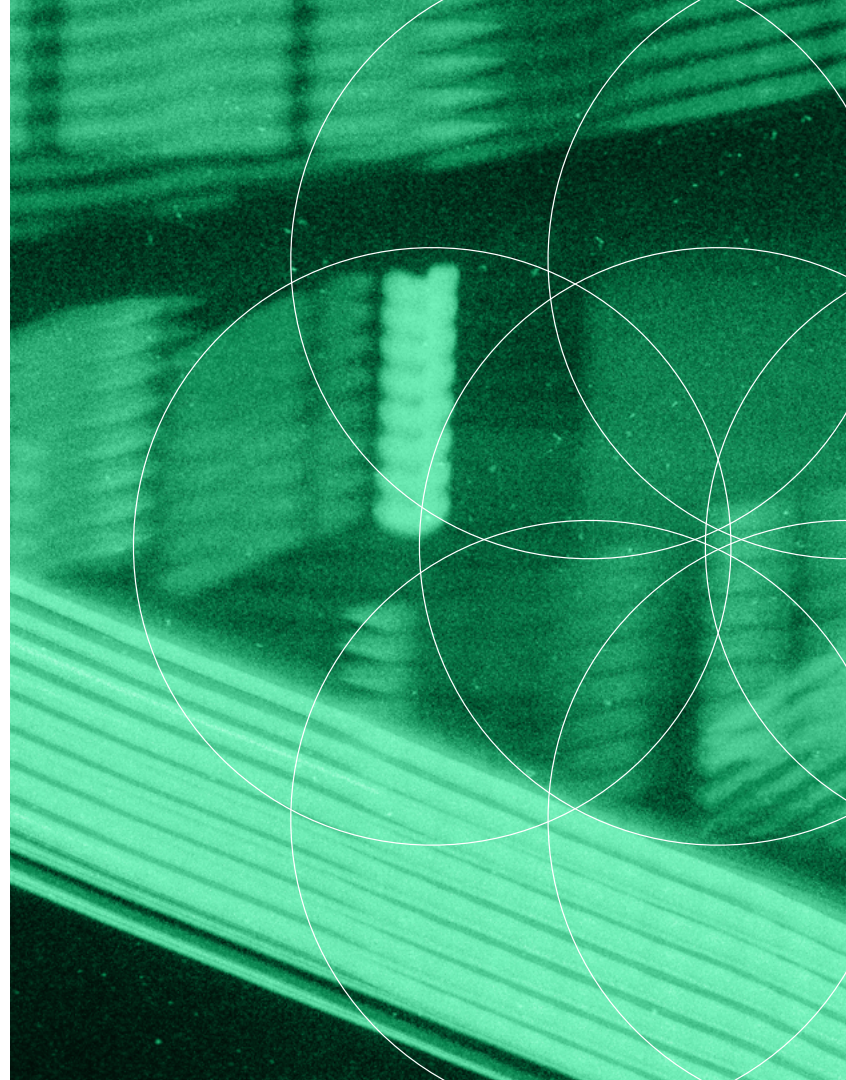


# Applications Of AI In Health And Life Sciences

Leaders Expect AI To Drive Transformational Change  
Across Patient Care And Business Operations

Get started →



## Overview

Artificial intelligence (AI) is critical to enterprises that want to build differentiated experiences and applications.<sup>1</sup> While companies across all verticals and maturity levels are finding opportunities to transform fundamental functions by implementing AI, healthcare lags behind most other industries.<sup>2</sup>

In November 2023, Salesforce commissioned Forrester to study the state of AI in health and life sciences (HLS). After surveying decision-makers at the director level and above in CRM, data, analytics, and business intelligence at HLS companies in the United States, we found that senior leaders across the board are bullish on AI. While they expect AI to drive transformational change across their organizations, many see barriers to widespread AI adoption. To overcome these challenges, finding long-term partners that can support growth is essential.

## Key Findings



AI investment is increasing, and vendors are playing an important role. But HLS companies face many challenges and partnering with a trusted vendor with AI expertise is an important step.



AI partners must meet diverse requirements. HLS leaders expect AI to impact use cases that span from customer service and member engagement to supply chain management and risk management.



