The State of GenAI Today: The Early Stages of a Revolution

A survey of public and commercial sector IT and data leaders reveals insights about generative AI readiness across industries

Guidehouse

cdo CHIEF DATA OFFICER MAGAZINE

We are in the midst of an accelerating technological revolution. Generative AI promises to redefine the contours of innovation, efficiency, and competitive advantage.

Are organizations ready?

Artificial intelligence is the most transformative technology public- and commercial-sector leaders will experience in their lifetimes. The impacts to their organizations will be profound—potentially greater than mobile technology or even the internet itself. We are in the midst of an accelerating technological revolution. Generative AI (GenAI) promises to redefine the contours of innovation, efficiency, and competitive advantage.

How ready are organizations for a future defined by GenAI?

CDO Magazine conducted a survey with Guidehouse to find out. Together, we developed a survey that closely examines how organizations are embracing GenAI and their experiences thus far. This survey gathered input from senior executives across the public sector and commercial industries to shed light on their diverse GenAI perspectives and the strategies their organizations are adopting. How are leaders bracing for GenAI's impacts, including the automation of knowledge work? Are they ready for this transformational technology?
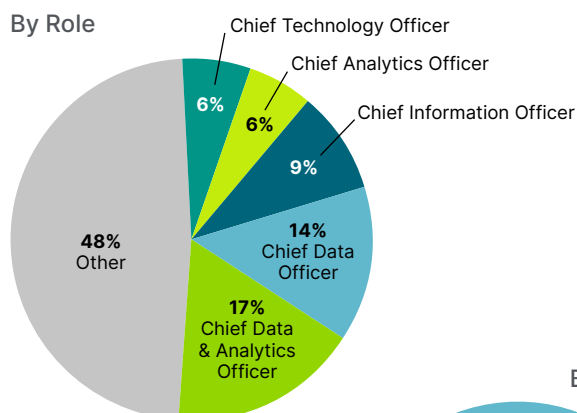
Our *State of GenAI Today Survey* reveals nuanced answers to these questions. Responses vary by industry, education and awareness, investment, and preparedness to deal with key obstacles to adoption, including ethical clarity, workforce training, and strategic integration. Our aim is for these survey results to help data and IT leaders harness the potential of GenAI, gauge their organization's readiness, and define a path forward.
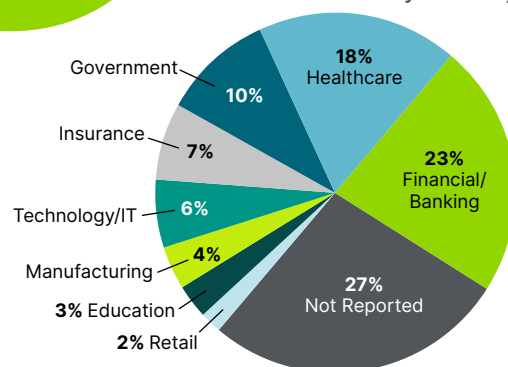
State of GenAI Today Survey Respondents

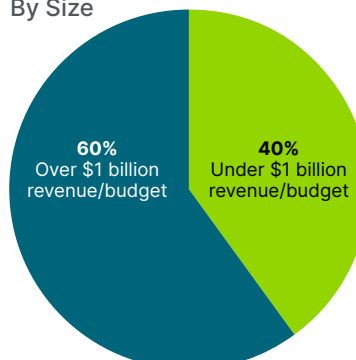**Demographics**   **Total responses: 243**

By Role

- 6% Chief Technology Officer
- 6% Chief Analytics Officer
- 9% Chief Information Officer
- 14% Chief Data Officer
- 17% Chief Data & Analytics Officer
- 48% Other

By Industry

- 18% Healthcare
- 23% Financial/Banking
- 27% Not Reported
- 10% Government
- 7% Insurance
- 6% Technology/IT
- 4% Manufacturing
- 3% Education
- 2% Retail

By Size

- 60% Over $1 billion revenue/budget
- 40% Under $1 billion revenue/budget

The State of GenAI Today Survey illustrates the transformative potential of GenAI in reshaping industries, the critical need for readiness and strategic planning, and the importance of governance frameworks in harnessing GenAI's full benefits.

