



# The ROI of AI

in healthcare and life sciences



How AI agents  
are helping improve  
patient outcomes.

# Methodology

This report is based on a survey conducted by Google Cloud and National Research Group.

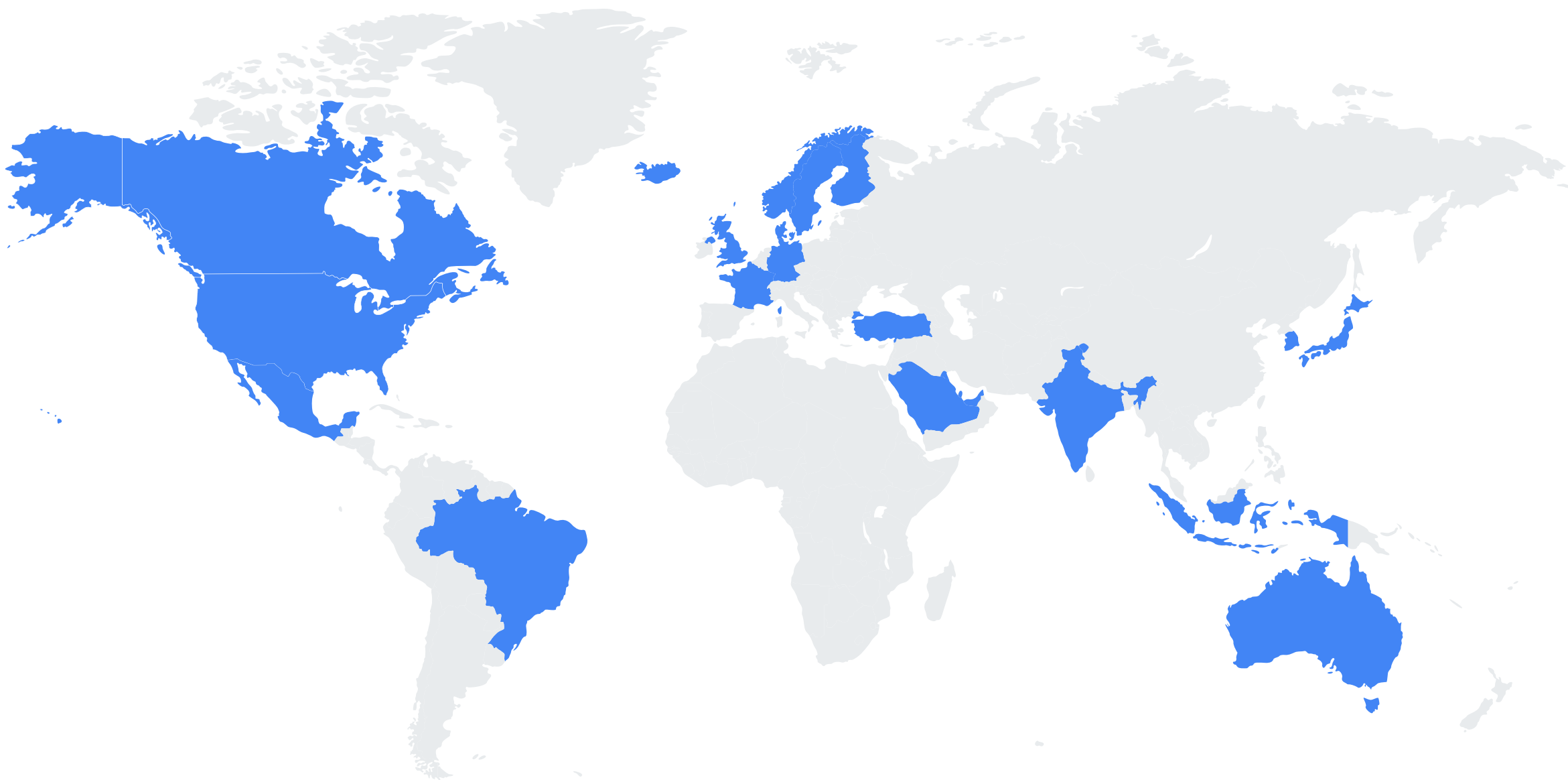
605 leaders of global healthcare and life sciences companies:

- 176 CEO, CIO
- 140 CFO, CMO, CTO
- 179 CISO, CDO, CSO, COO, Director of Digital Strategy, VP of IT
- 119 IT Director, Head of Innovation, Director of Customer Experience/Service, Marketing Director

Over  
**100**  
full-time employees

Over  
**\$10M**  
annual revenue

Fieldwork conducted April 18–June 3, 2025\*



|         |     |         |    |             |    |                |    |          |   |
|---------|-----|---------|----|-------------|----|----------------|----|----------|---|
| US      | 241 | France  | 28 | Australia   | 23 | Brazil         | 49 | Kuwait** | 1 |
| Canada  | 31  | Nordics | 30 | South Korea | 18 | Indonesia      | 17 | UAE**    | 5 |
| UK      | 29  | Japan   | 15 | Taiwan      | 12 | Saudi Arabia** | 7  | Qatar**  | 1 |
| Germany | 24  | India   | 18 | Mexico      | 54 | Turkey**       | 2  |          |   |

\* An additional augment sample among those in life sciences was conducted September 10–11  
\*\* Markets shown in aggregate as MEA region

# Executive summary

Our second annual survey of senior leaders in healthcare and life sciences reveals continued ROI from their gen AI initiatives, along with a new focus on agentic AI projects.

Historically, agentic systems have been difficult to implement, requiring laborious, rule-based programming or highly specific training of machine learning models. Gen AI changes that.

In fact, almost half of executives report their organizations are already leveraging AI agents. The use cases span a spectrum of complexity—

from single-task agents to multi-agent systems that can take actions on your behalf and under your control. And while this technology is already helping people get more done, many companies are still in the early phases of agentic maturity.

For the healthcare and life sciences industry this marks a clear acceleration from planning to action, and using AI to drive growth, reduce operational costs, and mitigate critical risks.



**Aashima Gupta**

Global Director, Healthcare  
Strategy & Solutions, Google Cloud



**Shweta Maniar**

Global Director, Life Sciences  
Strategy & Solutions, Google Cloud



# 44%

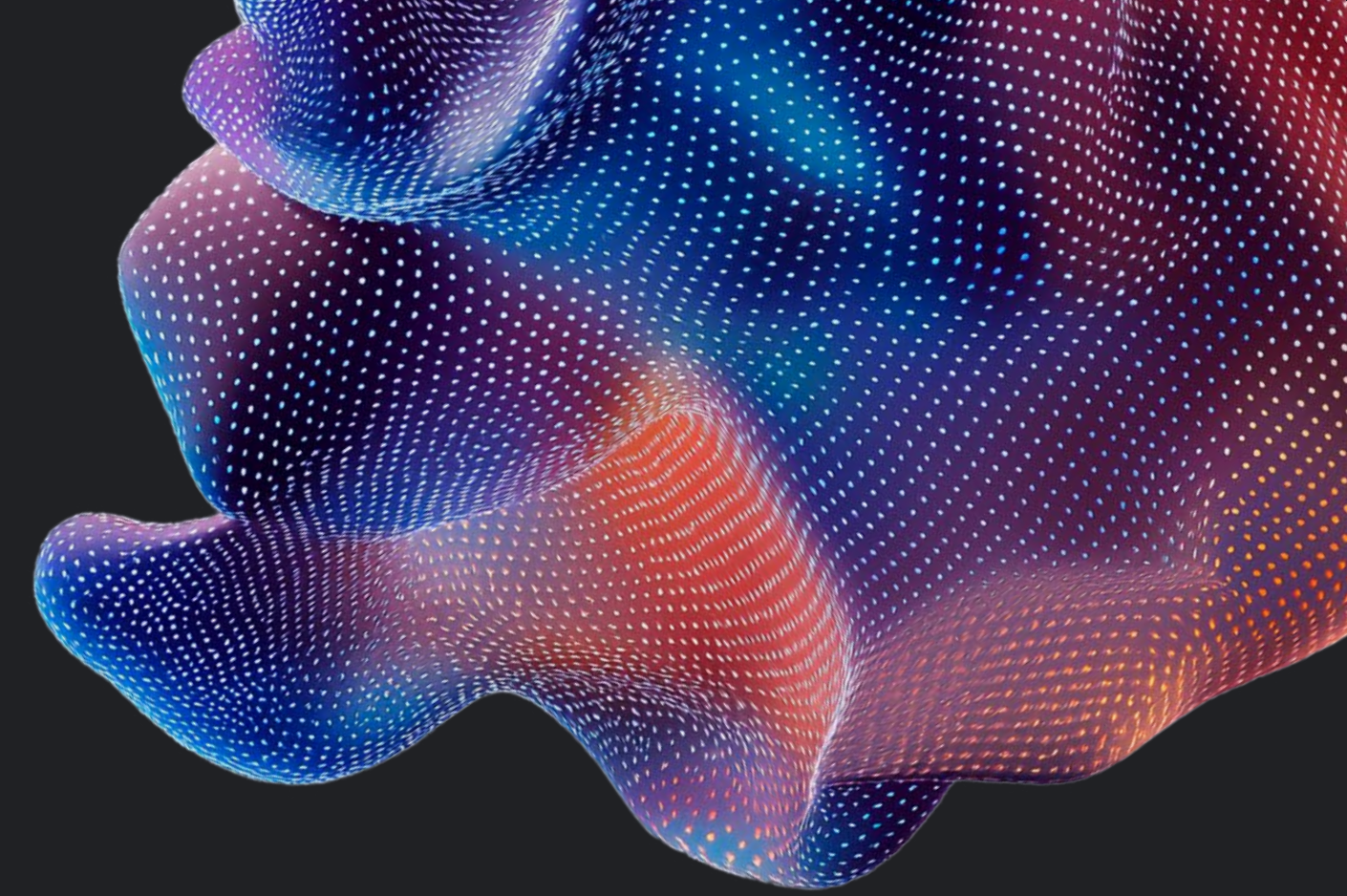
of healthcare and life sciences executives report their organizations are leveraging AI agents<sup>1</sup>



\* Unless otherwise noted, all statistics in this report are derived from the healthcare and life sciences executive survey and only include those who are using gen AI in production.