Overwhelmingly, respondents believe AI offers the opportunity to drive value in both patient-facing and operational capacities, with 82% stating it will drive more efficiencies — a top focus area.

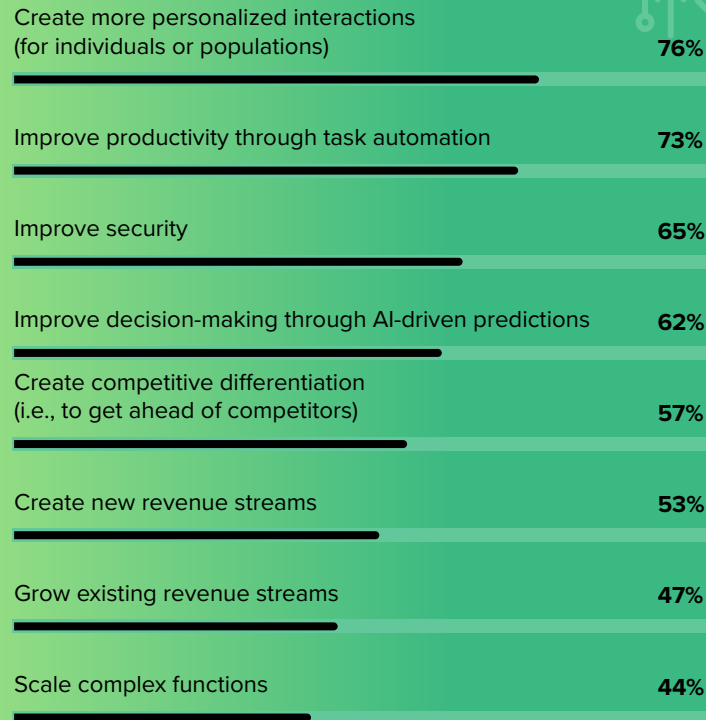
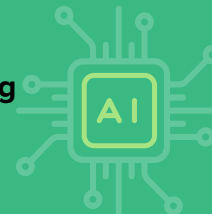
## HLS Senior Leaders Believe AI Adoption Will Define Success In The Future

HLS senior leaders are bullish on AI, both for themselves personally and for their organizations. Eighty-six percent of respondents believe effectively leveraging tech, data, and AI will define success over the next five years, with 78% stating that embracing AI is important for their career development.

Respondents expect AI to create value in many ways. The most common reason organizations are interested in AI is to create more personalized interactions, but nearly three-fourths of respondents rank automating tasks to improve productivity as a top driver and nearly two-thirds say the same for improving security.

Identifying high-level business goals for AI investment will provide an important framework to navigate the challenges that invariably lie ahead. Organizations that implement AI more successfully will stand to generate a competitive advantage.

## “What business value, if any, is driving interest in AI at your organization?”



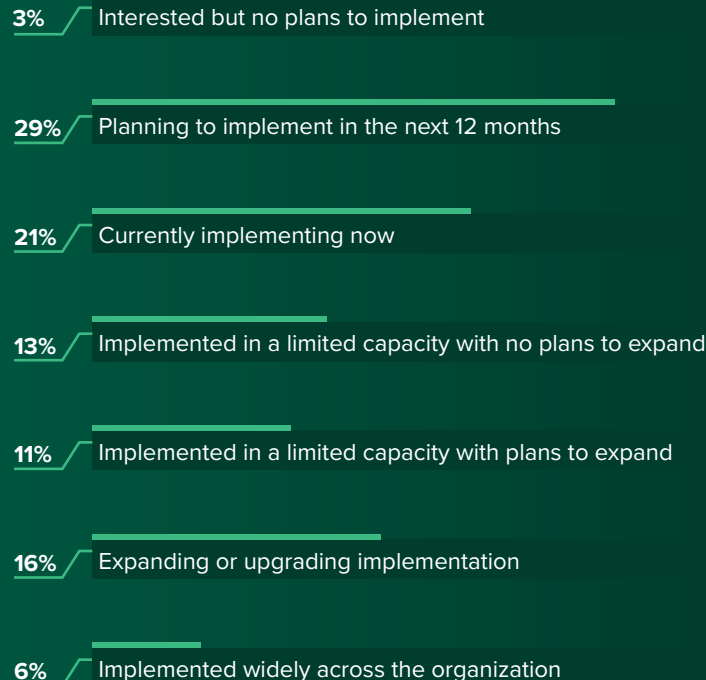
## Most Companies Are In The Early Stages Of AI Implementation

Though HLS senior leaders recognize the vast potential AI offers, most reported their organizations are in the early stages of adoption. This means organizational leaders face important decisions that will directly affect future success.