Insights and Trends

It's an exciting time to lead an organization's data and technology efforts, but a daunting one as well. To reap the far-reaching rewards of GenAI, companies and public agencies must prepare for extensive organizational change.

The *State of GenAI Today Survey* responses reveal the following insights and trends emerging as organizations grapple with this technology revolution:

Size-Based Investment Disparities
Large companies ($1 billion or more in revenue/budget) are extremely likely to invest up to 8% of their IT budget in GenAI, which is 2-3 times the rate of smaller organizations.

This disproportionate investment could result in adoption disparities that give large enterprises additional competitive advantages as the benefits and efficiencies of GenAI compound.

Industry-Specific Momentum
89% of healthcare and 88% of insurance respondents say their organization is likely to invest in GenAI in the next 12 months.

The healthcare and insurance industries have emerged as GenAI front-runners, which could revolutionize patient care and risk assessment.

ROI Expectations and Competitiveness Gains
52% of respondents say GenAI will have a high or substantial impact on competitiveness; 35% anticipate a moderate impact.

Respondents expect GenAI to enhance productivity, process automation, and labor efficiency, suggesting a transformative impact on competitiveness across sectors.

Governance and Management Challenges
72% of respondents say data governance and data management maturity are impacting GenAI solutions.

Organizations of all sizes anticipate a struggle to integrate GenAI into existing governance structures and business processes and workflows.

Overall GenAI Readiness
76% of respondents say their organization is not fully equipped to harness GenAI.

Organizations aren't yet ready to implement GenAI, despite its potential as a catalyst for competitive advantage or mission fulfillment. Obstacles include governance, architecture, training needs, privacy concerns, and a lack of skilled personnel.

The following sections of this report detail five priorities for organizations as they navigate the complex GenAI landscape and apply its potential to drive innovation and competitive advantage.
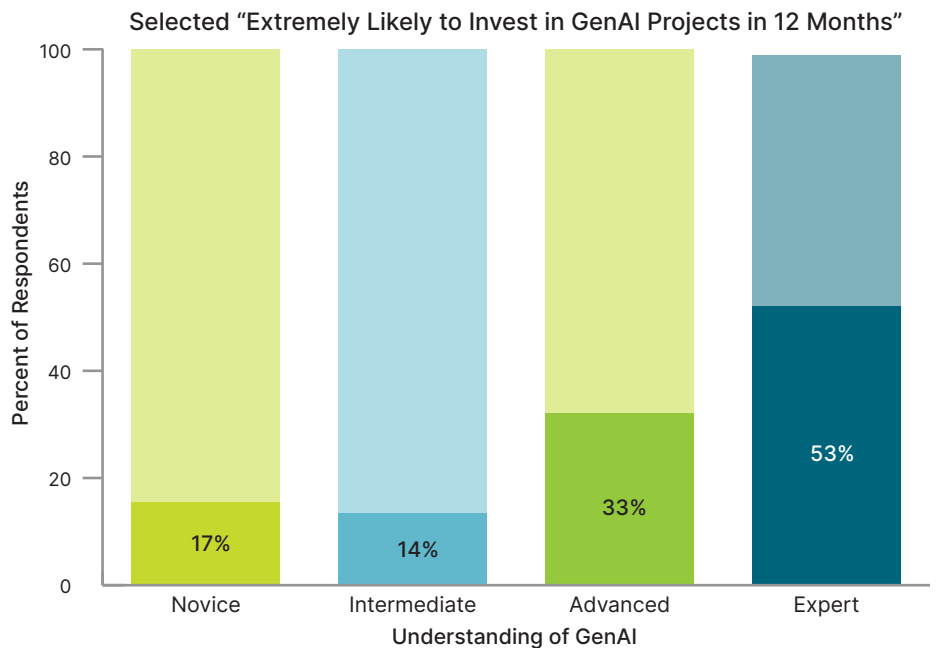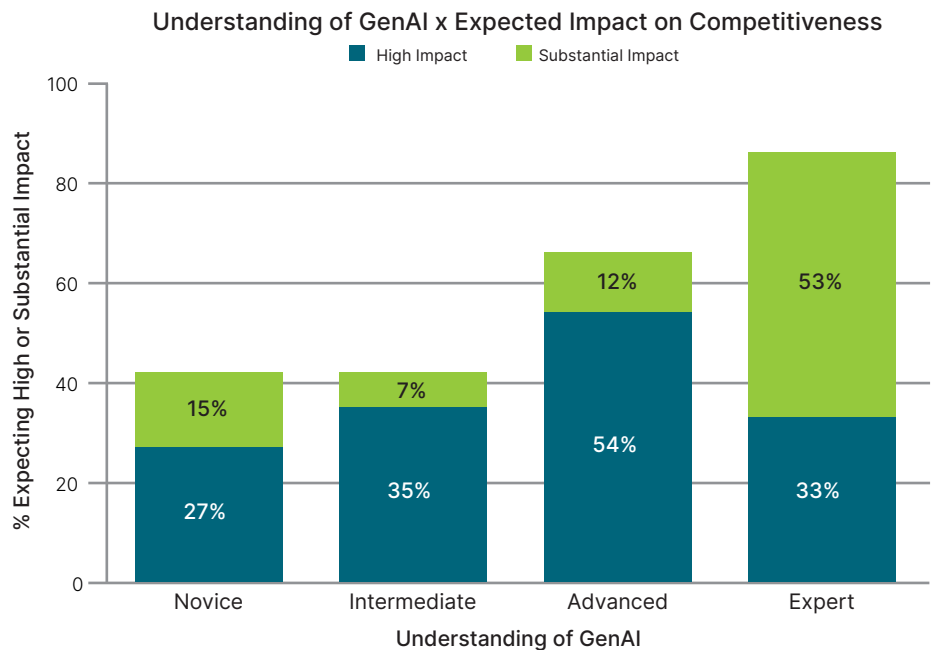
> "Given the investments we have made over the last few years into our people, our platforms and our data, we feel relatively ready to start to benefit from GenAI. Our focus for now remains on using this as a capability that empowers our internal teams and work processes first (think co-pilot and assistant-like capabilities) and building confidence and a track record over time to make these capabilities directly end-user facing."

