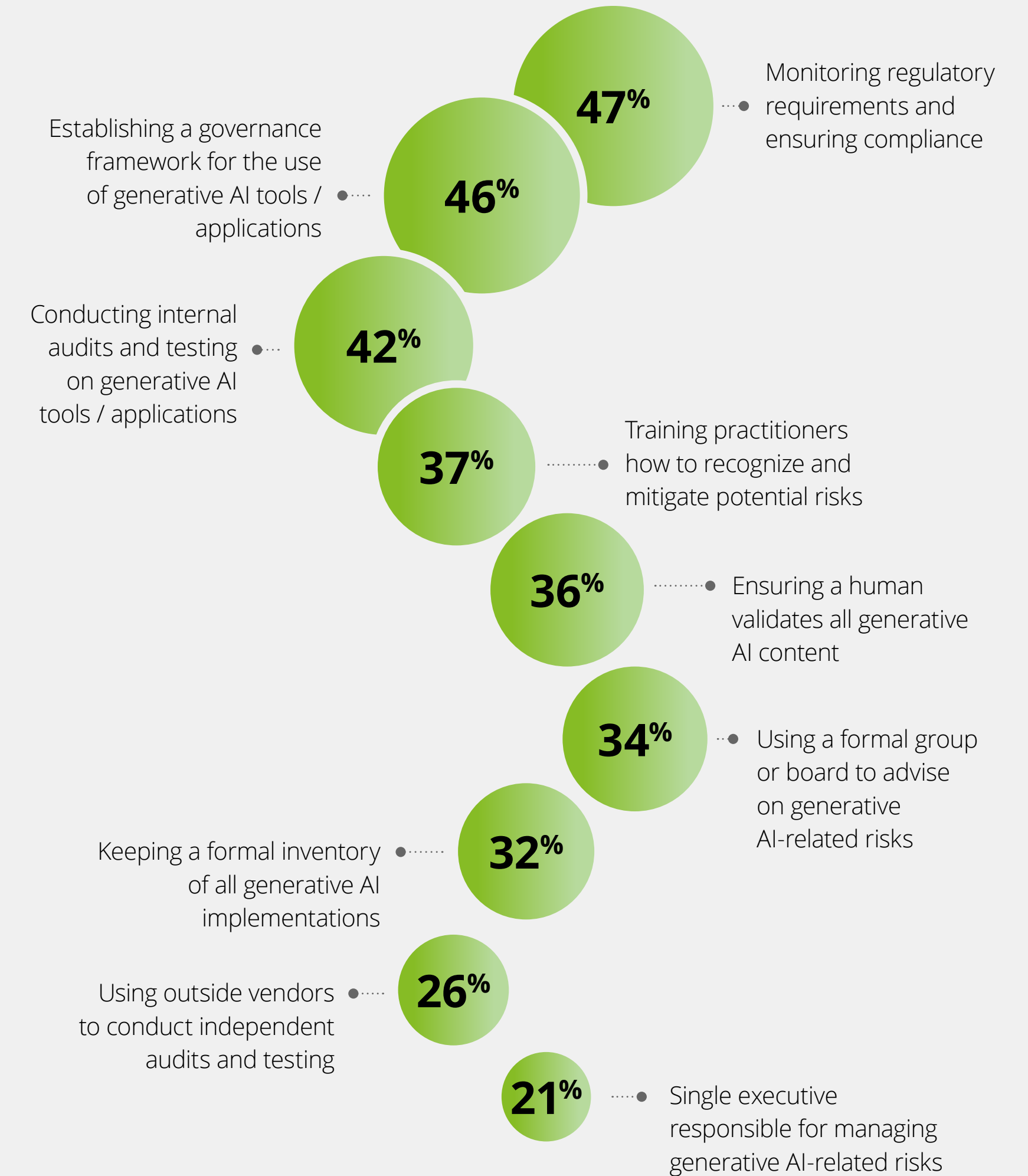## Managing generative AI implementation risk

- 47% Monitoring regulatory requirements and ensuring compliance
- 46% Establishing a governance framework for the use of generative AI tools / applications
- 42% Conducting internal audits and testing on generative AI tools / applications
- 37% Training practitioners how to recognize and mitigate potential risks
- 36% Ensuring a human validates all generative AI content
- 34% Using a formal group or board to advise on generative AI-related risks
- 32% Keeping a formal inventory of all generative AI implementations
- 26% Using outside vendors to conduct independent audits and testing
- 21% Single executive responsible for managing generative AI-related risks

Figure 8

Q: What is your organization currently doing to actively manage the risks around your generative AI implementations?