But what defines successful AI adoption? AI presents unique risks, such as data breaches, regulatory fines, or lack of trust, that leaders must understand and manage through strong governance to prevent serious damage to the business. Working with the right AI vendor is an excellent opportunity to manage these risks and protect ROI.

Effective AI governance is the key to mitigating the risks of AI while advancing business goals.<sup>3</sup> Forrester defines AI governance as practices that business leaders adopt to incorporate purpose, culture, action, and assessment to ensure AI delivers desired business outcomes, is responsibly used, and complies with applicable regulations.

## Investment Plans For AI



## Momentum Around AI Adoption In HLS Is Significant And Growing

When asked about the speed of adoption, most respondents note that their organizations are moving at the same pace as their industry peers. But there is more to the story: 60% said their company is not moving quickly enough to adopt AI. And each one of the respondents that said this also report that their company is moving more slowly or at the same pace as its peers.

While accelerating implementation may be important, mitigating the inherent risks of AI adoption is critical. Enterprisewide AI strategies are important tools to do both. They allow organizations to collaborate across functions to share opportunities and overcome barriers more quickly and effectively. This will reduce the risk of such things as increased technical debt, disparate adoption creating technical siloes, and poor governance.

## Perceived Speed Of Adoption Relative To Industry Peers

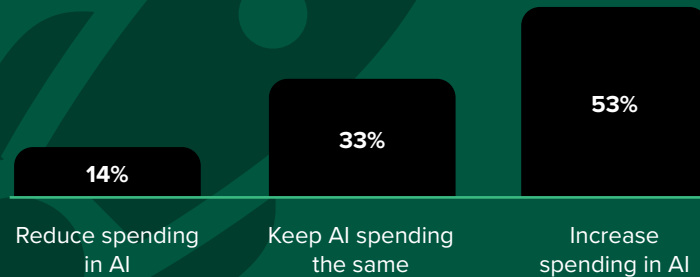


## AI Investment Is Increasing And Vendors Are Playing An Important Role

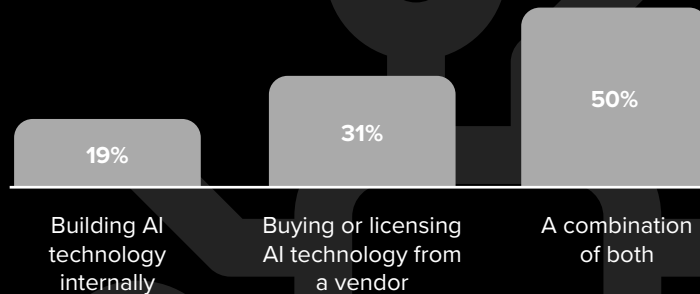
In a signal that momentum of AI adoption is growing, more than half of respondents report their organization is planning to increase AI investment. But with that investment comes the important decision of whether to build, buy, or both. Eighty-one percent of surveyed HLS senior leaders say their organization is working with a technology partner as part of its AI strategy.

Deploying AI is hard: Companies face a collection of challenges that must be overcome, and partnering with a trusted vendor can go a long way to mitigating many of these challenges — but choosing the right partner is important.

### Plans For AI Spending



### Approach To Implementing AI



## The Biggest Threats To Successful Adoption Are Poor Data, Privacy Concerns, And Lack Of Internal Skills

HLS senior leaders recognize that data is critical to a successful AI adoption, reporting that inadequate data is the most significant barrier they anticipate their organizations will face. But inadequate data can come in many forms, including insufficient availability, integrity, quality, or cleanliness. Each can prevent successful adoption on its own. This again points to the importance of establishing an enterprisewide data governance strategy.