State of GenAI Today Survey respondent Himanshu Arora, Blue Cross Blue Shield of Massachusetts Chief Data & Analytics Officer

1 │ An Educational Imperative for Leadership

GenAI is swiftly becoming a cornerstone of competitive strategy across industries. With 52% of respondents acknowledging either a high or substantial impact on competitiveness, it's clear that GenAI has moved from the periphery of business leadership strategy to its core.

However, a notable relationship emerged in the survey data between GenAI buy-in—including plans to invest and anticipated competitive advantages—and education. As the data below reveals, the higher their degree of GenAI understanding, the more likely a respondent was to report buy-in.

Understanding of GenAI x Expected Impact on Competitiveness

Legend: High Impact (dark blue), Substantial Impact (green)

Understanding of GenAI	High Impact	Substantial Impact
Novice	27%	15%
Intermediate	35%	7%
Advanced	54%	12%
Expert	33%	53%

Y-axis: % Expecting High or Substantial Impact

Selected "Extremely Likely to Invest in GenAI Projects in 12 Months"

Understanding of GenAI	Percent of Respondents
Novice	17%
Intermediate	14%
Advanced	33%
Expert	53%

Y-axis: Percent of Respondents

"Given protected health information (PHI) and personally identifiable information (PII) considerations in healthcare, we are being exceptionally cautious about how we engage foundational LLMs to derive and deploy these capabilities, and how we use alternative methods such as vectorization to help solve for some of these concerns."

