Your journey to a GenAI future:

A strategic path to success in life sciences and pharma

Global research study reveals opportunities and obstacles when integrating GenAI technology

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Foreword

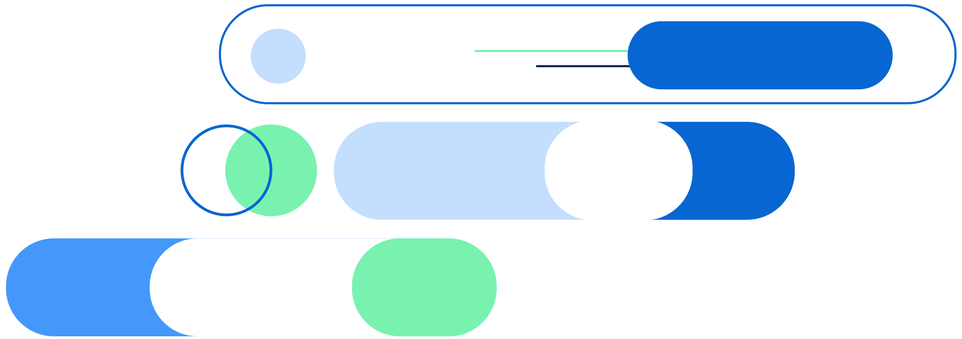
By Alyssa Farrell, Director, Global Health Care and Life Sciences Industry Marketing at SAS

As generative AI continues to make waves across both headlines and boardrooms, the life sciences industry is unlocking new possibilities that could reshape the future. This sector, known for managing vast, intricate data sets and safeguarding sensitive patient information, is poised to harness GenAI for groundbreaking advancements. In life sciences, GenAI isn't just a buzzword – it's a game changer with the potential to revolutionize innovation, productivity and patient care.

Our latest insights on GenAI come from a comprehensive survey of 1,600 organizations across the globe, offering a deep dive into how different industries are approaching GenAI. Specifically, we focused on the responses of 237 senior life sciences leaders who are at the forefront of shaping GenAI, data and analytics strategy.

In this report, you'll discover:

- How the life sciences industry is leading or lagging in GenAI adoption compared with other sectors.
- The specific areas where the industry is already seeing GenAI drive results – and where it is still navigating uncertainty.
- How GenAI investments in life sciences stack up against other sectors and where the industry is placing its bets.
- Practical strategies to overcome the challenges of GenAI implementation, ensuring you maximize your return on investment (ROI) and stay ahead of the curve.



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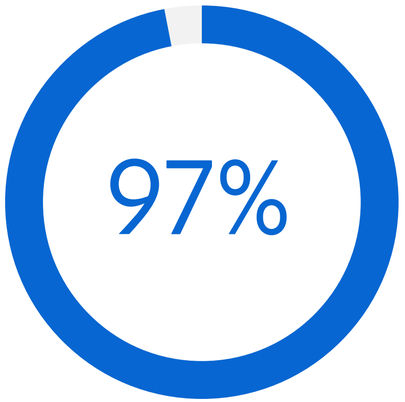
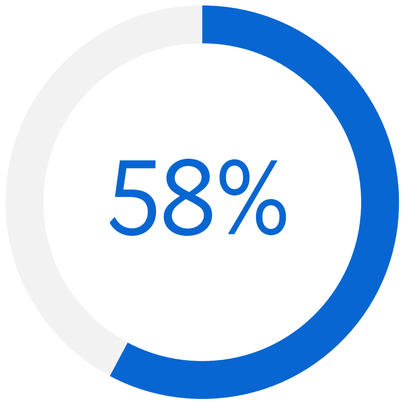
GenAI in life sciences and pharma today

The life sciences industry is steadily embracing GenAI: Adoption rates are ahead of the average for other sectors, leaders use the technology more regularly and the sector is better prepared when it comes to policies on how GenAI should be used.

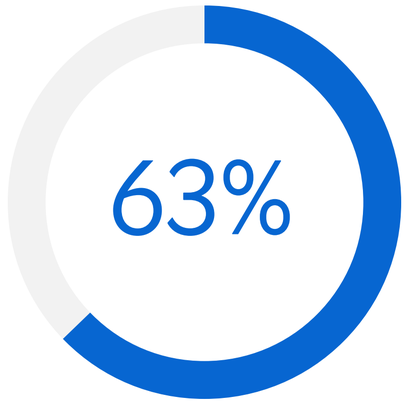
Respondent perspectives



of life sciences businesses are already using or have plans to adopt GenAI.