But data problems are far from the only challenges companies face. Respondents also report their organizations face other major hurdles, including ethical and privacy concerns, lack of internal skills and expertise, and the risks of biased or inaccurate output. With these in mind, it's no surprise that 56% agree their organization needs help from an outside partner to implement AI.

## Barriers To AI Adoption



### ● Large and Very Large Barrier

Inadequate data  
**64%** (e.g., insufficient availability, integrity, quality, or cleanliness)

**61%** Ethical and privacy concerns

**57%** Lack of internal skills and expertise

**54%** Risk of inherent bias or inaccuracy of AI output

**54%** Immature technology

**50%** Uncertain ROI

**49%** Lack of defined budget

**49%** Unsure how to implement AI solution

## Most Companies Are Not Ready For Widespread Adoption

AI implementation is not the same as effective AI implementation. Creating a strong foundation to effectively scale AI applications is key, and respondents indicate their departments have many areas that need to improve.

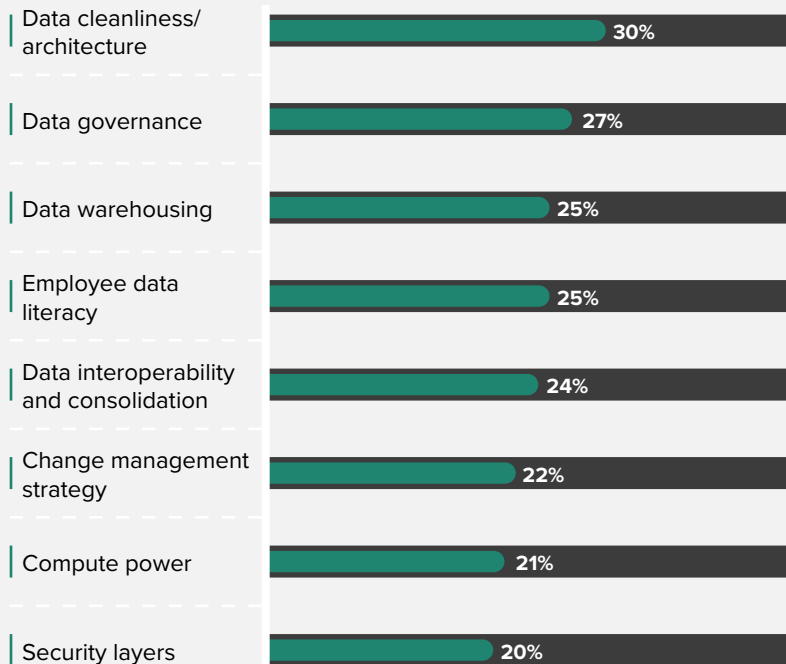
Measuring across eight important metrics (even the area in which companies are the readiest, which is data cleanliness and architecture) only 30% of surveyed HLS senior leaders report their department is completely ready, and only 27% have the right data governance in place.

But the area in which companies are the least prepared is security, which is arguably the most important of all. Given the complex nature of healthcare privacy regulations, partnering with an AI vendor that provides the necessary security will be an important decision.

## Departmental Readiness



● Completely ready





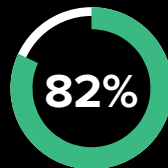
## AI Can Improve Both Front-And Back-Office Operations

Overwhelmingly, respondents believe AI offers the opportunity to drive value in both patient-facing and operational capacities. While over 80% believe organizations that effectively adopt AI will be more efficient and agile, the majority also anticipate it will improve not just the patient experience (79%) but also patient outcomes (75%).

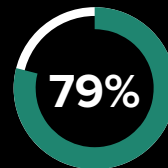
## Benefits Of AI Adoption



“Organizations that effectively adopt AI will ...”



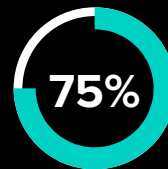
Be more efficient.



Improve patient/member communications and experiences.



Be more agile.



Improve patient/member outcomes.