<sup>1</sup> HCLS executives: n=605; Question: (1) How are AI agents leveraged across the enterprise? (2) How many AI agents does your company currently have deployed in production across your organization?

# Key insights in healthcare and life sciences



44%

of executives report their organization has adopted AI agents in production<sup>2</sup>



46%

of executives report their organization is allocating over 50% of their future AI budget to AI agents<sup>3</sup>



#1

concern for executives is data privacy and security when evaluating LLM providers<sup>4</sup>

<sup>2</sup> HCLS executives: n=605; Question: (1) How are AI agents leveraged across the enterprise? (2) How many AI agents does your company currently have deployed in production across your organization?

<sup>3</sup> HCLS executives: n=578; Question: What % of your future AI budget is being allocated to agents?

<sup>4</sup> HCLS executives: n=605; Question: Which of the following factors are MOST important to your company when considering LLM providers?

# Table of contents



The agentic shift 06

5 proven areas where AI is delivering ROI 25

Invest in the AI-ready future 38

Your next steps 46





01

# The agentic shift

# AI agents have arrived

The breadth of agentic AI adoption in the healthcare and life sciences industry is striking.

Implementations range from gen AI-powered chatbots that answer questions, to single-task agents focused on a specific function like creative assistance, to sophisticated multi-agent systems that combine advanced AI models with access to tools so they can take actions on your behalf, under your control.



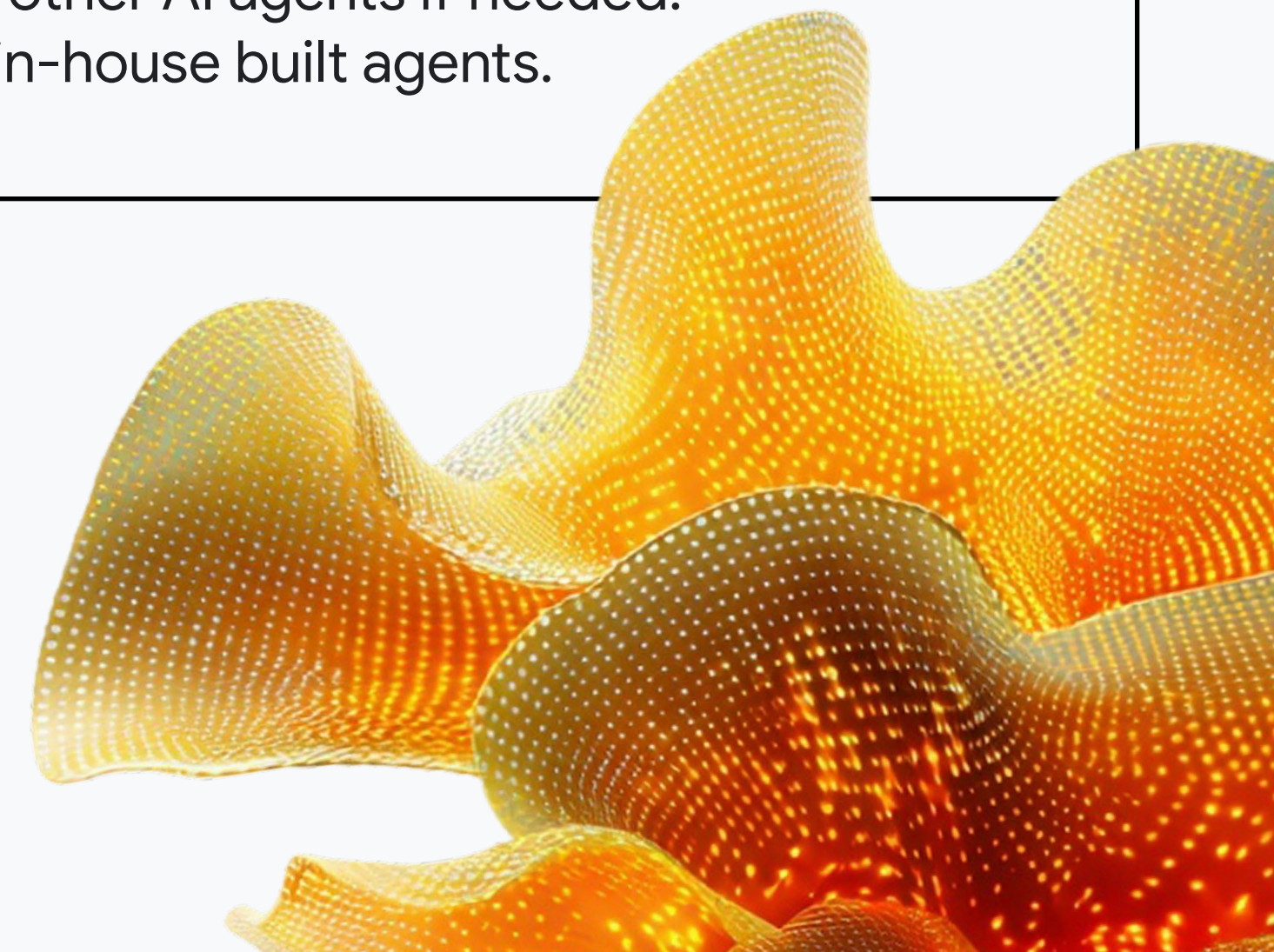
# 44%

of healthcare and life sciences executives whose organizations use gen AI also have adopted AI agents in production<sup>5</sup>

## Definition of AI agents used in the survey

**AI agents** are specialized LLMs that have specific roles, context, and objectives to independently plan, reason, and perform tasks with access to data function call APIs and can interact with other AI agents if needed. These can be pre-built or in-house built agents.

<sup>5</sup> HCLS executives: n=605; Question: (1) How are AI agents leveraged across the enterprise? (2) How many AI agents does your company currently have deployed in production across your organization?