(Oct./Dec. 2023) N (Total) = 2,835

Now: Key findings

Generative AI barriers related to talent and workforce

Generative AI has the potential to supplement human workers across a vast array of activities traditionally thought of as uniquely human. As such, its impact on talent and workforce strategies could be immense. How will it affect organizations and their workers in the short and long runs? Which types of skills will be most affected, and when?

The vast majority of leaders we surveyed (72%) said they expect generative AI to drive changes in their talent strategies sometime within the next two years: now (17%), within 1 year (24%), or in 1-2 years (31%) (figure 9).

However, less than half (47%) reported that they are sufficiently educating their employees on the capabilities, benefits and value of generative AI—survey respondents also cited a lack of technical talent and skills as the biggest barriers to adoption.

Generative AI is impacting talent strategies *now*

2%
Never

10%
No formal time frame

17%
Now

24%
Within 1 year

16%
2+ years

31%
1-2 years
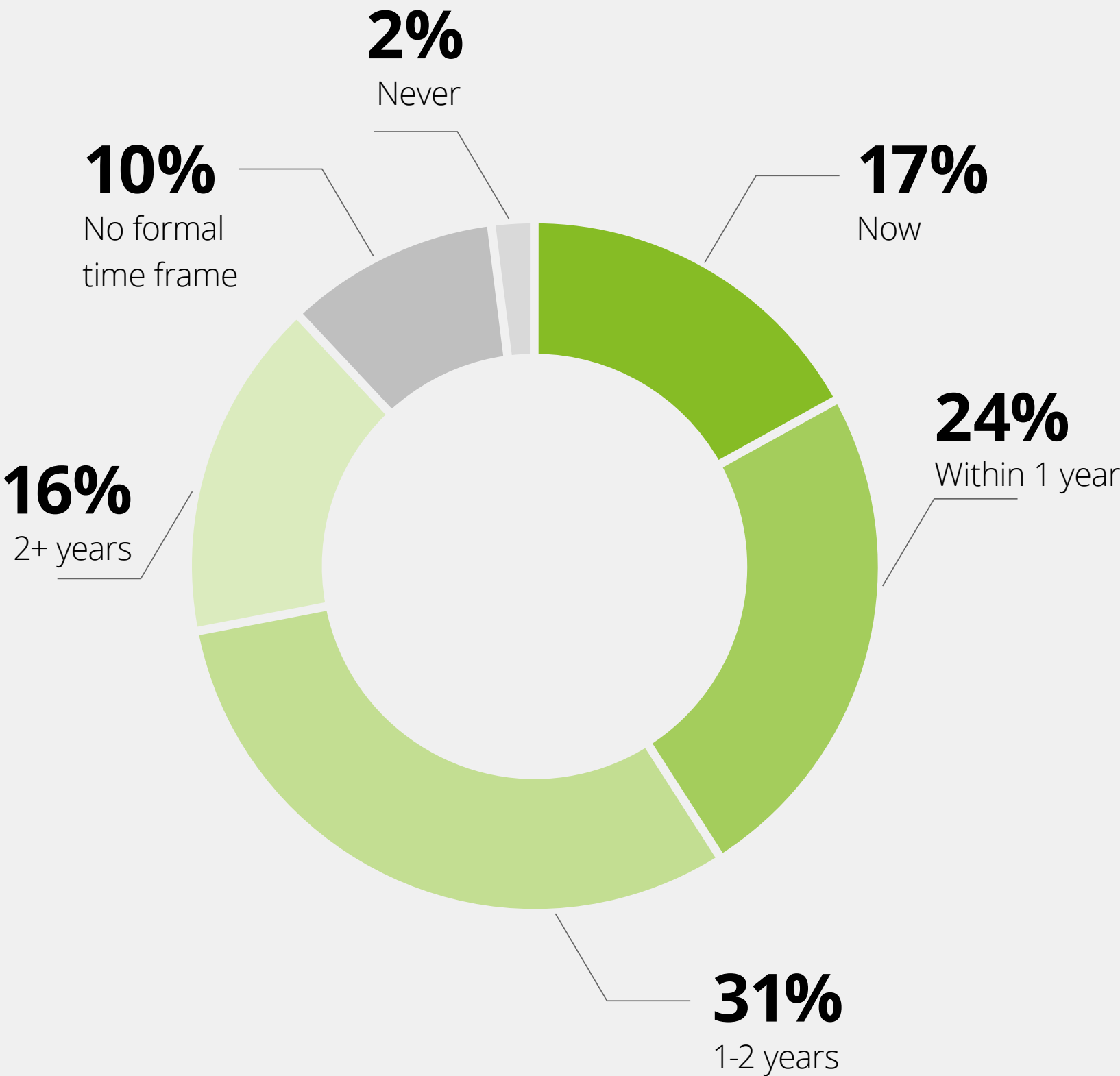
Figure 9

Q: When do you expect to make changes to your talent strategies because of generative AI?