Base: 518 decision-makers at the director level or higher with responsibility for CRM or analytics strategy at healthcare companies

Note: Showing top 4 responses

Source: A commissioned study conducted by Forrester Consulting on behalf of Salesforce, December 2023

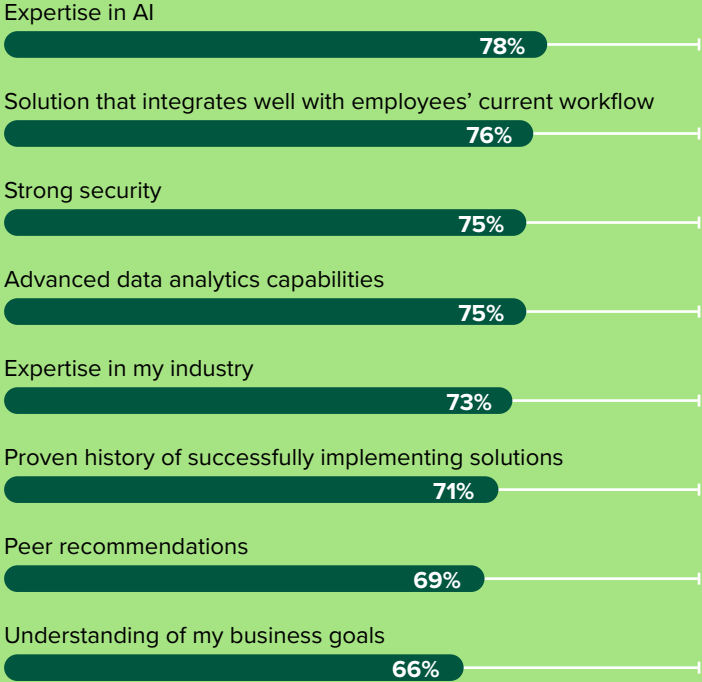
# AI Platforms Must Be Advanced, Convenient, And Secure

Selecting the right technology partners for AI programs is essential, and while over half of respondents rate all criteria as critical or important, the top-five criteria are clustered within five percentage points.

While the most important selection criterion is AI expertise, solutions must also integrate well into employees' existing workflows. No doubt, the past experiences of lengthy electronic health records (EHR) implementations are top of mind. New technologies must go beyond meeting regulatory requirements and provide value that improves experiences for employees and patients alike. They must also have strong security, which is more table stakes, and advanced analytics capabilities.

While cost is important for 61%, it's near the bottom of the list. As implementation expands, costs must be weighed against use cases that will return operational value.

# Selection Criteria For Third-Party Technology Platform That Helps With AI Implementation And Adoption



Base: 518 decision-makers at the director level or higher with responsibility for CRM or analytics strategy at healthcare companies  
 Note: Showing top 8 responses  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Salesforce, December 2023

## AI Must Support Diverse Use Cases In HLS

Looking at the top use cases across the four major HLS subverticals (payer, provider, pharmaceutical, and medical technology) reveals the diverse requirements AI partners must meet. From customer service and member engagement to back-office and operational applications, AI partners must offer versatile solutions that work in many different environments.

HLS senior leaders would be well served to understand and clearly define which use cases are most important to their organizations as they invest and define their AI roadmap. Considering that 50% report ROI as a large or very large barrier to adoption, tying milestones and metrics for success to clearly defined outcomes will ensure program success and acceptable financial returns. This means that vendor partners that can provide flexible business intelligence (BI) platforms that can accommodate changing AI ecosystems will be even more important.



**86%**

of respondents believe the abilities to effectively leverage tech, data, and AI will define success over the next five years.

## Top Subvertical Use Cases

(Showing “Large impact” or “Transformational impact”)

Payer/Insurer		Provider*		Pharmaceutical <sup>†</sup>		Medical Technology <sup>‡</sup>	
75%	Risk management	79%	Customer service	68%	Supply chain management	69%	Improve regulatory compliance
73%	Member engagement or satisfaction	67%	Risk management	66%	Clinical trials	67%	Improve supply chain
72%	Shop and enroll	66%	Appointment scheduling	62%	Optimize order fulfilment	63%	Improve R&D
69%	Supply chain management	65%	Internet of medical things	59%	Target identification and prioritization	56%	Model innovation investment and risks
67%	Forecasting medical cost of claims	63%	Predicting patient outcomes	58%	Literature review	51%	Sales targeting and strategy