# Levels of AI agent maturity

Level 1

## Simple tasks

Chatbots

Information retrieval

Image generation

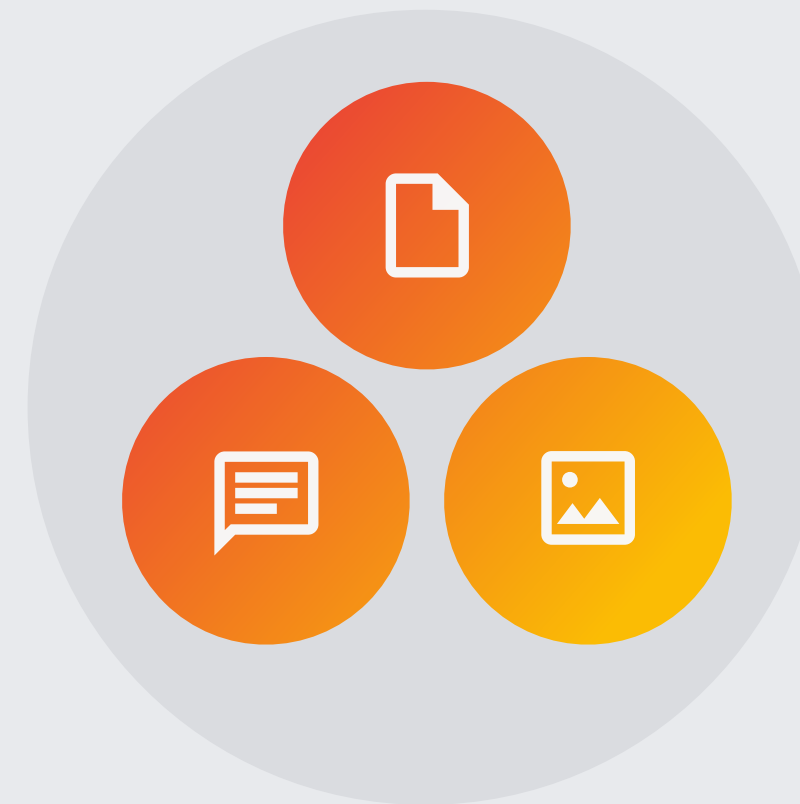


Level 2

## AI agent applications

Customer service AI agents

Creative agents

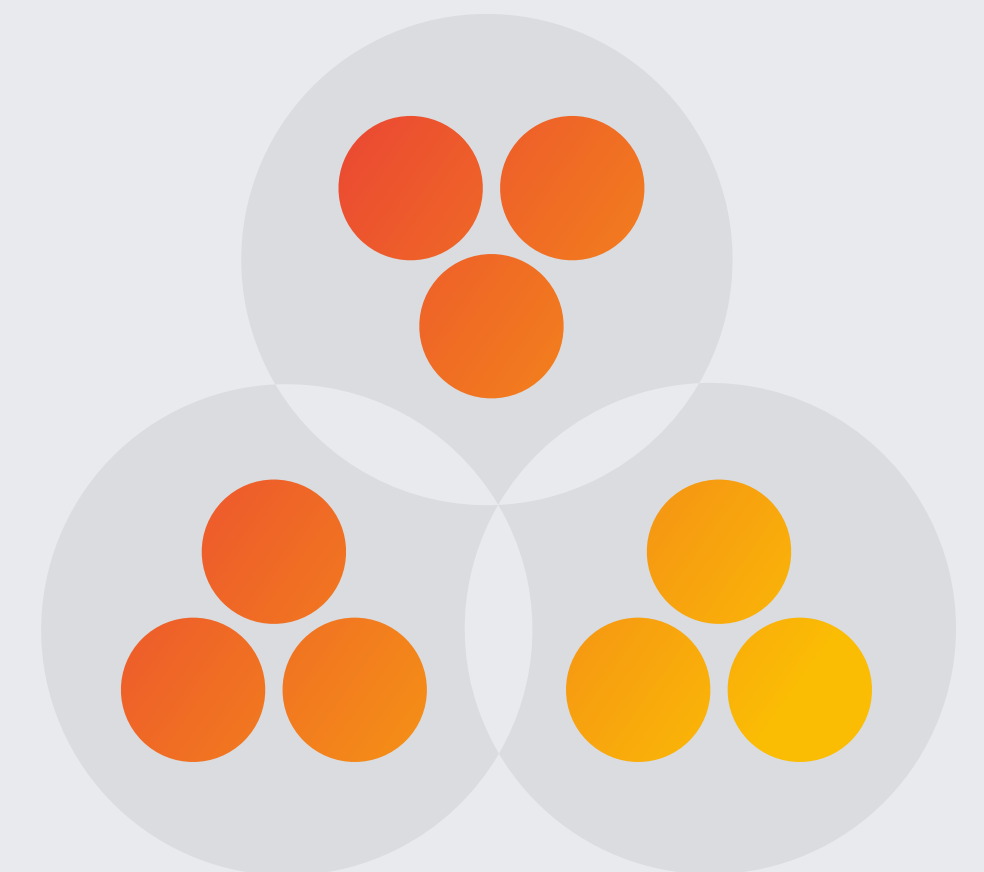


Level 3

## Multi-agent workflows

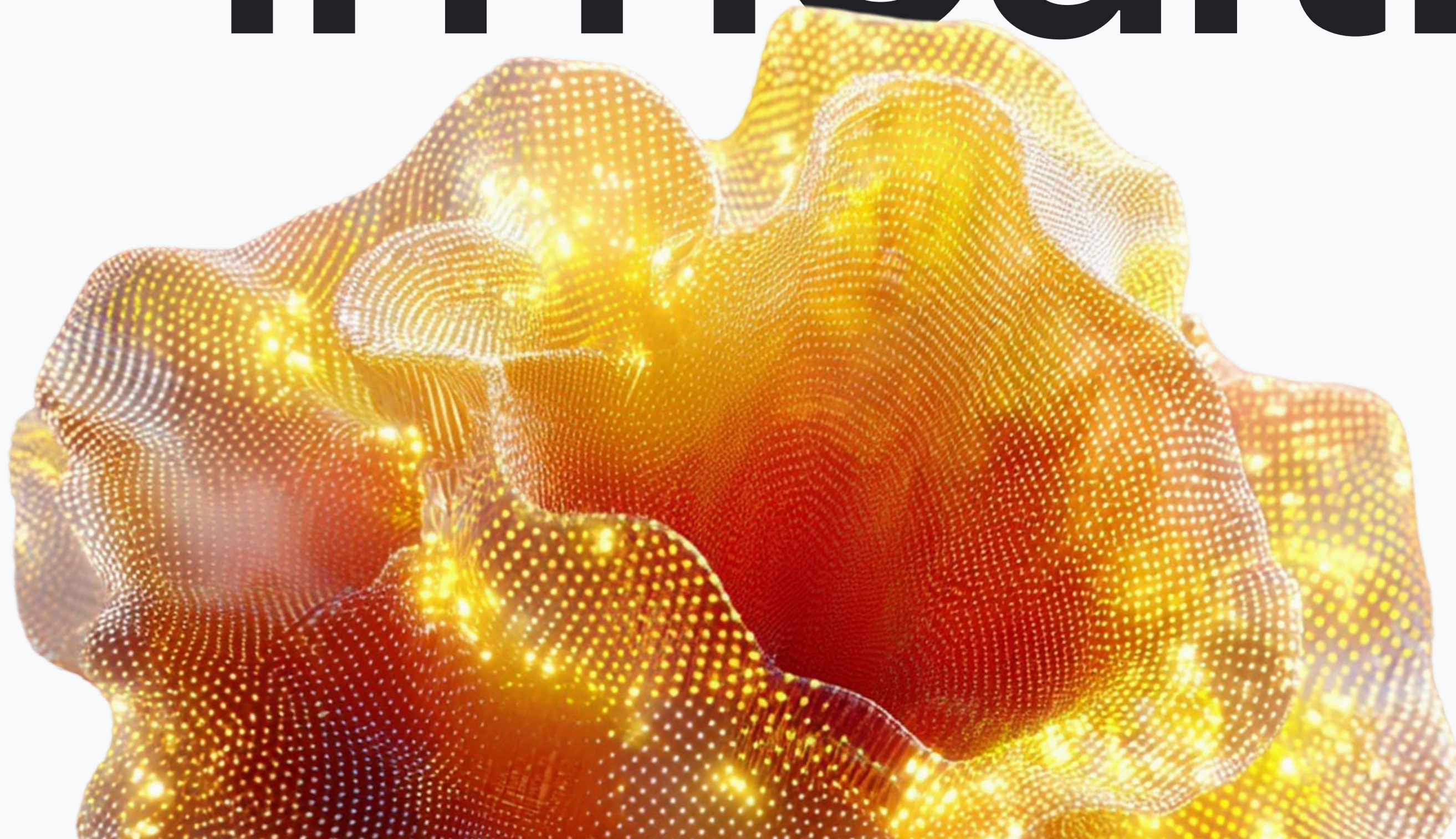
Agentic workflows

Agent orchestration





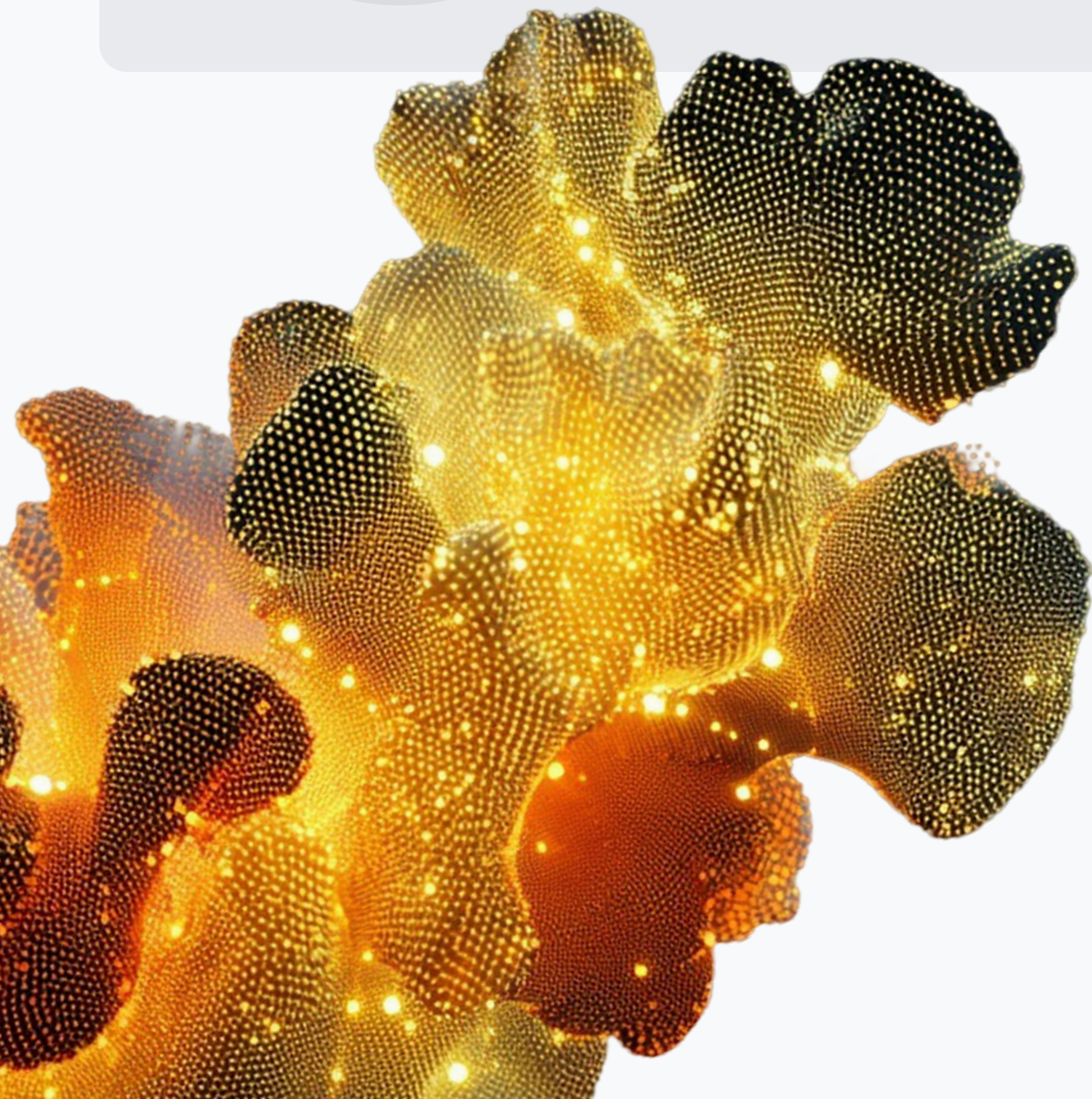
# AI agents in healthcare



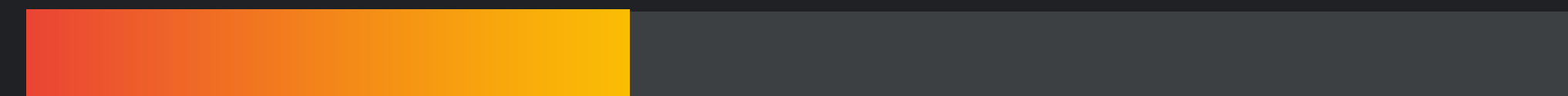


34%

of healthcare executives  
say their organizations have  
launched more than 10 AI agents<sup>6</sup>

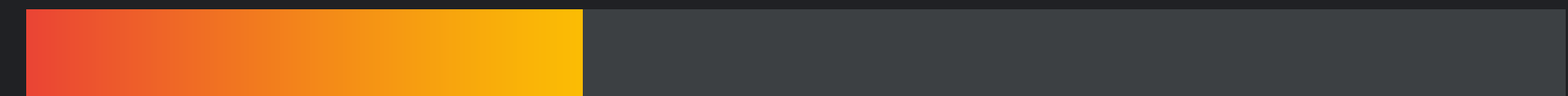


## How AI agents are being used<sup>7</sup>



39%

use them for inventory  
tracking and restocking



36%

use them for automated  
document processing



35%

use them for  
regulatory compliance

<sup>6</sup> HC executives: n=390; Question: How many AI agents does your company currently have deployed in production across your organization?  
<sup>7</sup> HC executives whose organization is leveraging agentic AI: n=164; Question: What use cases has your company deployed AI agents for?

“

**DASA**

As AI agents take on more of the repetitive tasks that are easily automated, human roles will shift to those that require more empathy, judgment, creativity, and complex decision-making.”

**Anaterria Oliveira**

Vice President of Technology, Dasa



# Agentic AI use cases in action in healthcare

AI agents are now actively helping healthcare workers get more done.

Tech support is a compelling place to start, with its high volume of repetitive queries and the need for support across different time zones. Other cross-industry use cases include security operations, productivity and research, and patient care and experience.<sup>8</sup> These use cases closely align with core business objectives and have high automation potential.

However, agentic AI adoption for core healthcare processes—such as inventory tracking and restocking (39%), automated document processing (36%), and regulatory compliance (35%)—has the potential for truly transformative impact in the future.<sup>8</sup>