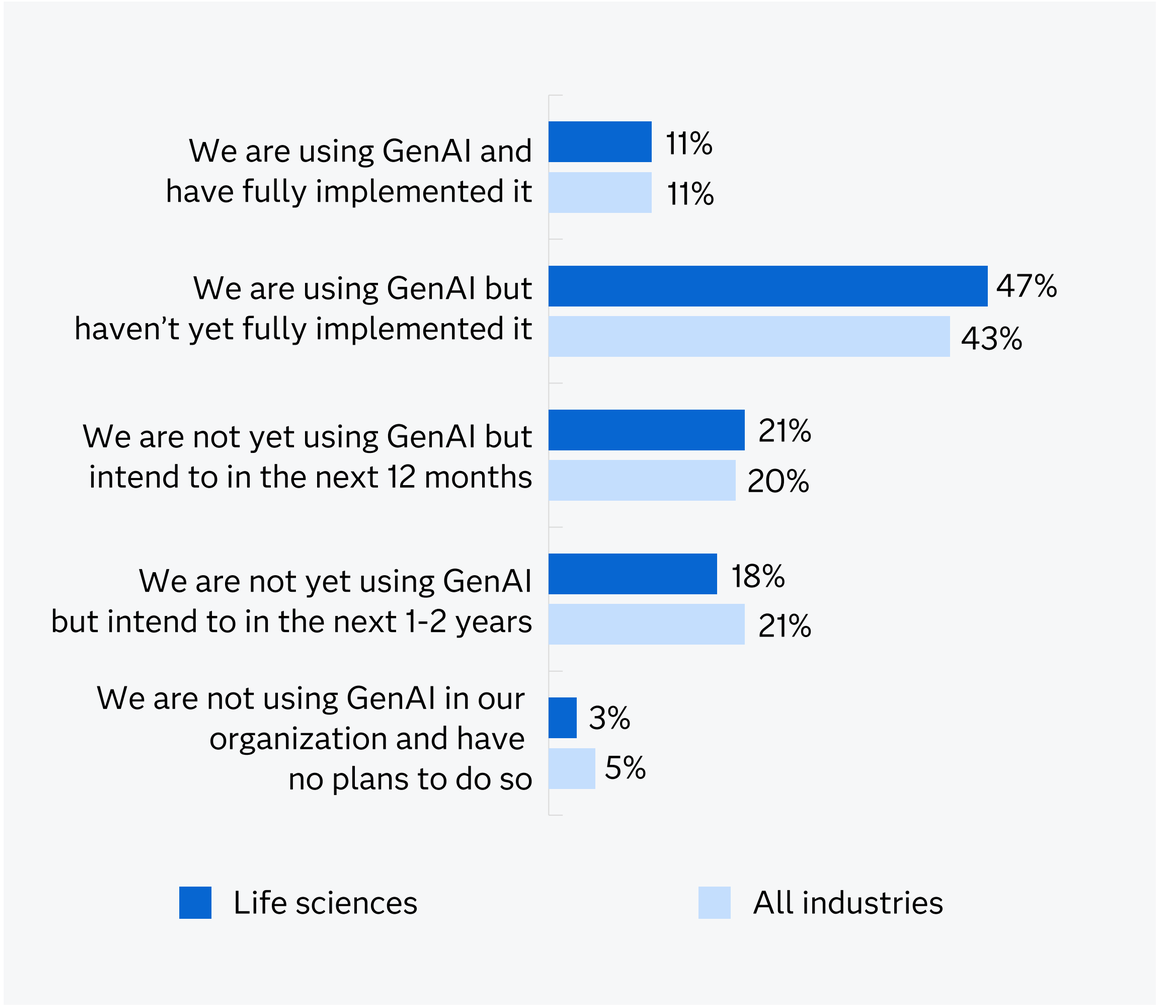


of life sciences organizations currently use the technology, compared with **54%** on average in all sectors.



of organizations have a policy stating how employees can use GenAI.

What stage of GenAI implementation are respondents?