State of GenAI Today Survey respondent Himanshu Arora, Blue Cross Blue Shield of Massachusetts Chief Data & Analytics Officer
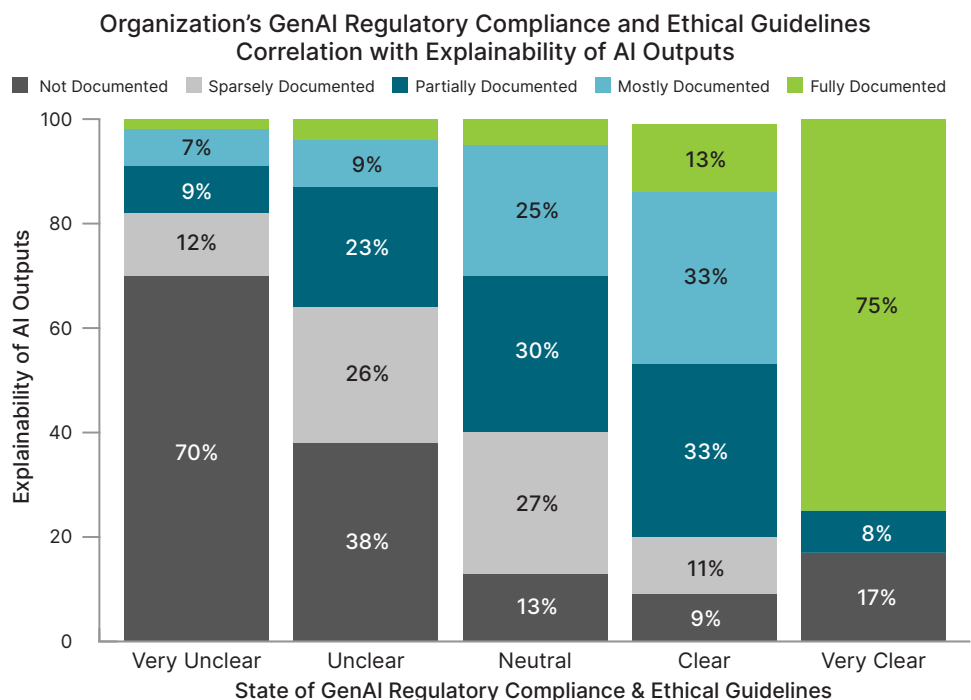
The fact that 67% of respondents report a novice to intermediate level of understanding of GenAI reveals meaningful room for improvement. Despite general recognition of its potential value, a deeper and more widespread understanding of GenAI is essential for organizations to fully employ its capabilities and drive competitiveness.

This knowledge gap in GenAI understanding spans industries and warrants an urgent educational drive and investment in comprehensive training and development programs to elevate GenAI literacy at various organizational levels. This effort is not just about technical skill enhancement, but also about fostering a culture of understanding around GenAI benefits and key considerations.

2 | Ethical Governance

Data and IT leaders cannot leverage the transformational power of GenAI without also addressing the ethical considerations and compliance challenges associated with such power. The need for ethical clarity is apparent: 77% of survey respondents reported that regulatory compliance and ethical guidelines surrounding GenAI in their organizations are vague or unclear. The gap suggests organizations need to establish clear and comprehensive regulatory frameworks for GenAI, ensuring ethical alignment and compliance.

Establishing such frameworks and ethical guidelines demands a strategic and nuanced approach. Enhancing documentation and transparency of AI outputs, for example, is critical for building trust and facilitating effective governance in GenAI applications. Survey respondents reveal that organizations with a better handle on GenAI-related regulatory compliance and ethical guidelines have a substantial 75% of AI outputs fully documented, as illustrated in the chart below.

Organization's GenAI Regulatory Compliance and Ethical Guidelines Correlation with Explainability of AI Outputs

Legend: ■ Not Documented ■ Sparsely Documented ■ Partially Documented ■ Mostly Documented ■ Fully Documented

Explainability of AI Outputs	Very Unclear	Unclear	Neutral	Clear	Very Clear
Fully Documented		4%	5%	13%	75%
Mostly Documented	7%	9%	25%	33%	
Partially Documented	9%	23%	30%	33%	8%
Sparsely Documented	12%	26%	27%	11%	
Not Documented	70%	38%	13%	9%	17%

State of GenAI Regulatory Compliance & Ethical Guidelines

"Ensuring data is ready for AI/GenAI to generate and deliver quality data in a compliant and efficient manner and having a data strategy to build cross-functional data foundations allows us to create data products based on consumption needs."

State of GenAI Today Survey respondent
Kiran Kodali, Sanofi Head of R&D
Data Strategy and Governance
& Data Foundations

Data privacy is another key component of GenAI ethics and responsibility. While 38% of respondents cite having effective data privacy practices in GenAI use, an equally notable 35% express neutrality, indicating room for improvement. We also observe a significant relationship between organizations' clarity regarding ethical guidelines and regulatory compliance, and the effectiveness of GenAI-related data privacy measures. Integrating robust data privacy frameworks within GenAI is critical for safeguarding against privacy breaches and maintaining organizational reputation.

These insights are pivotal indicators driving the ethical direction of GenAI adoption. The survey results highlight a need for organizations to establish clear ethical guidelines, improve transparency in AI outputs, and strengthen data privacy measures.