These use cases directly support strategic business areas, however they often involve protected patient health data and sensitive supply chain information about medical equipment and medication, making them more difficult to implement.

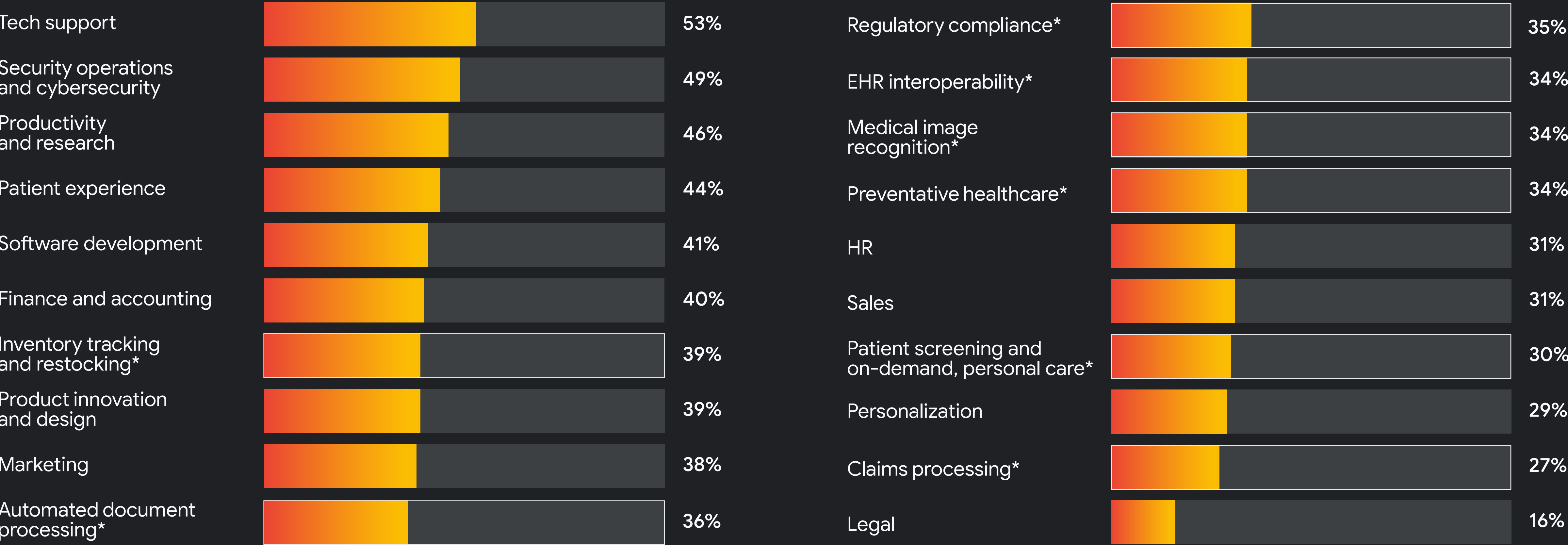
Ultimately, by demonstrating clear value in these high-stakes, data-intensive areas, AI agents are laying the foundation for broader transformation across healthcare.

<sup>8</sup> HC executives whose organization is leveraging agentic AI: n=164; Question: What use cases has your company deployed AI agents for?



# Top AI agent use cases in healthcare

\* Core industry use cases



HC executives whose organization is leveraging agentic AI: n=164; Question: What use cases has your company deployed AI agents for?

“



The next big thing for agentic AI in healthcare will be patient support. Patients often struggle to navigate the system, especially if there's a long wait to speak with a doctor. A personal AI assistant that can answer their questions based on validated clinical data would make a huge difference.”



**Zafar Chaudry**

Chief Digital Officer & Chief AI and Information Officer,  
Seattle Children's Hospital



# The ROI of AI agents in healthcare

AI agent use cases already show ROI, with tech support and patient experience (both 34%) leading the way.<sup>9</sup>

However, the biggest ROI opportunities exist in core healthcare functions such as inventory tracking and restocking (22%), medical image recognition (22%), and patient screening and on-demand personal care (22%).<sup>9</sup>

These functions—even those with longer implementation horizons—have the potential to revolutionize care delivery by directly addressing high-volume, repetitive administrative tasks. For example, the deployment of AI scribes for efficient documentation can support tasks like patient scheduling, prescription refills, and medical records management.

These applications are not experimental. Already, they are having a clear, tangible impact, easing the administrative workload for doctors and nurses and improving patient satisfaction. This focus on proven solutions aligns with the industry's pragmatic and risk-aware approach to AI investment and its commitment to improving patient outcomes.