(Oct./Dec. 2023) N (Total) = 2,835

Against this backdrop, some respondents reported making a high or very high effort to: recruit and hire technical talent to drive their generative AI initiatives (42%), educate the workforce about generative AI (40%), and reskill workers impacted by generative AI (36%). Those numbers are much higher for leaders who viewed their organization's generative AI expertise as very high (74%, 74% and 73%, respectively) (figure 10).

It should be noted, however, that these reported workforce-related efforts might be limited in scope. Deloitte's experience suggests that most organizations have yet to substantially address the talent and workforce challenges likely to arise from large-scale generative AI adoption. A likely reason for this is that many leaders don't yet know what generative AI's talent impacts will be, particularly with regard to which skills and roles will be needed most.

Preparing workforces for generative AI: Respondents making a high or very high effort in the following areas.

Legend:
- All respondents
- Little expertise
- Some expertise
- High expertise
- Very high expertise

Recruiting and hiring technical talent to drive our generative AI initiatives
42% | 16% | 30% | 55% | 74%

Educating our broader workforce to raise overall generative AI fluency
40% | 14% | 27% | 55% | 74%

Reskilling workers because of the impact of generative AI to their roles
36% | 10% | 24% | 50% | 73%
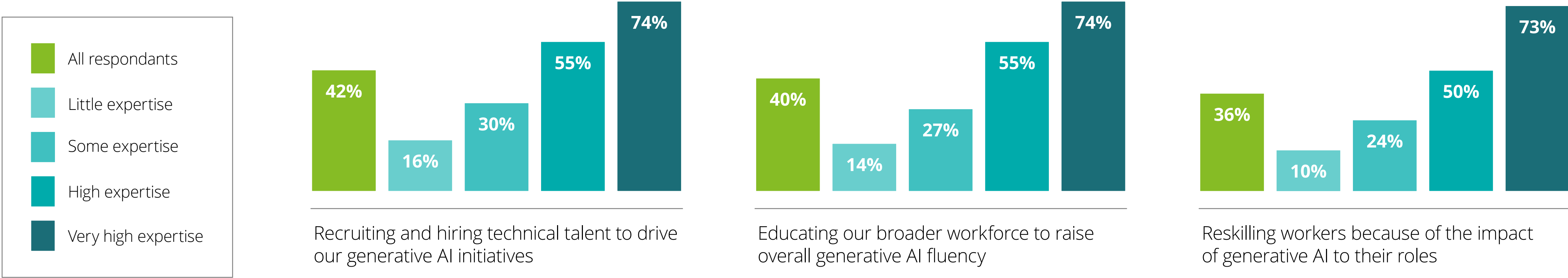
Figure 10

Q: What level of effort is your organization taking regarding the following workforce-related areas?

(Oct./Dec. 2023) N (Total) = 2,835

"Generating confidence in workers' abilities to collaborate with generative AI, now, could elevate creativity and job satisfaction, next."

7 Leaders see significant societal impacts on the horizon.

Although the leaders we surveyed were generally excited and enthusiastic about generative AI's potential business benefits, they were less optimistic about its broader societal impacts. Specifically, 52% of respondents said they expected widespread use of generative AI to centralize power in the global economy, while 30% expected it to more evenly distribute global power. Similarly, 51% expected generative AI to increase economic inequality, while 22% expected it to reduce inequality (figure 11).

What's more, 49% of respondents believe the rise of generative AI tools / applications will erode the overall level of trust in national and global institutions.

Is this pessimism or realism? Our survey results appear to reflect the broader moral and ethical debates about artificial intelligence that are occurring in every corner of society—even in the boardrooms of the technology companies driving AI development, where AI's commercial value is being weighed against its potential value to serve humanity and AI's potential benefits are being weighed against its potential risks.

The challenges that generative AI poses in corporate governance and risk parallel those in societal governance and risk. In both domains, the technology's potential benefits and potential harms are high. National and supranational organizations and governments will likely need to walk the tightrope of helping to ensure that generative AI benefits are broadly and fairly distributed, without overly hindering innovation or providing an unfair advantage to countries with different rules.