Percentages may not add up to 100% due to rounding

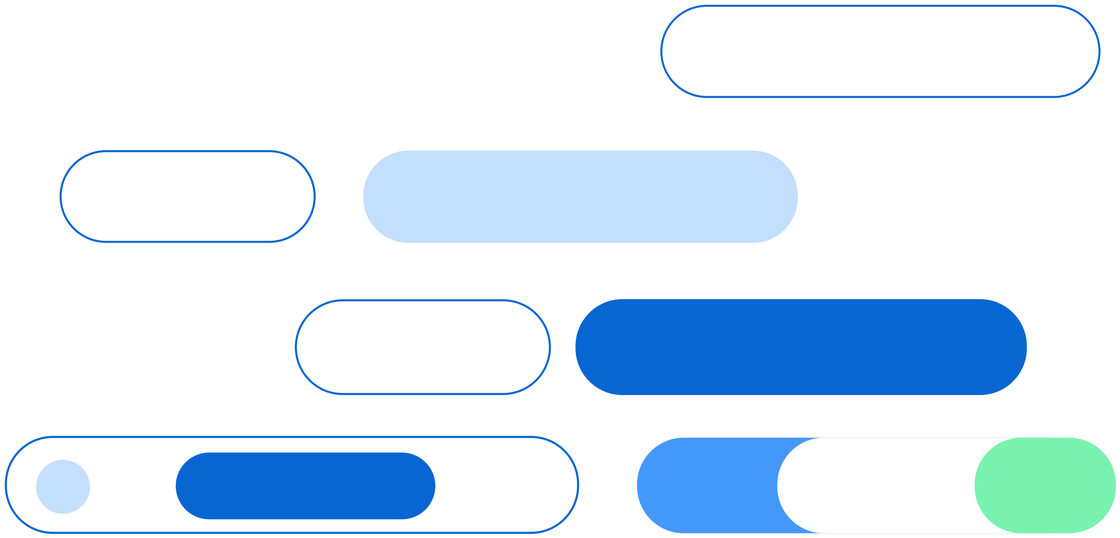
Life sciences leaders are using GenAI more often than the cross-sector average.

32% use it every day, compared with **29%** in all sectors.

15% use it every month or more, just slightly less than all sectors at **18%**.

38% use it every week or more, compared with **35%** in other industries.

11% use it less than once a month, while other sectors use GenAI **10%**.



Spotlight on marketing

Marketing departments have accelerated GenAI adoption, creating a productive testing ground for the technology in the life sciences sector. In a separate global study, 300 marketers – 45 from life sciences and pharma – were asked about their use of GenAI.

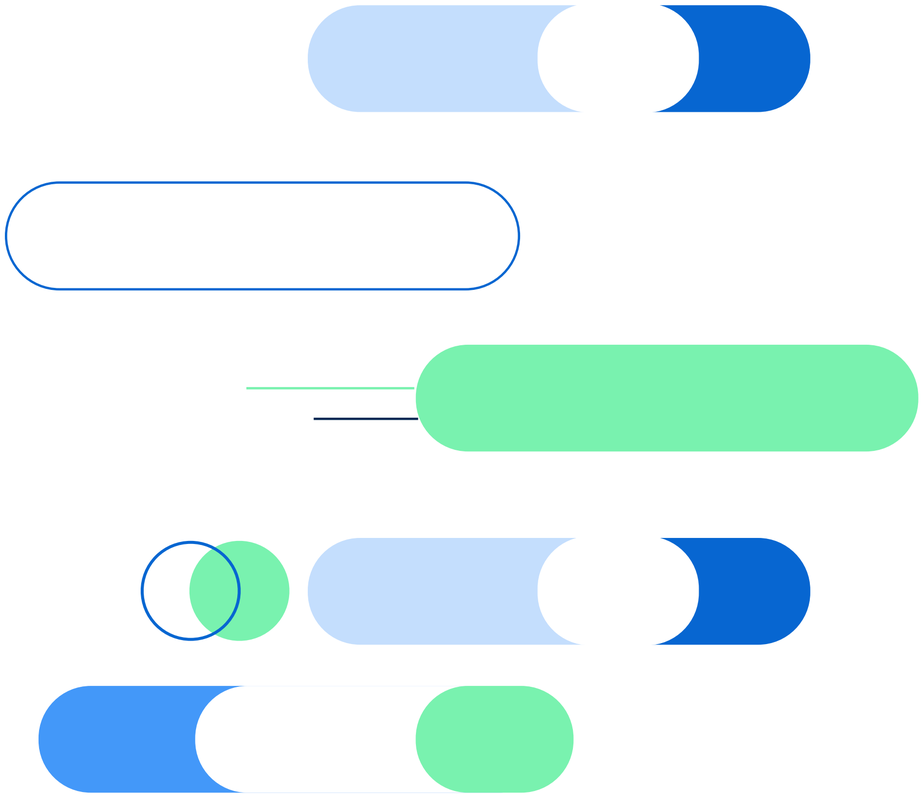
51% plan to use GenAI within the next year for chatbot interactions and **33%** for building audiences.

51% use GenAI to interact with customers, compared with **43%** on average.

53% plan to use the technology within the next year to generate images, **49%** to write copy and **49%** to create videos.

58% say their top goal for the technology is to enhance risk management and compliance measures, while **58%** aim to make processing large data sets more efficient.

Get the full report on **GenAI in marketing**.