Guidehouse Case Study: GenAI Experience in Financial Crime Compliance Operations

A large financial technology institution needed to streamline its Anti-Money Laundering (AML) investigation process to meet Suspicious Activity Report (SAR) regulatory requirements. Guidehouse developed a sequence of Large Language Models (LLM) to automate the process, leveraging procedural documents, narrative examples, training material, anonymized customer and transactional data, and AML insights. Human investigators then review these robust AI-generated summaries to determine potential suspicious activities.

The LLM-enabled investigation process will reduce level one triage time, improve overall quality with consistent case summary generation, guide consistent transaction pattern analysis, and enable a highly scalable process to accommodate short-term increases in alerts and cases requiring review.

3 | Strategic Integration

As previously noted, 76% of respondents feel that their organization was not adequately prepared to embrace GenAI. Depending on the industry, the lack of preparation can be even more widespread—only 8% of government respondents, for example, express GenAI readiness.
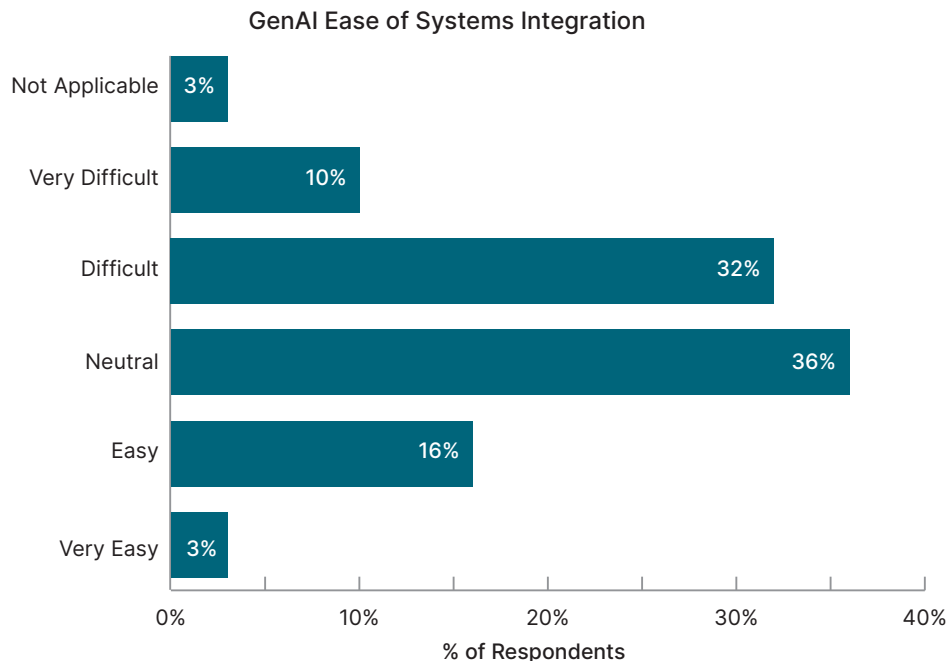
This lack of readiness reflects organizations' multifaceted GenAI adoption challenges and offers a nuanced view of current GenAI integration within corporate frameworks. Data governance is chief among these challenges, with 87% of respondents agreeing that AI advancements necessitate a heightened focus on data management, demonstrating a significant priority shift in this direction.[1] Another 72% report that GenAI applications are not incorporated into existing data governance and management structures, indicating potential risks for GenAI initiatives. Data governance and management gaps need to be addressed for effective GenAI implementation and risk management.

[1] Thor Olavsrud, "Is your data strategy ready for gen AI? LOB leaders may disagree," CIO, November 2, 2023.

"Instead of prioritizing GenAI capabilities as standalone, we are injecting them into existing priorities as enablers or scaling capabilities."

State of GenAI Today Survey respondent Himanshu Arora, Blue Cross Blue Shield of Massachusetts Chief Data & Analytics Officer

Systems integration presents an additional GenAI adoption obstacle. As illustrated in the graph below, less than 20% of respondents anticipate ease in melding GenAI with their current infrastructure and integrating GenAI solutions into business processes and workflows.