51% expect generative AI to increase economic inequality.

Expected societal impacts of generative AI

Distribution of economic power

5%	25%	18%	42%	10%

30%
distribute

52%
centralize

Levels of economic inequality

3%	19%	27%	41%	10%

22%
decrease inequality

51%
increase inequality

Figure 11

Q: How will widespread use of generative AI shift the overall distribution of power in the global economy?
Q: How will widespread use of generative AI tools / applications impact global levels of economic inequality?

(Oct./Dec. 2023) N (Total) = 2,835

8

Leaders are looking for more regulation and collaboration globally.

In a break from traditional business norms, the unique risks associated with generative AI are prompting many business leaders to call for increased government regulation and increased global collaboration around AI technologies.

Among the leaders in our survey, 78% said that more governmental regulation of AI is needed, while 72% said there is currently not enough global collaboration to ensure the responsible development of AI-powered systems (figure 12).

These results seem to reflect an understanding that generative AI could be too powerful, far-reaching and impactful for individual organizations to regulate themselves. This isn't meant to suggest that individual organizations be absolved from behaving responsibly; however, relying on them to be the primary gatekeepers for containing AI risk could potentially be dangerous.

Could generative AI be too powerful and far-reaching for individual organizations to regulate themselves?

Support for increased regulation and global collaboration
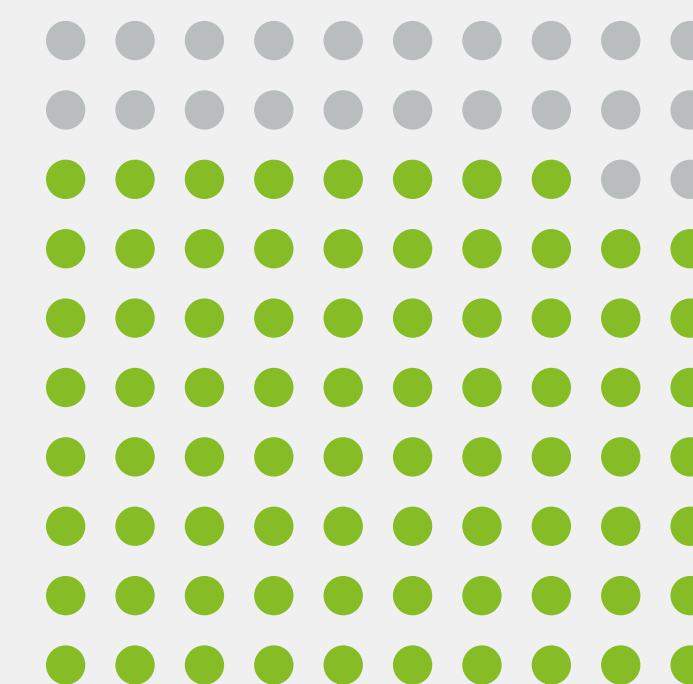
78% more regulation

Agree the widespread proliferation of generative AI tools / applications will require **more regulation of AI** by governments
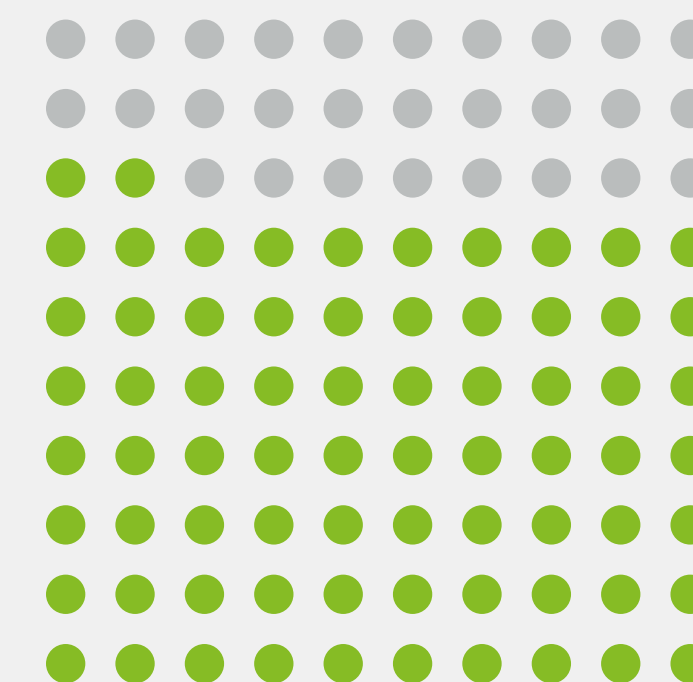
72% more collaboration