03

Blockers and barriers: What life sciences and pharma need to overcome

To unlock the technology's full potential and effectively manage risks, GenAI integration needs expert knowledge and planning. As adoption expands, organizations across all sectors are facing similar challenges. But for the life sciences industry, some issues are particularly pressing.

Top implementation challenge

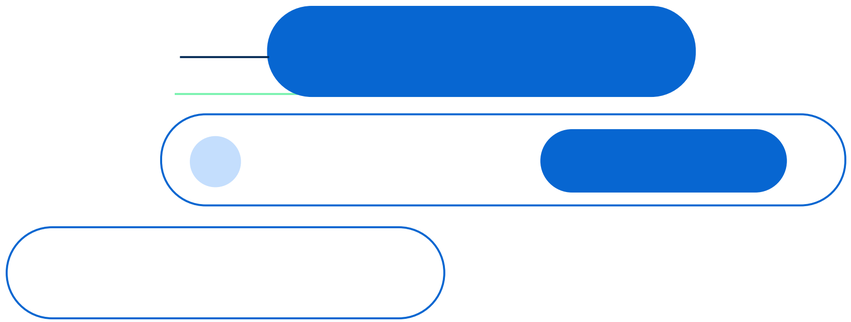
49% are finding it difficult to transition GenAI from the conceptual phase to a practical use, and the same number say using both public and proprietary data sets effectively is a concern.

Biggest worries

79% of life sciences leaders say they are uneasy about data privacy when it comes to using GenAI in their organization.

74% say the same for data security.

59% are anxious about governance.

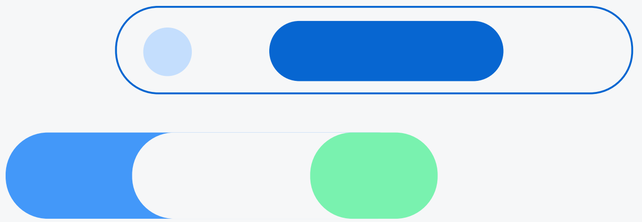


Technical hurdles

30% indicated that technological limitations are the greatest impediment to implementing effective governance and monitoring.

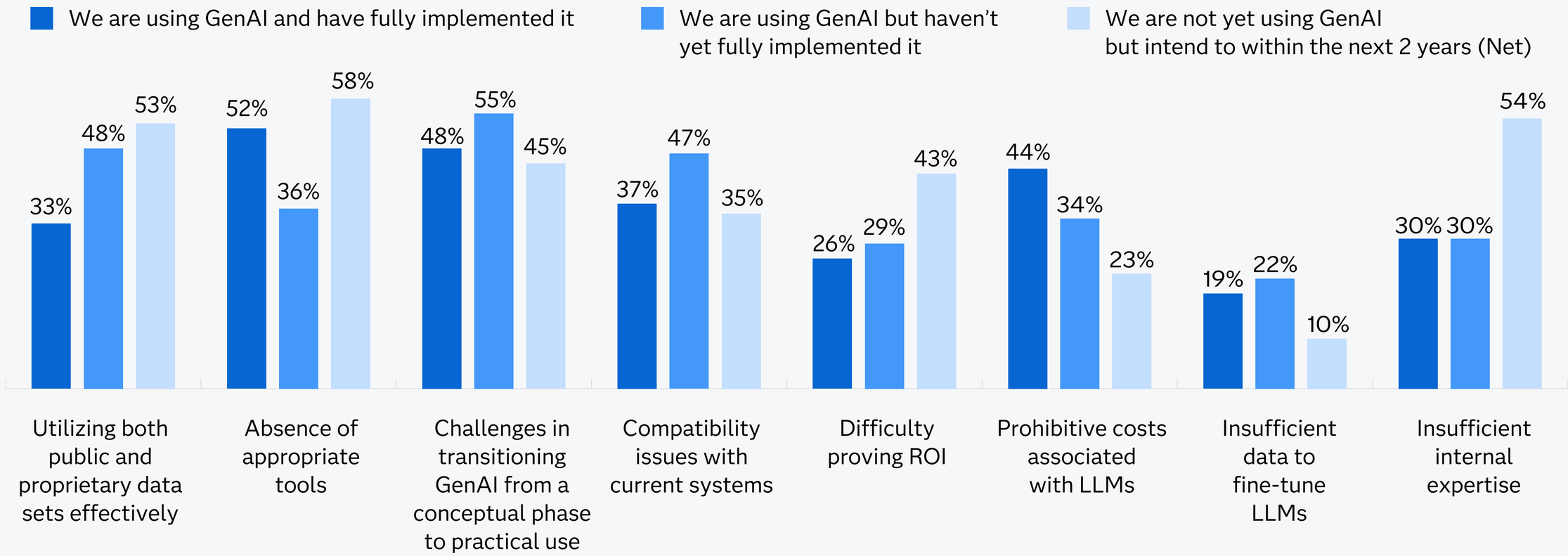
Funding issues

17% of life sciences leaders say insufficient funding is a significant challenge in implementing effective GenAI governance and monitoring, higher than any other sector.