GenAI Ease of Systems Integration

Category	% of Respondents
Not Applicable	3%
Very Difficult	10%
Difficult	32%
Neutral	36%
Easy	16%
Very Easy	3%

% of Respondents

Respondents also cite use case identification and prioritization as key challenges, suggesting organizations are grappling with not just the "how" of technical integration, but also the "what" and "where" of GenAI implementation. Exploring these questions allows organizations to more deeply understand GenAI capabilities, refine their strategic approach, and align these innovative technologies with their specific needs and contexts.

Finally, 37% of respondents report their processes to operationalize GenAI (e.g., use case identification and approval, development processes and tools, governance procedures, and business workflow integration) as not clear and communicated, and 26% call it only slightly clear and communicated. There is palpable recognition of the need for better dissemination of information and more structured frameworks, such as for use case identification and prioritization, AI and data governance, and AI development and deployment.

These insights are critical indicators guiding strategic GenAI implementation. The survey highlights the imperative for an organizational transformation encompassing readiness, data governance, integration strategies, process management, leadership support, and clear ROI objectives. Navigating GenAI demands strategic, integrated approaches and inevitably entails fostering a culture of innovation and adaptability essential for thriving in the GenAI domain.
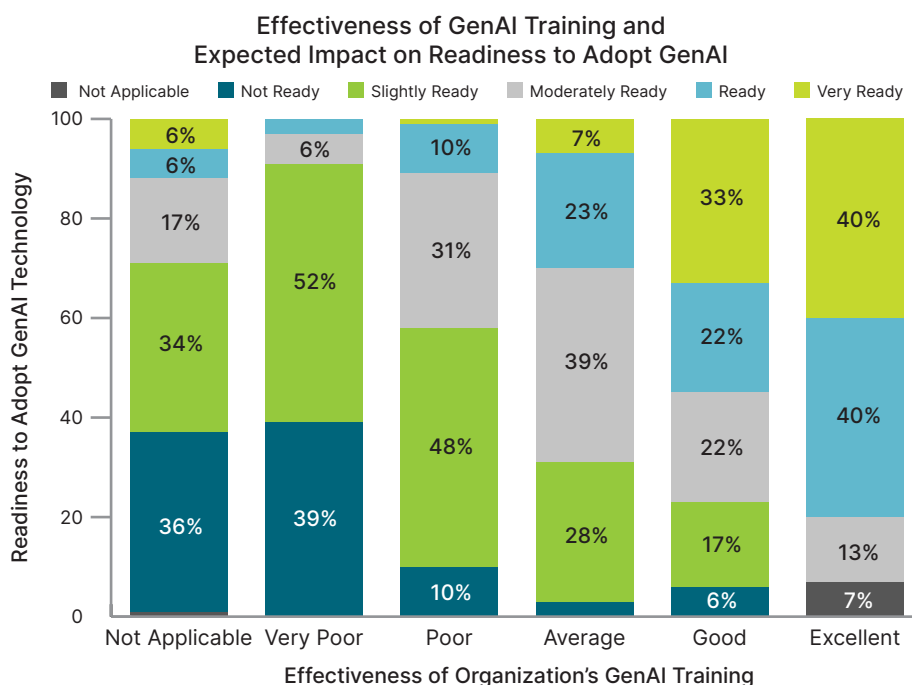
4 │ Workforce Transformation

Training and skill development are essential in successfully integrating GenAI within organizations. Differing levels of training among survey respondents offer insights into workforce readiness to embrace this technological wave.

Widespread GenAI skill gaps exist, potentially derailing its optimal use. With 69% of survey respondents acknowledging this gap, organizations may struggle to deploy and scale GenAI solutions effectively. Upskilling staff to meet rising demands and strategic sourcing will be critical to filling these skill gaps.

How staff are trained is clearly consequential. As the survey data shows in the chart below, a correlation exists between GenAI training program quality and how ready organizations are to adopt GenAI. This relationship is not a subtle hint but a resounding affirmation that effective GenAI training is a cornerstone for cultivating a workforce ready to navigate and excel in GenAI projects.