Agree there is not enough **global collaboration** with respect to ensuring the responsible development of all AI-powered systems

(Oct./Dec. 2023) N (Total) = 2,835

Next: Looking ahead

As the first in an ongoing series of quarterly surveys to track the pulse of generative AI, this initial effort was designed to establish a strong baseline to build on. Moving forward, our objective is to understand how generative AI adoption is unfolding—and to anticipate where it's headed. Throughout this report we posed a number of strategic questions to help organizations think critically about how the actions they take *now* will best set the stage for what comes *next*. We don't have definitive answers to every question yet, nor would we claim to. However, we can offer some questions to spark thinking and some practical guidance based on what we've learned so far. We also note that given the pace at which AI and specifically generative AI is moving, definitive answers that make sense today may not be relevant in a few months.

+ ## How can my organization build generative AI **expertise** when things are moving so quickly?

In the race to deploy generative AI solutions, organizational attributes such as adaptation, experimentation and agility will be critical as new models, capabilities and use cases emerge. The key is to maintain a beginner's mindset—the belief that no matter how expert you think you are, there will always be much more to learn— even as your experience grows. Careful coordination across your organization will be needed to successfully shepherd generative AI transformation in the face of rapid change. Work to improve generative AI literacy throughout your organization, and lead using a cross-disciplinary approach. Actively collaborate with partners and third-party organizations. Also, gain experience with a variety of generative AI technologies—with innovation happening so quickly, it's nearly impossible to pick a clear winner today.
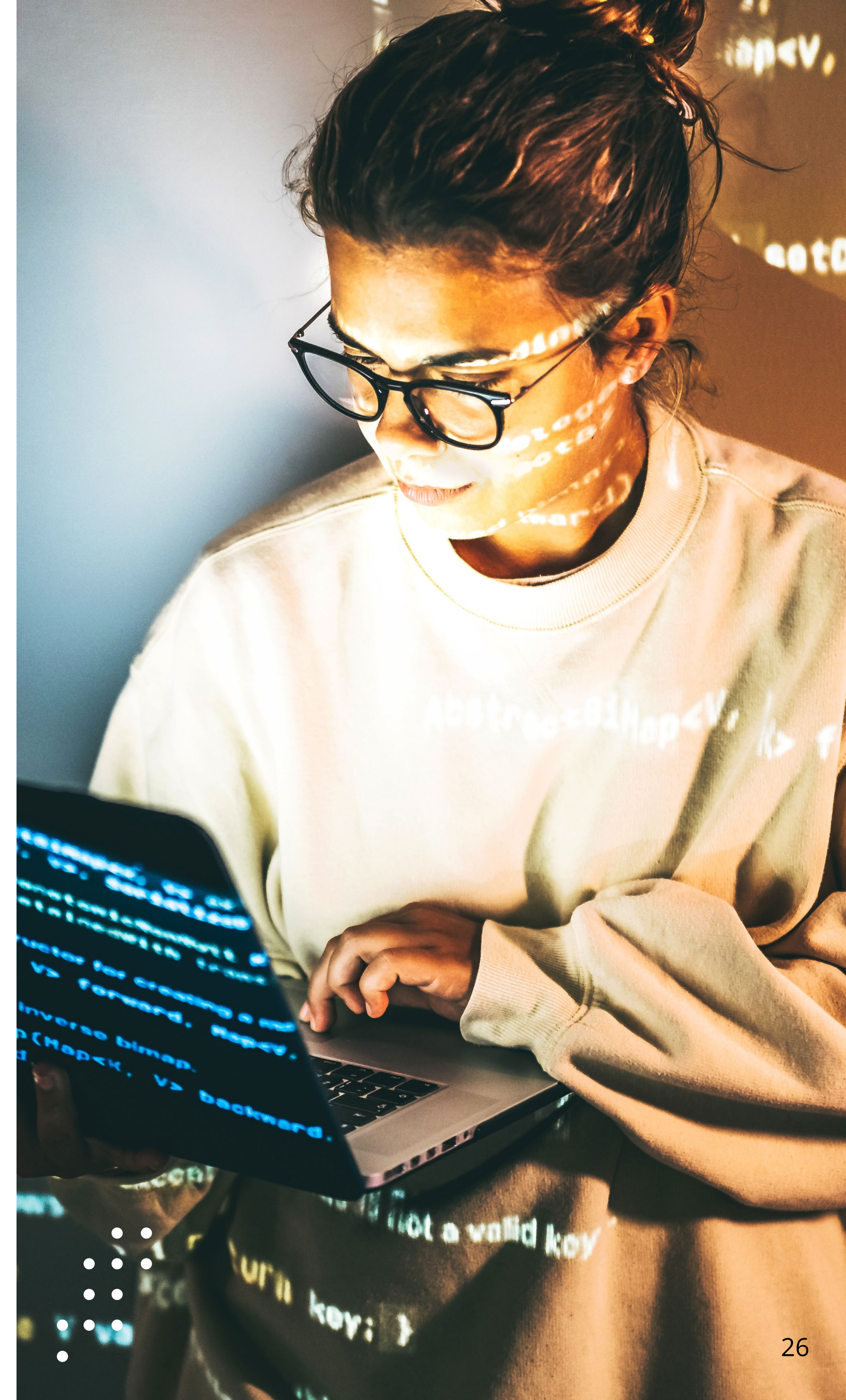
+ How can we best **scale up** and build a foundation for longer-term value creation?