Evolving obstacles

The greatest obstacles to GenAI adoption change for life sciences organizations as they progress along the implementation curve. Those planning GenAI adoption are more likely to struggle with a lack of the right tools and internal expertise. During the process of implementation and once organizations have established and integrated GenAI use cases, their greatest obstacles become cost, compatibility with current systems and transitioning from conceptual to practical.



04

Intelligent adoption: How life sciences and pharma organizations are integrating GenAI

Research shows that the industry is excited by GenAI's potential. Leaders are using it more regularly than in other sectors, and an overwhelming majority plan to invest in it the next financial year.

85% of life sciences organizations who plan to invest in GenAI in the next financial year.

92% of those investing who have a dedicated GenAI budget for next year.

But there is a worrying lack of effective budgeting for GenAI governance and the need to focus on developing strong data ethics procedures as well as developing trustworthy systems to manage privacy risks.

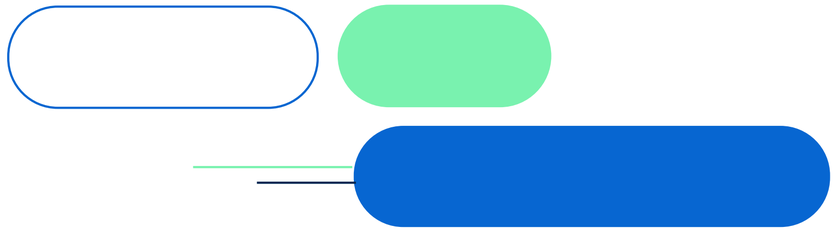
14% of life sciences leaders say their organizations' current AI governance framework is well-established and comprehensive.

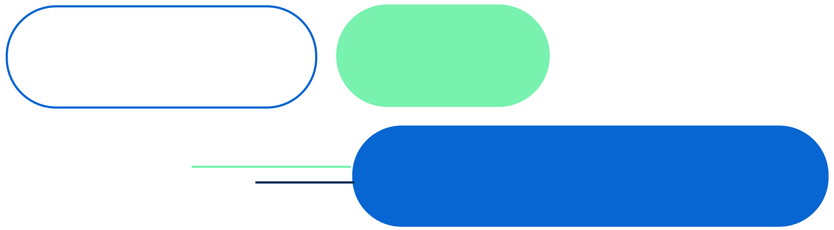
63% are still developing their framework for AI governance.

R&D departments in life sciences and pharma are slightly ahead of most industries.

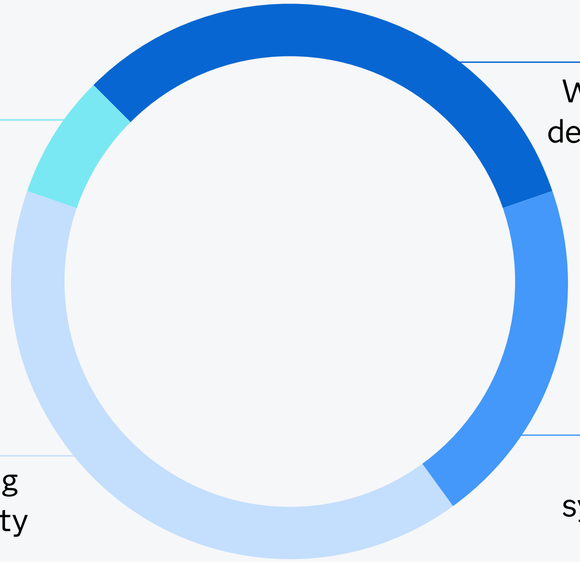
34% are using GenAI, compared with **22%** cross-sector average.

46% plan to start using GenAI.





Key takeaway: Life sciences organizations need to focus on finding credible solutions to ensure trustworthy and ethical data usage.