Base: 134 decision-makers at the director level or higher with responsibility for CRM or analytics strategy at payer/health insurer companies

\*Base: 139 decision-makers at the director level or higher with responsibility for CRM or analytics strategy at provider companies

<sup>†</sup>Base: 125 decision-makers at the director level or higher with responsibility for CRM or analytics strategy at pharmaceutical and life science companies

<sup>‡</sup>Base: 120 decision-makers at the director level or higher with responsibility for CRM or analytics strategy at medical technology companies

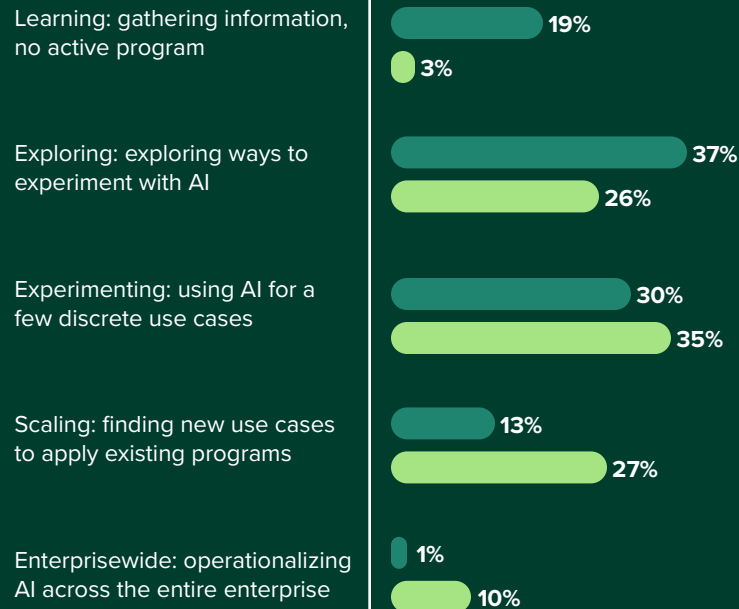
## The Breadth Of AI Use Is Expected To Grow Across Companies

Though most companies are in the early stages of adoption (whether gathering information, exploring ways to experiment with AI, or experimenting with using AI in a few discrete use cases), leaders expect adoption to broaden quickly over the coming 18 months.

Though AI is not new, HLS companies are responding to commercially available options advancing exponentially in recent years. With this new enthusiasm comes great expectations. But for companies to achieve their goals, they will need help. Success will likely be defined by how well a company partners with outside vendors.

## “Where would you chart the breadth of your department’s AI adoption, both now and expected in 18 months?”

● Today ● 18 months



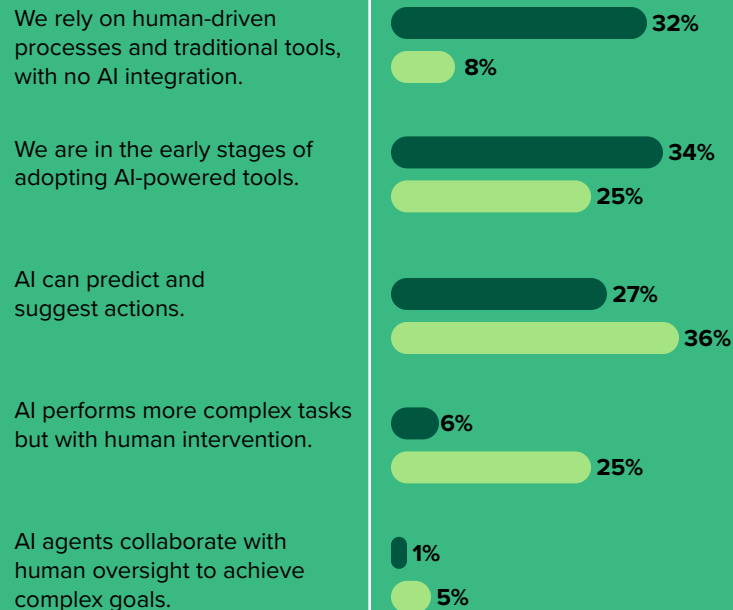
## HLS Senior Leaders Expect More Complex AI Implementation Very Soon

Surveyed HLS senior leaders expect the ways their organizations use AI to become more complex very quickly. Given the anticipated complexity, strong governance of data and AI in general will play critical roles in successful adoption.