Experimentation is essential when deploying generative AI. But if you can't scale up your efforts, the high expectations for transformation revealed by our survey likely won't be met. It's fine to focus on a few use cases at first. However, the most valuable use cases will likely change over time, so it's important to focus on improving end-to-end processes, not just narrow tasks. Also, follow the example of organizations that report high generative AI expertise and consider deploying AI broadly across your enterprise as part of a holistic strategy, rather than focusing narrowly on point solutions and silos. Strive to build platform capabilities that can enable multiple use cases, accommodate new and improved generative AI models, and provide consistent governance and risk management to ensure models produce safe and trustworthy outputs and content.

How should we **invest the dividends** gained from improving efficiency and productivity?

Generative AI projects can potentially be expensive, so leaders are naturally looking for rapid ways to achieve a compelling return on investment (ROI). Benefits might at first arrive slowly, but then ramp up quickly as your organization reaches a critical mass of experience and proficiency. Most generative AI efforts are currently focused on improving efficiency and productivity, and reducing costs. Once you achieve those goals, what will you do with the time and money saved? Will you strategically reinvest in more generative AI projects? Will you invest in training and reskilling your workforce? Will you improve your technology infrastructure? Or will you simply boost your bottom line? A deliberate reinvestment strategy for generative AI dividends will help lay the path for continued success.