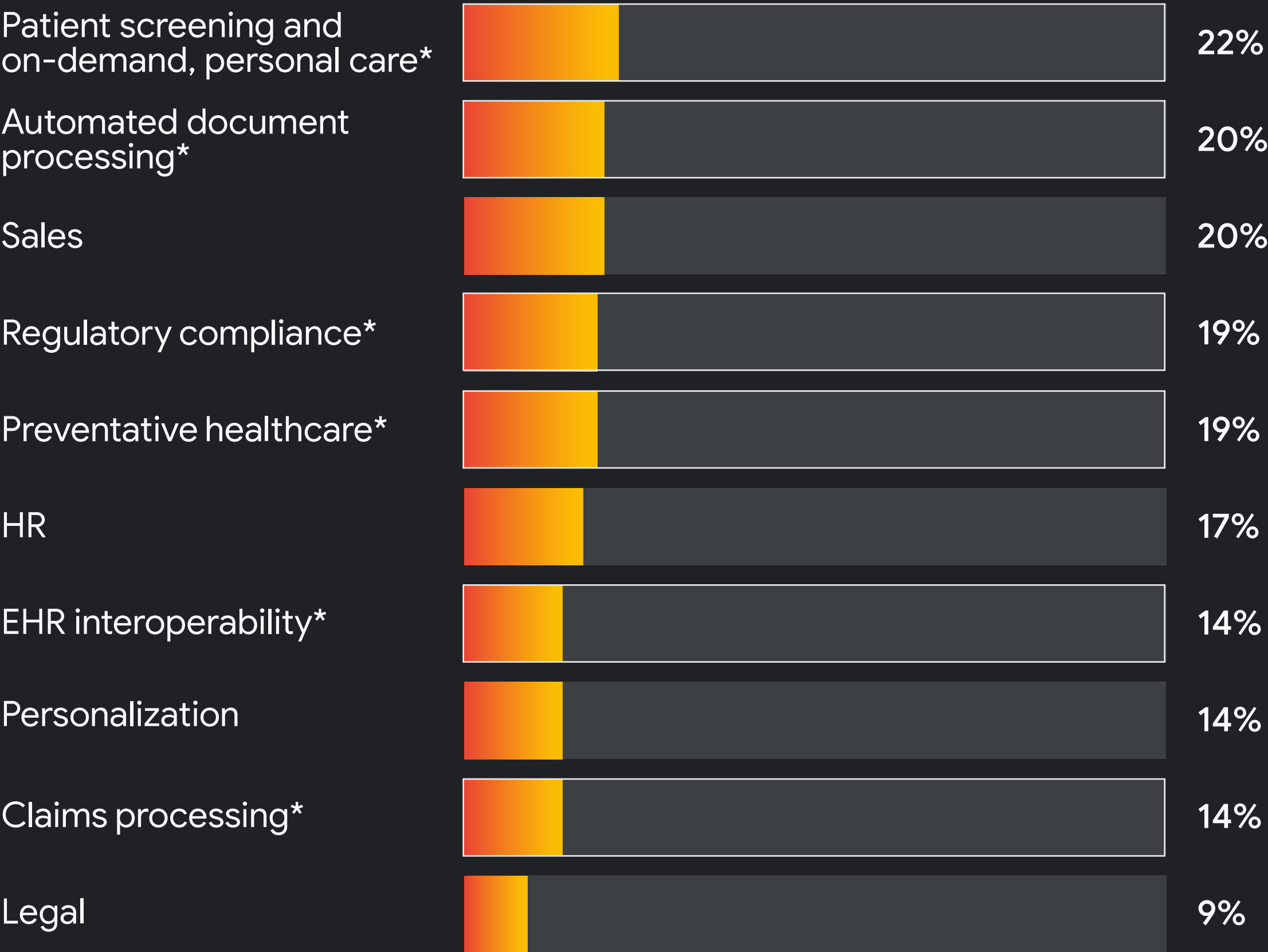
<sup>9</sup> HC executives whose organization is leveraging agentic AI: n=161; Question: Which of the AI agent types that your company has deployed have seen ROI?





# Top AI agent use cases that have already shown ROI in healthcare

\* Core industry use cases



HC executives whose organization is leveraging agentic AI: n=161; Question: Which of the AI agent types that your company has deployed have seen ROI?



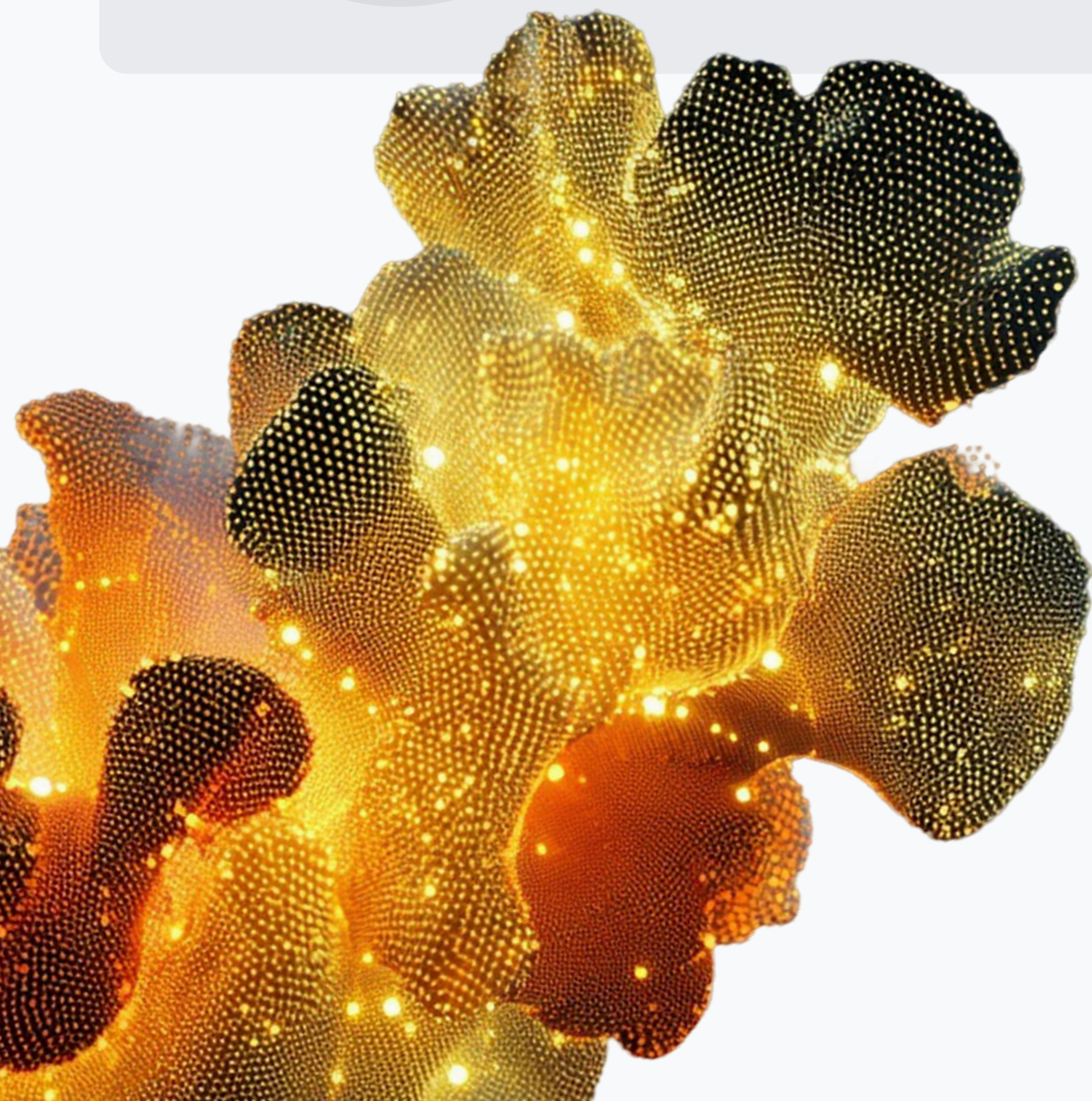
# AI agents in life sciences



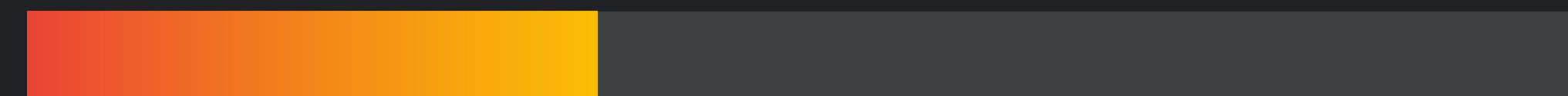


35%

of life sciences executives say their organizations have launched more than 10 AI agents<sup>10</sup>

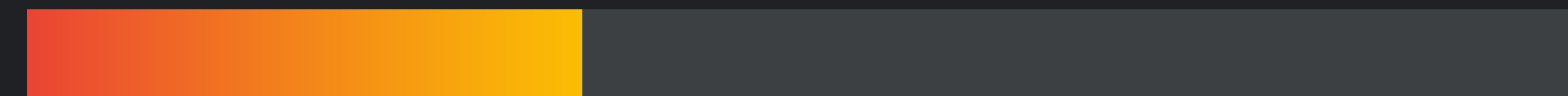


## How AI agents are being used<sup>11</sup>



37%

use them for quality control



36%

use them for automated document processing



33%

use them for supply chain risk identification and process augmentation

<sup>10</sup> LS executives: n=215; Question: How many AI agents does your company currently have deployed in production across your organization?  
<sup>11</sup> LS executives whose organization is leveraging agentic AI: n=105; Question: What use cases has your company deployed AI agents for?