Effectiveness of GenAI Training and Expected Impact on Readiness to Adopt GenAI

Legend: ■ Not Applicable ■ Not Ready ■ Slightly Ready ■ Moderately Ready ■ Ready ■ Very Ready

Y-axis: Readiness to Adopt GenAI Technology (0–100)
X-axis: Effectiveness of Organization's GenAI Training

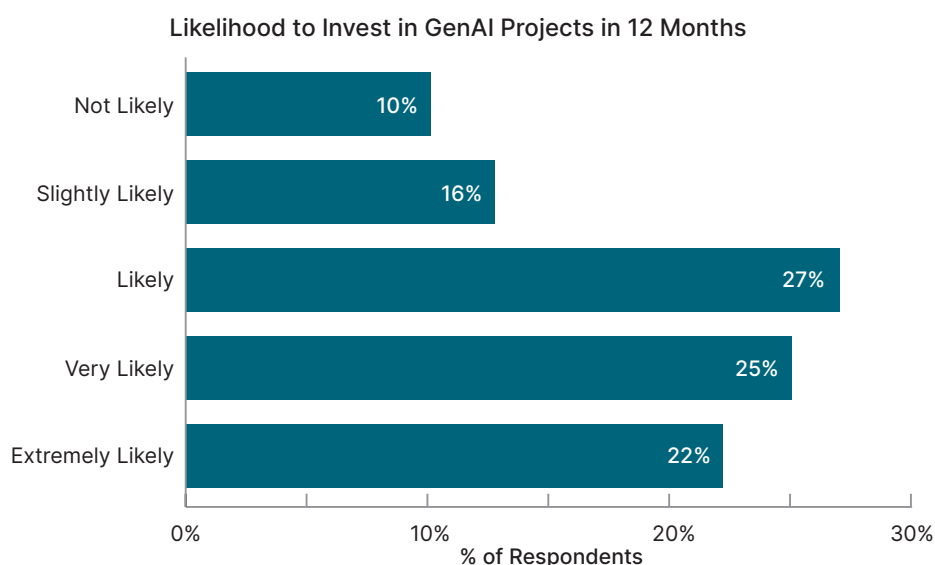| Category	Not Ready	Slightly Ready	Moderately Ready	Ready	Very Ready
Not Applicable	36%	34%	17%	6%	6%
Very Poor	39%	52%			6%
Poor	10%	48%	31%	10%	
Average	28%		39%	23%	7%
Good	6%	17%	22%	22%	33%
Excellent	7% (Not Applicable)		13%	40%	40%

The implications are clear and demand attention. To bridge potentially obstructive skill gaps, the findings suggest that organizations invest in training, but also ensure these programs are of high caliber. From the survey results, organizations with more effective GenAI training programs—broader than just equipping staff with new tools and aimed at strategically uplifting workforce skills—demonstrate a greater readiness to adopt GenAI capabilities. Cultivating a GenAI-equipped workforce is essential for organizations aiming to leverage the full potential of this revolutionary technology, driving innovation, efficiency, and competitive edge in a rapidly evolving AI-centric landscape.

Planned investment data marks a pivotal moment in organizational strategy, reflecting a broad-based recognition of GenAI's transformative potential.

5 | Financial Foresight and Investment

The survey data indicates cautious optimism in financial commitments toward GenAI. Organizations must balance their exploratory enthusiasm with strategic investment to ensure their financial resources align with long-term GenAI goals.

About 47% of respondents across various industries express a high likelihood of investing in GenAI within the upcoming year, signaling a significant shift in market sentiment. This noteworthy figure marks a pivotal moment in organizational strategy, reflecting broad-based recognition of GenAI's transformative potential. It indicates a consensus that GenAI is not just a fleeting trend, but a fundamental component of future technological infrastructure.

Likelihood to Invest in GenAI Projects in 12 Months

Category	% of Respondents
Not Likely	10%
Slightly Likely	16%
Likely	27%
Very Likely	25%
Extremely Likely	22%

% of Respondents

However, most of these planned early investments will be modest. Most organizations foresee allocating less than 5% of their IT budget to GenAI initiatives in 2024. This conservative budget allocation highlights a strategic yet exploratory stance toward GenAI investment. It points to a phase of cautious experimentation—organizations are testing the waters before fully committing substantial resources to GenAI.

These findings on organizations' GenAI investment plans are vital indicators of an evolving GenAI ecosystem. The data demonstrates a burgeoning enthusiasm for GenAI across corporate landscapes, marked by strategic financial planning. As enterprises navigate this emerging domain, their investment choices and budgeting decisions will play a critical role in dictating the growth trajectory of GenAI, setting the stage for pioneering innovations and sector-wide transformations.