Where companies reinvest the gains they make in efficiency from generative AI, now, may decide their level of transformation, next.
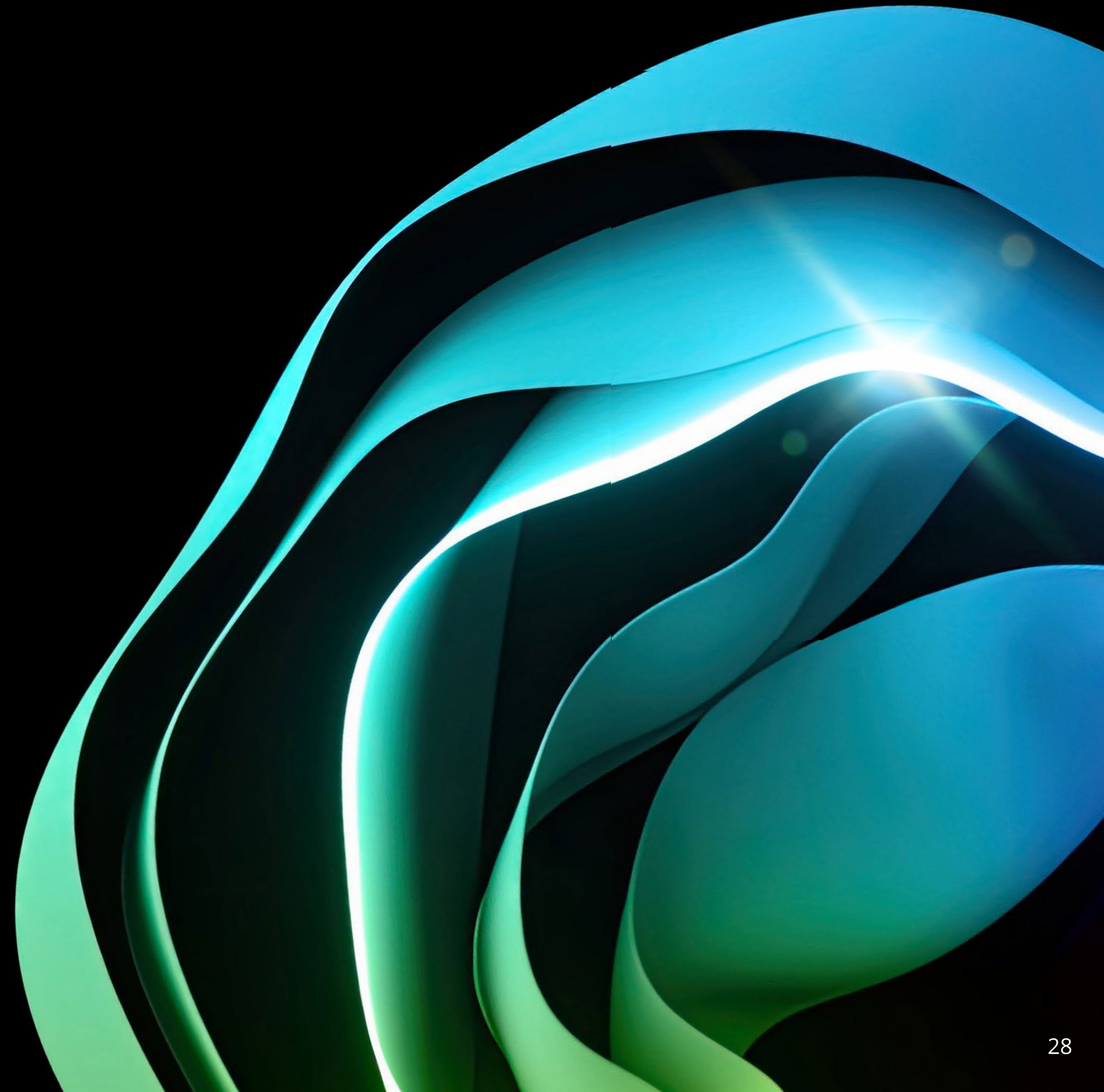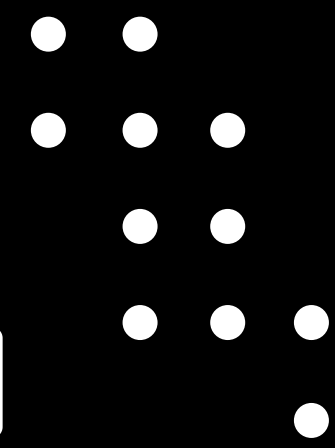
+ How can our organization use generative AI to create strategic **differentiation** and a competitive edge?

As generative AI adoption rises and the technology becomes a standard commodity—with increased integration into common enterprise software, broader availability of specialized tools and models, and standardized data requirements—will first movers lose their advantage? To maximize the value of the technology, organizations should consciously focus on innovation and differentiation—customizing their generative AI solutions to fit their unique needs and data assets, with the goal of building capabilities that create sustainable competitive advantage. Pursuing easy opportunities and quick wins is smart, but not to the exclusion of more strategic opportunities (even though the latter will require more time and money to achieve and may take longer to achieve ROI).

How should we **balance** buying vs. building?

When developing and deploying generative AI solutions, should you buy or build? The answer depends on many factors, including your overall goals and the scale, complexity and uniqueness of your solution and use case. Are you looking to monetize your model? What is your approach to open source? How much control over training datasets do you want? Questions like these will help you choose from the broad spectrum of approaches, which include: building large language models or LLMs from scratch, fine-tuning vendor-provided models with your own data, or using enterprise software with generative AI built in. Each approach has its benefits and drawbacks, and you might end up choosing more than one. When deciding, be sure to consider your business strategy, desired investment level, risk tolerance and data readiness.

+ ## How can we best invest in our **people** and reinvent how they work with generative AI?

Survey respondents cited talent as their biggest barrier to generative AI adoption. To surmount it, you will likely need to recruit new talent, empower your existing workforce, and build organizational trust. Although the talent market is highly competitive, don't let that deter you from pursuing people with the technical skills to develop and maintain generative AI solutions (e.g., prompt engineers, AI solutions architects, data scientists / engineers, LLM operators). At the same time, invest in training to help your people get the maximum value from generative AI tools and to improve their productivity. Also, prioritize broad workforce education to help allay fears and misconceptions about AI technology.

What **guardrails** does our organization need to ensure responsible use of generative AI, and how do we stay aligned with shifting societal guardrails?