# Agentic AI use cases in action in life sciences

AI agents are now actively tackling challenges like marketing (41%), tech support (41%), and productivity and research (39%).<sup>12</sup>

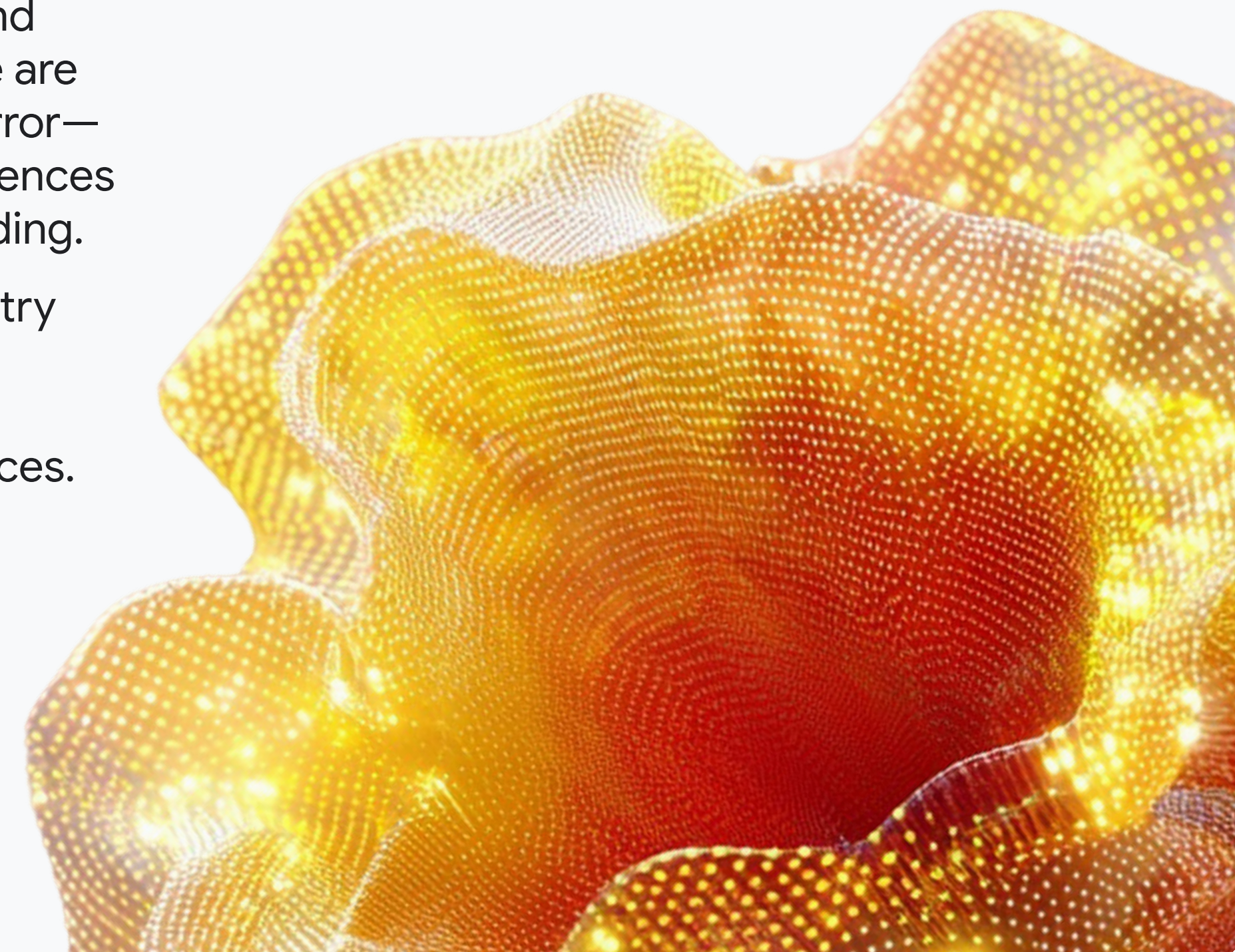
These strategic choices, which address critical and time-consuming industry functions, closely align with business objectives to protect R&D budgets and shorten time to market for new therapies.

However, agentic AI adoption for core life sciences processes such as quality control (37%), automated document processing (36%), and supply chain risk identification and process augmentation (33%)<sup>12</sup> has the potential for truly differentiating impact in the future. These use cases often involve highly sensitive data like patient health information and proprietary research. Such data is subject to regulations like HIPAA and GDPR, adding significant legal and technical hurdles.

Another key challenge is the need to integrate with specialized legacy systems like Laboratory Information Management Systems (LIMS) and Quality Management Systems (QMS). These are complex integrations with a higher risk of error—where mistakes could have severe consequences for patient safety or a company's legal standing.

By demonstrating clear value in cross-industry applications, agentic AI is accelerating organizational readiness for more complex, industry-specific use cases within life sciences.

<sup>12</sup> LS executives whose organization is leveraging agentic AI: n=105; Question: What use cases has your company deployed AI agents for?



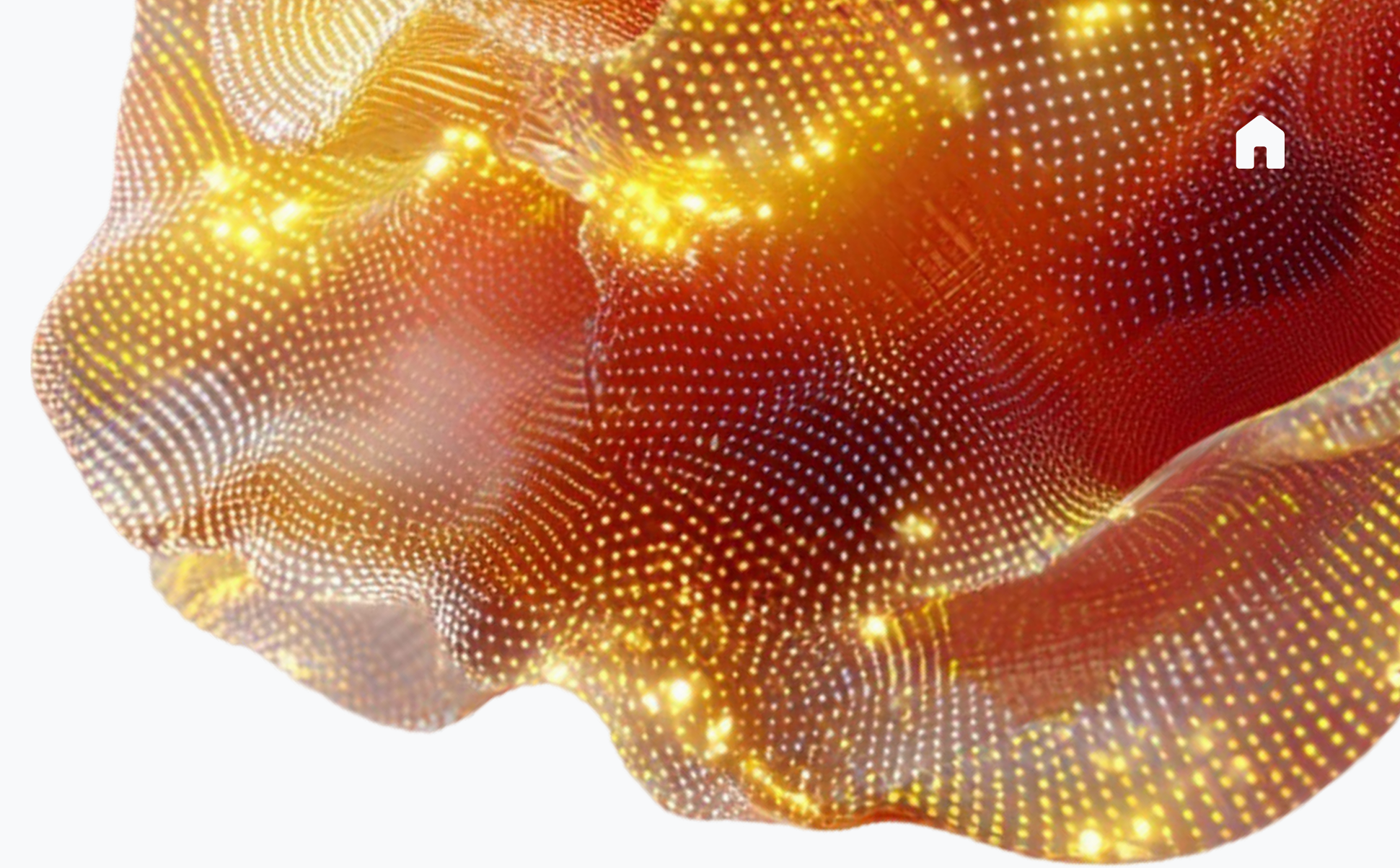


AI technology is evolving quickly. A year ago, very few people were talking about AI agents and agentic AI at the enterprise level. With agentic AI as a positive disruptive force for our industry, we have to rethink processes for people and AI consumption—prioritizing agentic AI is about setting ourselves up for the future.”