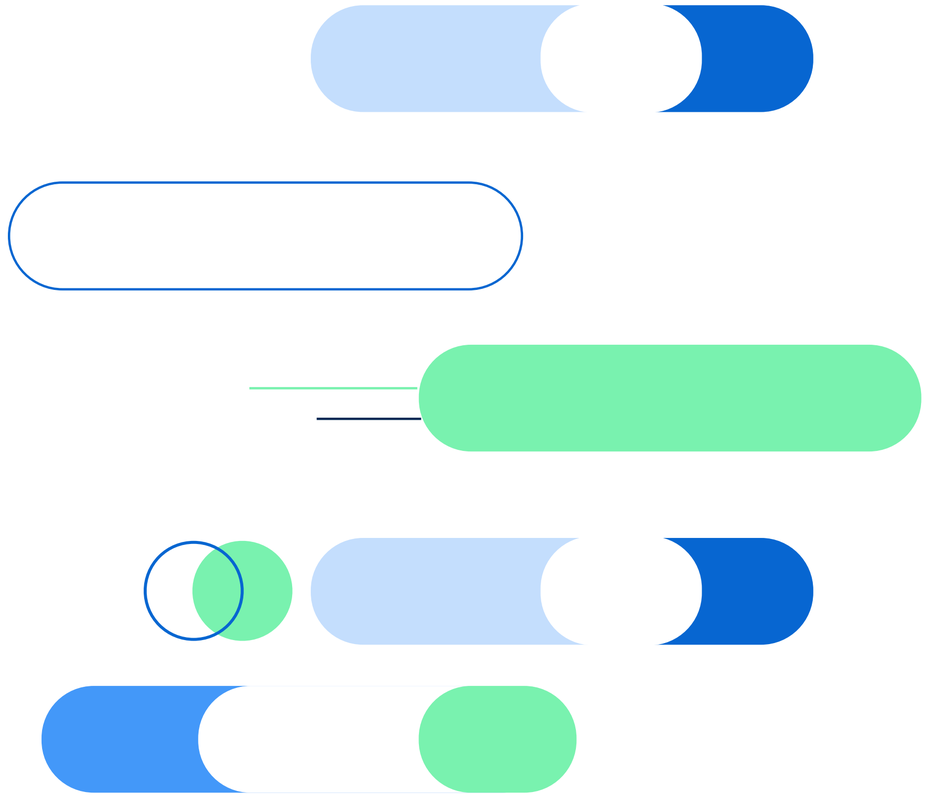


7%
We have systems in place to measure bias in LLMs

32%
We are considering developing in-house capabilities for bias detection

40%
We are considering buying a third-party solution for bias detection

20%
We do not have systems in place to measure bias in LLMs now



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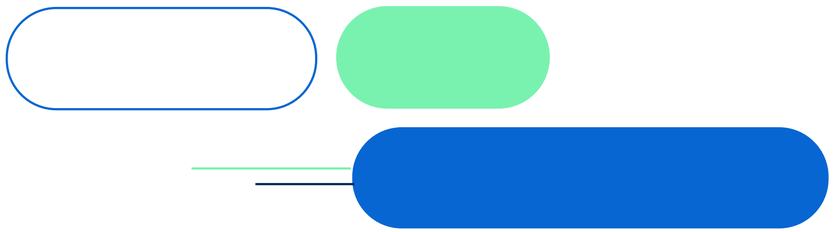
The future of GenAI in life sciences and pharma

The life sciences sector is looking toward a GenAI future with strong rates of organizational and personal use – with the budgets to back it up.

The technology's strengths in prediction and modeling suggest incredible potential to aid and accelerate R&D. Leaders are feeling positive about what GenAI can do, particularly when it comes to innovating and maintaining a competitive advantage.

64% say their organization expects GenAI to drive innovation and help them maintain a competitive edge in the market, compared with **57%** across all sectors.

57% expect the technology will mean they see measurable improvements in the accuracy of their predictive analytics.