Respondents expressed a variety of concerns about generative AI risks, including the need to manage hallucinations and model bias, assess potential intellectual property issues, and ensure transparency and explainability. These issues underscore the importance of keeping humans in the loop to work with AI, check its accuracy, and address any problems that arise. Additionally, there are open questions about how various regulatory and legal challenges will affect development of the overall market. A large percentage of organizations (47%) reported they were monitoring regulatory requirements as part of their risk management efforts. Many respondents noted their concerns that the widespread use of generative AI will concentrate power and increase economic disparity. As a leader, you will need to consider how your organization's generative AI decisions and actions fit into the larger picture—and will likely need to do so prospectively, instead of waiting for official guidance from lawmakers and regulators.
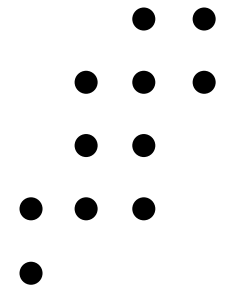
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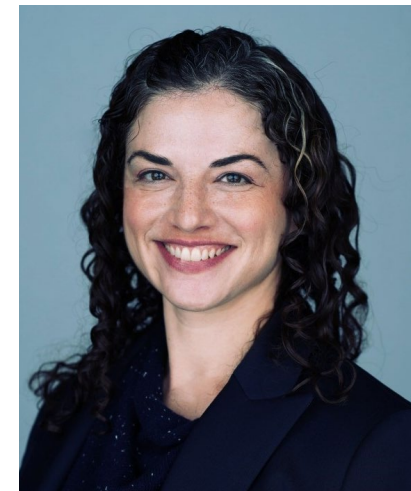Deloitte Consulting LLP
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The Deloitte AI Institute™ helps organizations connect all the different dimensions of the robust, highly dynamic and rapidly evolving AI ecosystem. The AI Institute leads conversations on applied AI innovation across industries, using cutting-edge insights to promote human-machine collaboration in the Age of With™.

The Deloitte AI Institute aims to promote dialogue about and development of artificial intelligence, stimulate innovation, and examine challenges to AI implementation and ways to address them. The AI Institute collaborates with an ecosystem composed of academic research groups, startups, entrepreneurs, innovators, mature AI product leaders and AI visionaries to explore key areas of artificial intelligence including risks, policies, ethics, future of work and talent, and applied AI use cases. Combined with Deloitte's deep knowledge and experience in artificial intelligence applications, the institute helps make sense of this complex ecosystem and, as a result, delivers impactful perspectives to help organizations succeed by making informed AI decisions.

Learn more

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Methodology

To obtain a global view of how generative AI is being adopted by organizations on the leading edge of AI, Deloitte surveyed 2,835 leaders between October and December 2023. Respondents were senior leaders in their organization and included board and C-suite members, and those at the president, vice president and director level. The survey sample was split equally between IT and line of business leaders. Sixteen countries were represented: Australia (100 respondents), Brazil (115 respondents), Canada (175 respondents), France (130 respondents), Germany (150 respondents), India (200 respondents), Italy (50 respondents), Japan (100 respondents), Korea (11 respondents), Mexico (101 respondents), Netherlands (75 respondents), Singapore (76 respondents), Spain (101 respondents), Switzerland (50 respondents), the United Kingdom (200 respondents), and the United States (1,201 respondents).

All participating organizations have one or more working implementations of AI being used daily. Plus, they have pilots in place to explore generative AI or have one or more working implementations of generative AI being used daily. Respondents were required to meet one of the following criteria with respect to their organization's AI and data science strategy, investments, implementation approach, and value measurement. They: influence decision-making, are part of a team that makes decisions, are the final decision-maker, or manage or oversee AI technology implementations.

All statistics noted in this report and its graphics are derived from Deloitte's first quarterly survey, conducted October – December 2023; *The State of Generative AI in the Enterprise: Now decides next*, a report series. N (Total leader survey responses) = 2,835

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Endnotes:

1. Krystal Hu, "ChatGPT sets record for fastest-growing user base – analyst note," *Reuters*, February 2, 2023, https://www.reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023-02-01/, accessed January 3, 2023.

2. Will Douglas Heaven, "Geoffrey Hinton tells us why he's now scared of the tech he helped build," *MIT Technology Review*, May 2, 2023, https://www.technologyreview.com/2023/05/02/1072528/geoffrey-hinton-google-why-scared-ai/, accessed January 3, 2023.

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