**Cristina Nitulescu**

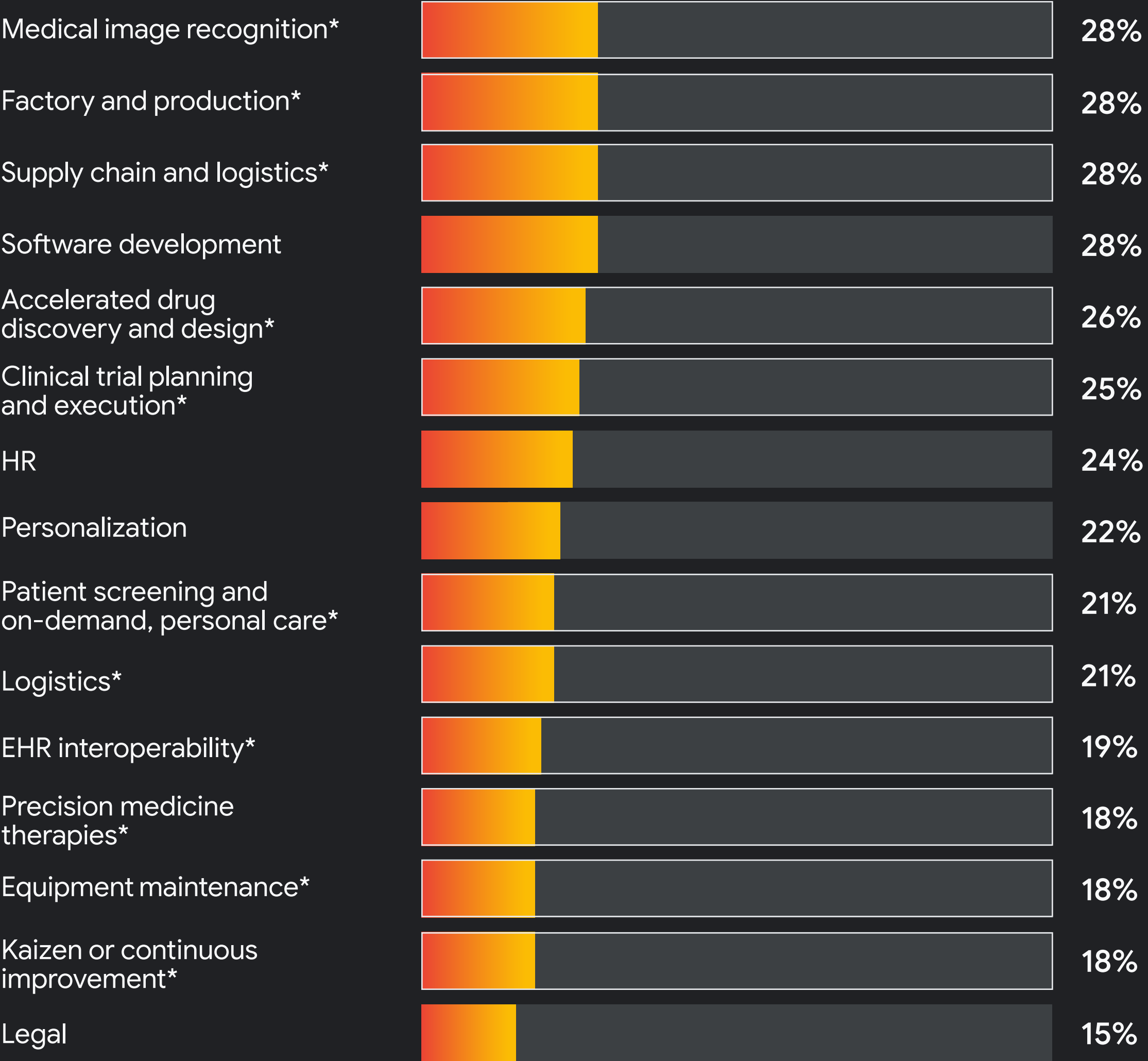
Head of Digital Transformation and IT,  
Bayer Consumer Health





# Top AI agent use cases in life sciences

\* Core industry use cases



LS executives whose organization is leveraging agentic AI: n=105; Question: What use cases has your company deployed AI agents for?

# The ROI of AI agents in life sciences

AI agents are already generating significant ROI in product innovation and design (28%), marketing (27%), and automated document processing (26%).<sup>13</sup>

This mix of broad and industry-specific use cases sets the life sciences industry apart from other industries—and shows how the most substantial ROI opportunities for the life sciences industry lie in core business functions.

Other use cases specific to life sciences that stand out for showing ROI include medical image recognition (19%), inventory tracking (18%), and restocking and production planning (18%).<sup>13</sup>

The collective impact of these industry-specific applications—from the top-ranked to the next tier—demonstrates a strategic opportunity.

For example, the value of automated document processing is most impactful in clinical trial workflows, where AI can extract key data and ensure compliance to accelerate drug development timelines. Similarly, AI agents can optimize resource allocation and predict demand to improve efficiency and quality control in inventory tracking and restocking, and production planning. Finally, medical image recognition represents a major opportunity to enhance diagnostic accuracy and accelerate analysis by identifying patterns in vast datasets.

These applications are transforming the industry by directly supporting the most differentiating business areas. This strategic focus on tangible results, rather than experimentation, underscores the industry's practical and cautious approach to investing in AI.

<sup>13</sup> LS executives whose organization is leveraging agentic AI: n=104; Question: Which of the AI agent types that your company has deployed have seen ROI?





You have to look at ROI as not just size of return but also speed of return. AI initiatives are sizable investments that are not commodities yet, so we have to look at where hyper-automation and scaling with AI is actually generating a return first. How fast is your investment coming back to the organization and what capabilities are you investing in now that will scale up and create more efficiencies or business transformation down the road?”