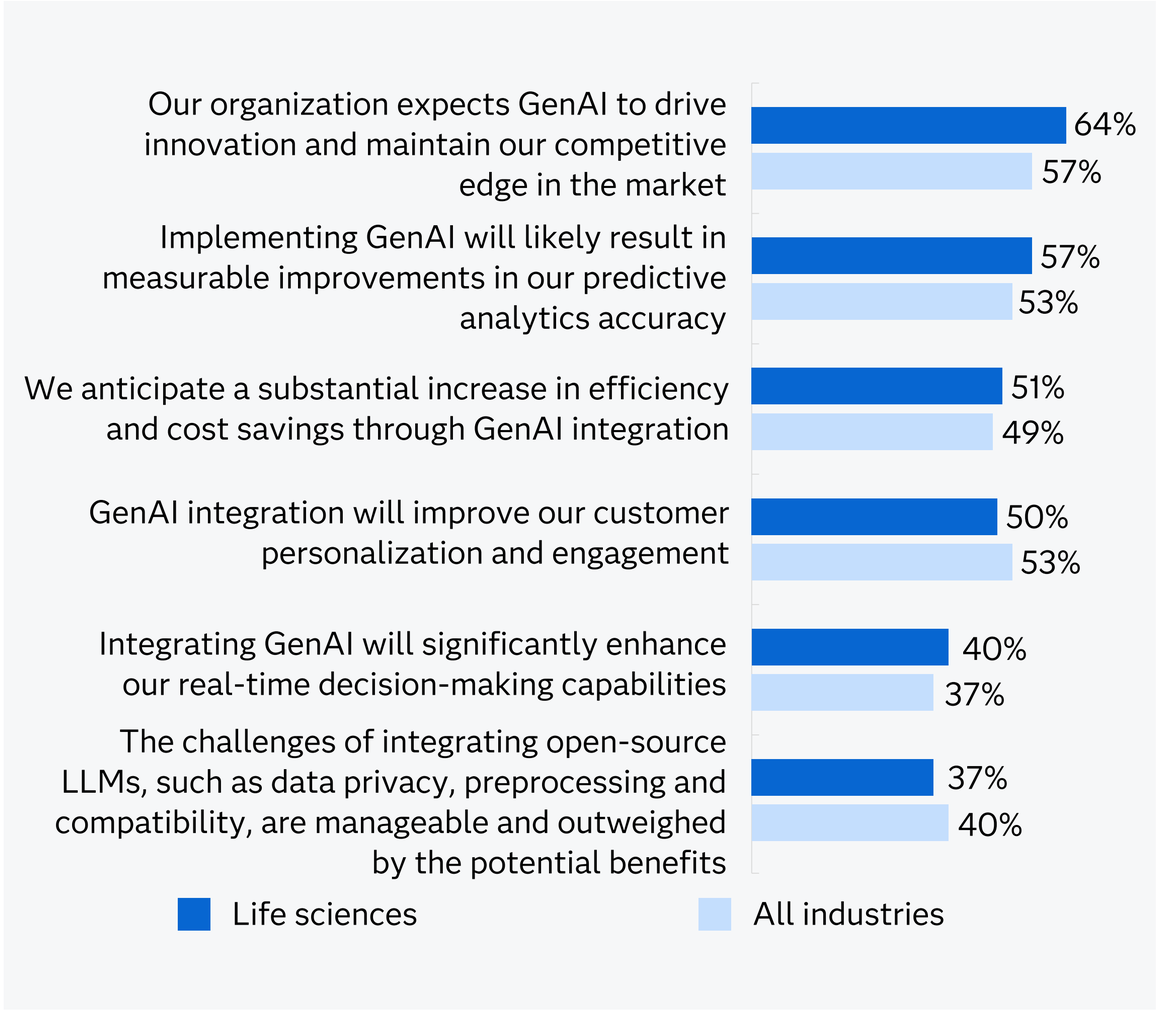


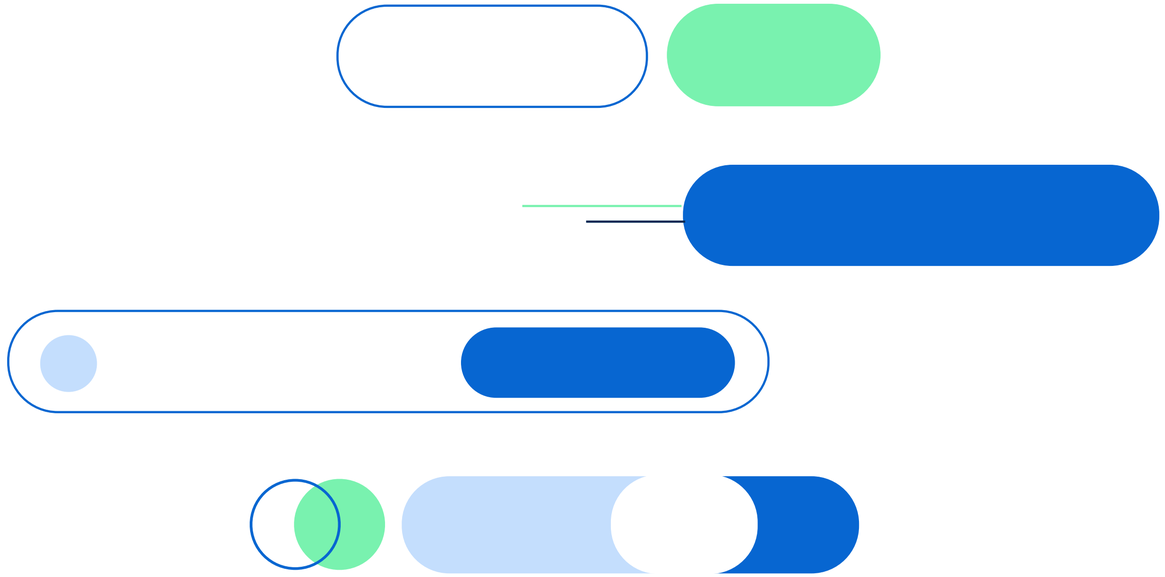
86% of life sciences organizations using GenAI who have seen increased efficiency in processing large data sets.