Rooting AI programs in clearly defined use cases from the beginning through an enterprisewide strategy will ensure organizations can properly manage and support adoption efforts, resulting in meeting milestones in a timely manner.

## “Where would you chart the complexity of your department’s AI adoption, both now and expected in 18 months?”

● Today ● 18 months



## Conclusion

AI offers many benefits for HLS companies. Building proper governance and implementation strategies are key to success. This study found that:

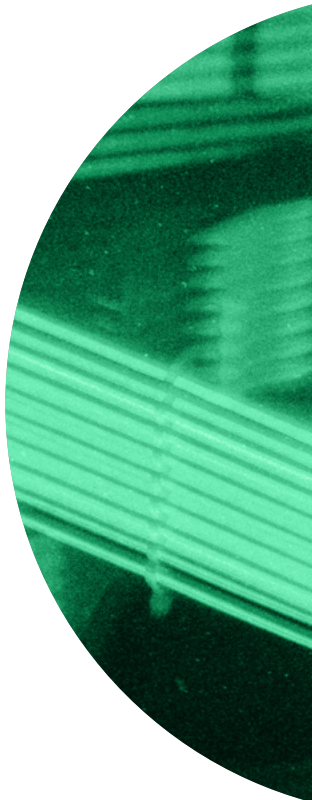
- HLS senior leaders view AI as an essential component to business growth and differentiation. Organizational leaders are engaged and searching for opportunities to leverage AI.
- AI is expected to permeate organizations at both enterprise- and customer-facing levels in diverse use cases — but most HLS organizations are not ready, especially regarding data preparedness.
- To reach expectations and goals, selective long-term partnerships with vendors that have extensive capabilities and flexibility in applications is imperative. Implementing and using AI is not easy. Finding the right partner will alleviate potential pain points and yield significant benefits.

## Endnotes

<sup>1</sup> Source: "[Enterprises Must Invest In AI Platforms To Empower Multirole AI Teams](#)," Forrester Research, Inc., August 26, 2022.

<sup>2</sup> Source: "[The State Of Future Fit In Healthcare, 2023](#)," Forrester Research, Inc., July 11, 2023.

<sup>3</sup> Source: "[Get AI Governance Just Right](#)," Forrester Research, Inc., July 5, 2023.



## Resources

### Related Forrester Research:

[“Tech-Led Healthcare Providers Can Transform The Clinician Experience,”](#) Forrester Research, Inc., September 14, 2023.

[“Enterprises Must Invest In AI Platforms To Empower Multirole AI Teams,”](#) Forrester Research, Inc., August 26, 2022.

[“Get AI Governance Just Right,”](#) Forrester Research, Inc., July 5, 2023.

[“The State Of Future Fit In Healthcare, 2023,”](#) Forrester Research, Inc., July 11, 2023.

### Related Resources

Shannon Germain, [“Healthcare Ranks Eighth Out Of 10 Industries In Future Fitness,”](#) Forrester Blogs.

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Forrester’s [Consumer & Digital](#)  
research group



## Methodology

This Opportunity Snapshot was commissioned by Salesforce. To create this profile, Forrester Consulting supplemented this research with custom survey questions asked of decision-makers at the director level or higher with responsibility for CRM or analytics strategy at health and life science companies. The custom survey began and was completed in December 2023.

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## Demographics

### COMPANY LOCATION

United States	100%
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### NUMBER OF EMPLOYEES

100 to 499 employees	6%
500 to 999 employees	19%
1,000 to 4,999 employees	27%
5,000 to 9,999 employees	20%
10,000 to 19,999 employees	14%
20,000+ employees	12%

### ORGANIZATION WITHIN HEALTHCARE

Provider	27%
Payer/insurer	26%
Pharmaceutical and life sciences	24%
Medical technology	23%

### RESPONDENTS LEVEL

C-level executive	14%
Vice president	39%
Director	47%

Note: Percentages may not total 100 due to rounding.



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