Navigating the GenAI Future

As organizations prepare to invest in GenAI, strategically aligning their goals with GenAI capabilities will be crucial. The journey ahead demands both technological readiness and a vision that comprehensively integrates GenAI into the fabric of organizational strategy and operations.

The *State of GenAI Today Survey* insights from industry leaders both illuminate the current context of GenAI adoption and chart a path for its future. The survey's findings underscore the critical juncture at which organizations stand today—in the early stages of a technological revolution that promises to redefine the contours of innovation, efficiency, and competitive advantage.

As we stand at this technological crossroads, the choices data and IT leaders make today will shape the future of industries and redefine how we interact with and leverage AI, ushering in a new era of innovation and growth.

Strategic Recommendations from Guidehouse

As GenAI technology evolves at a brisk pace, organizations should concentrate on:

- **Readiness and Strategic Planning:** The survey indicates widespread unpreparedness for GenAI integration, emphasizing the need for comprehensive strategic planning and capability assessments.

- **Upskilling and Training:** Organizations must invest in training programs at all levels to ensure effective GenAI adoption. This finding highlights the transformative role of education in harnessing the potential of GenAI.

- **Use Case Development and Piloting Priority Use Cases:** The survey reveals multiple areas where organizations can derive value from GenAI. Organizations should identify high-value use cases and select proofs of concept and pilots to demonstrate value and viability.

- **Policy Development and Ethical Considerations:** Establishing AI governance policies and controls, as well as ethical frameworks, is essential for responsible and effective GenAI governance. Responsible and ethically grounded practices are vital to success, and establishing such practices will ensure organizations navigate this technological advancement with integrity and social responsibility.

- **Strategic GenAI Investment:** Organizations should strive to align their financial commitments to GenAI with long-term business goals.

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These recommendations provide high level strategic guidelines based upon the survey results and the current state of the evolving field of GenAI. These recommendations are exclusively provided by Guidehouse. **CDO Magazine** *does not offer recommendations.*

About *CDO Magazine*

CDO Magazine is the premier digital publication giving voice to global executives in data, analytics, AI and security. The publication delivers C-suite-worthy format and quality content — insights essential to accelerating organizational adoption of enterprise disciplines that are key to success in our digital society.

Our passion is to gather leaders in regional communities and connect them to our global executive community. We want to help data, analytics, AI and security executives experience a more profound sense of community through a platform where the best ideas, innovations, companies and leaders are celebrated. *CDO Magazine* hosts CDO forums in cities, countries and regions around the world.

CDO Magazine grew out of the annual Chief Data Officer and Information Quality Symposium (CDOIQ), founded in 2007 by the MIT Sloan School of Management, in partnership with the International Society of Chief Data Officers (isCDO) and ComSpark.

With an audience approaching 400,000 readers, *CDO Magazine* is read in 95% of countries globally. Notably, the Global Editorial Board is composed of leading executives from 23 nations.

About Guidehouse

Guidehouse is a leading global provider of consulting services to the public sector and commercial markets, with broad capabilities in management, technology, and risk consulting. By combining our public and private sector expertise, we help clients address their most complex challenges and navigate significant regulatory pressures, focusing on transformational change, business resiliency, and technology-driven innovation. Across a range of advisory, consulting, outsourcing, and digital services, we create scalable, innovative solutions that help our clients outwit complexity and position them for future growth and success. The company has more than 16,000 professionals in over 55 locations globally. Guidehouse is led by seasoned professionals with proven and diverse expertise in traditional and emerging technologies, markets, and agenda-setting issues driving national and global economies. For more information, please visit guidehouse.com.

Acknowledgements

Additional Information About the Survey

The survey was administered between Nov 9, 2023, and Jan 12, 2024. The online survey was made available on both *CDO Magazine* and Guidehouse websites and social pages, sent to *CDO Magazine* members and target Guidehouse clients, shared at *CDO Magazine* and Guidehouse conferences, and targeted individuals on LinkedIn. All respondents received the same set of questions and were asked to respond to demographic information about their role and organization. Responses to each question in the survey were analyzed against these demographic categories, to identify differences in results based on these categorizations. Additional breakdowns are also provided based on other characteristics of respondents' GenAI capabilities in place.