84% have seen improved risk management and compliance measures with GenAI.

79% have seen operational cost and time savings with the technology.

How did respondents feel about integrating GenAI into data analysis and operational processes?





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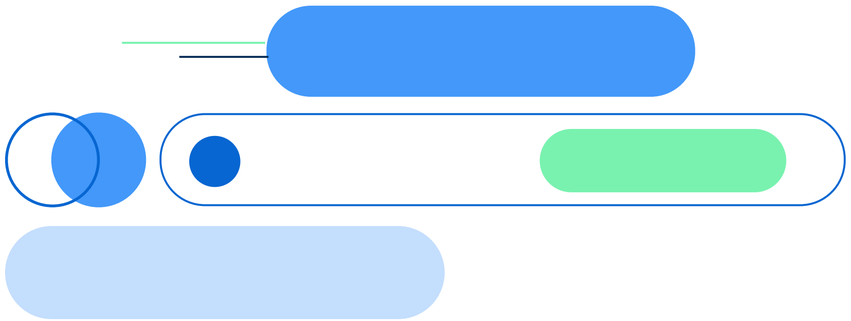
Next steps for life sciences and pharma

Life sciences companies are on the brink of a GenAI-driven transformation, and many are already making significant strides. As the industry continues to evolve, tech decision makers must ensure they:

- **Develop or update AI policies:** Establish comprehensive AI and GenAI policies tailored to the unique needs of life sciences and update existing IT policies to safely and compliantly integrate AI and GenAI best practices.
- **Engage and educate employees:** Clearly communicate the current and future applications of AI and GenAI within the organization, alongside the policies governing their use. Transparency and understanding are key.
- **Explore synthetic data use cases:** Investigate how synthetic data and technology, such as digital twins, can be capitalized on to supplement incomplete data sets or anonymize personally identifiable information (PII), adding value and enhancing data security.
- **Strengthen data governance:** The framework should outline the strategy, objectives and policies for managing enterprise-wide data across the organization. Additionally, this strategy should call out differences between data types and ensure that patient data and sensitive data are cared for with the utmost security.
- **Identify areas of the business to invest in first:** Through this extensive research, it's clear that some areas of a life sciences organization will be faster to adopt GenAI than others. Create a timeline of use and adoption, and empower the right teams to use the technology at the right time, phasing the technology across an enterprise over time.



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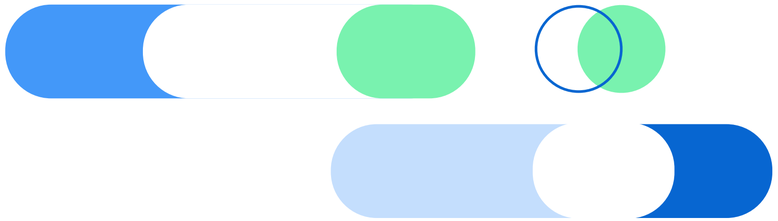
About this research

The survey was conducted by Coleman Parkes from February to April 2024 and targeted 1,600 decision makers in GenAI strategy or data analytics in organizations across key sectors globally. Survey respondents work across a range of industries: banking, insurance, government, life sciences, health care, telco, manufacturing, retail, energy and utilities and professional services. Their job titles include data manager, IT director and chief information officer. The smallest organizations we surveyed employed a workforce of 500 – 999 people, and the largest had more than 10,000 employees.

About Coleman Parkes

Coleman Parkes is a full-service B2B market research agency specializing in IT/technology studies, targeting senior decision makers in SMB to large enterprises across multiple sectors globally.

For more information, contact **Stephen@coleman-parkes.co.uk**.



About SAS

SAS is a global leader in data and AI. With SAS software and industry-specific solutions, organizations transform data into trusted decisions. SAS gives you THE POWER TO KNOW®.

At SAS, we empower life sciences leaders to harness their data to drive innovation, improve patient outcomes, and optimize operational efficiency. Our cloud-native data, analytics, and AI platform, SAS® Viya®, enables organizations to scale efficiently, boost productivity, and accelerate their pace of innovation. Additionally, our tailored health and life sciences solutions allow organizations to conduct their work within compliant, regulatory-supported, secure environments.

Learn more at **SAS life sciences analytics**.

Want to know more? Get the **full research report**:
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