**Cristina Nitulescu**

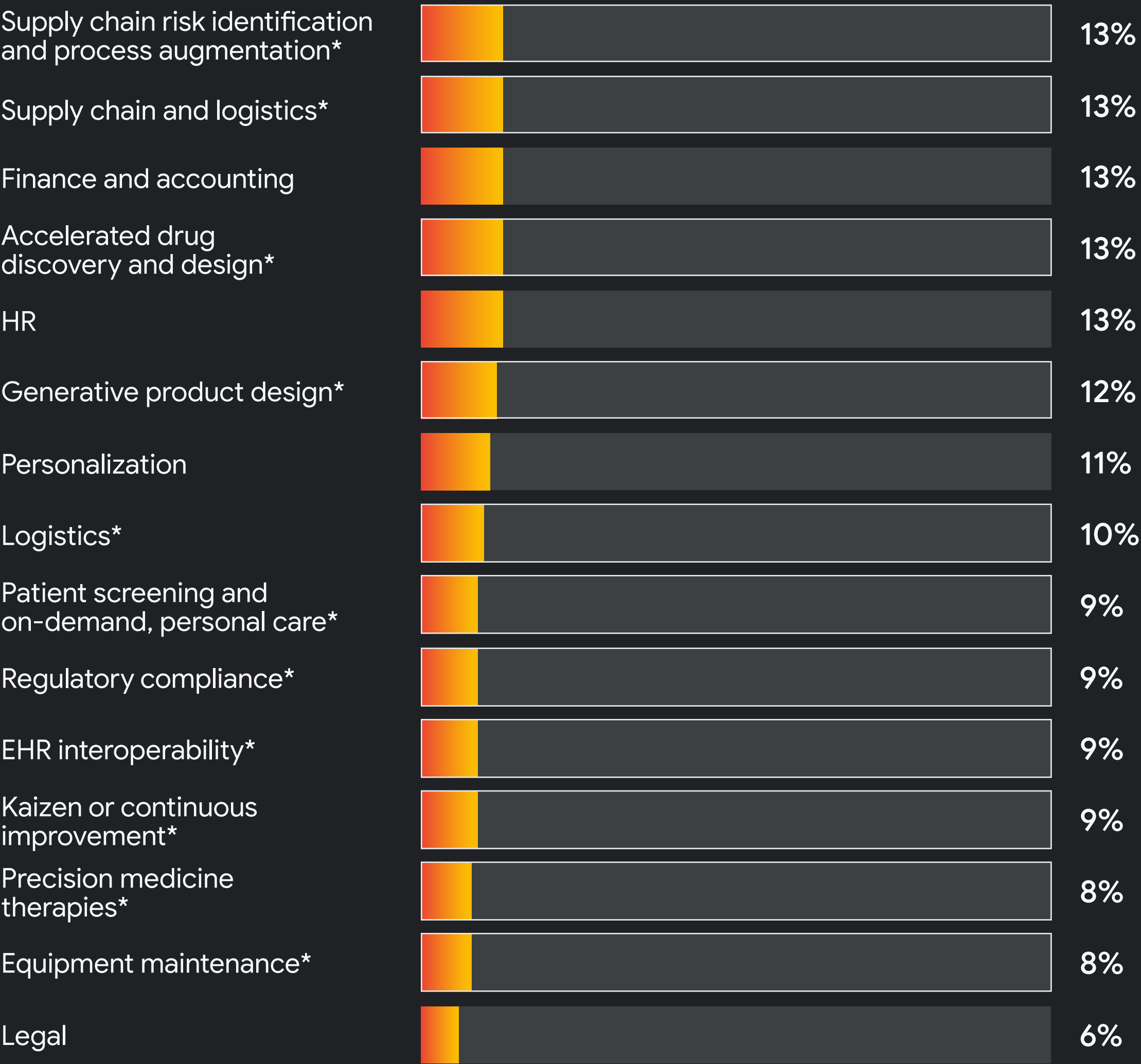
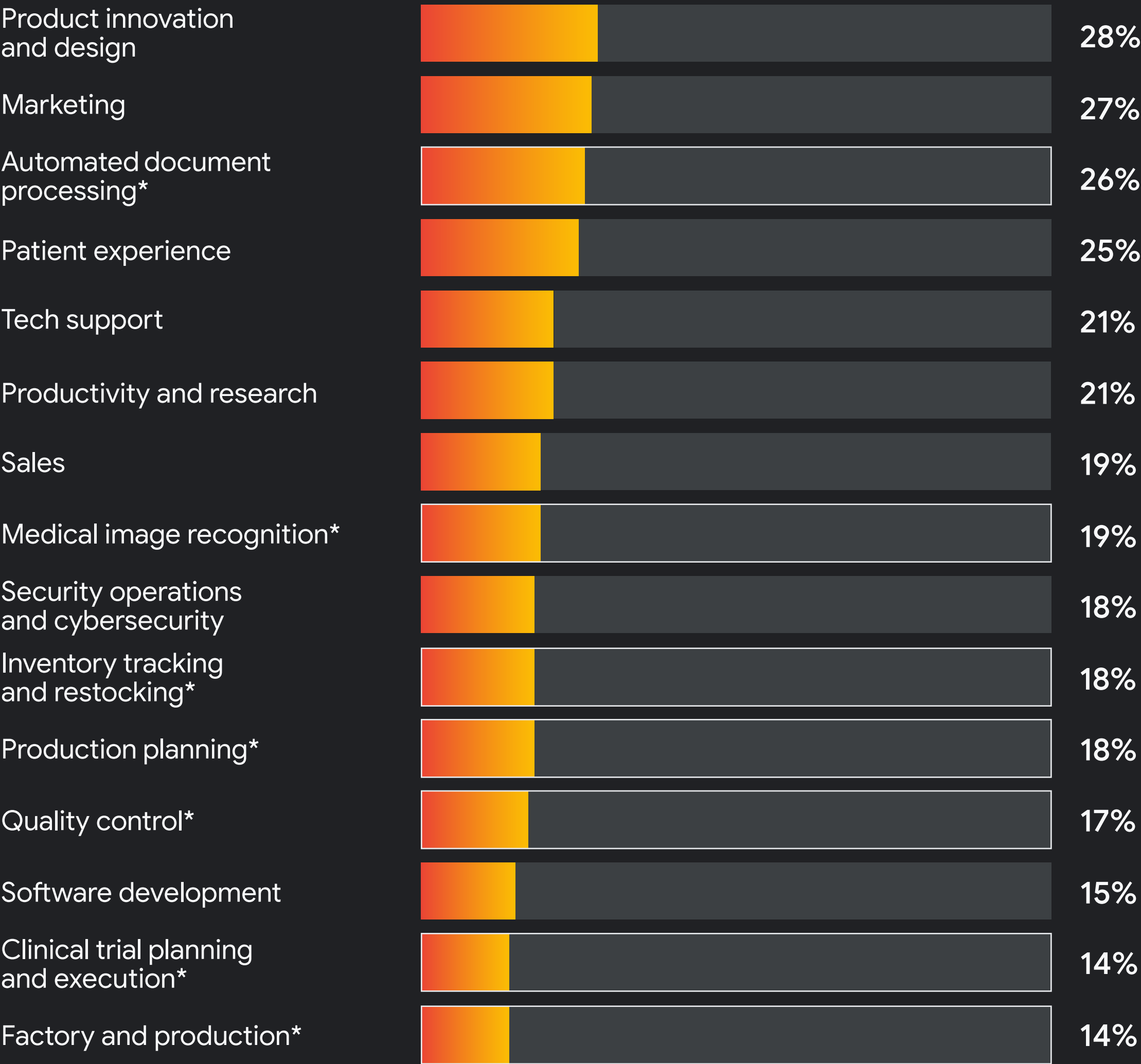
Head of Digital Transformation and IT,  
Bayer Consumer Health





# Top AI agent use cases that have already shown ROI in life sciences

\* Core industry use cases





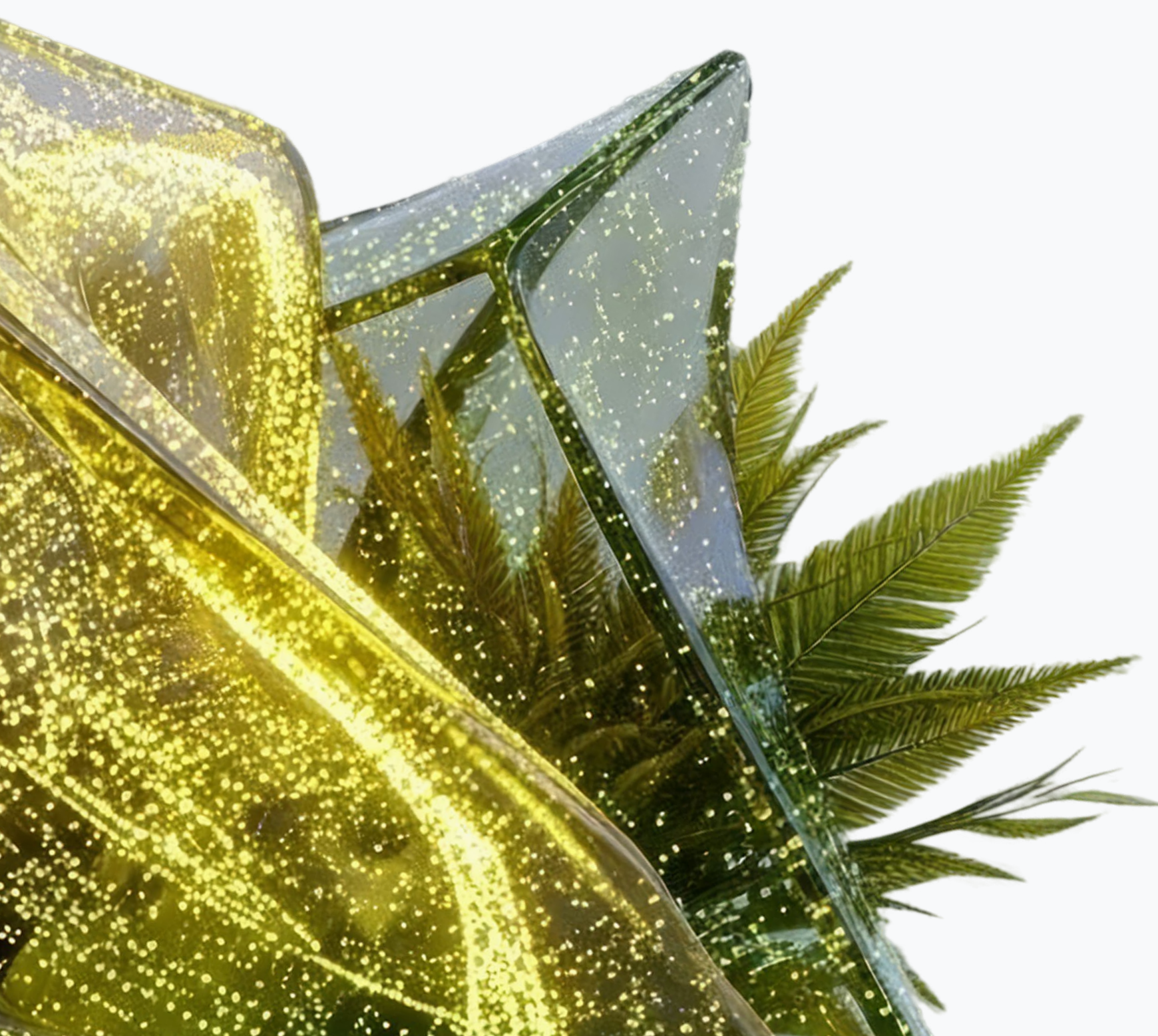
02

# 5 proven areas where AI is delivering ROI

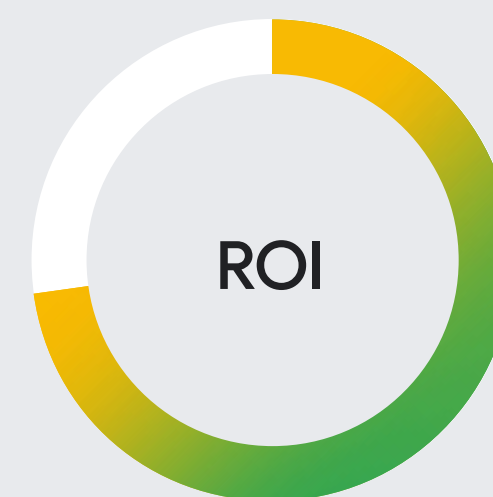


While AI agents represent the new frontier, the foundational value of gen AI continues to deliver compounding returns.

Our research shows five key areas where gen AI continues to drive significant impact for the healthcare and life sciences industry. After 2024 proved that gen AI really works, 2025 is all about building on that success.



Our survey assessed the direct value of gen AI across key areas using these 3 measures:



**73%**

report ROI now  
(vs. 74% in 2024)<sup>14</sup>



**83%**

of those reporting  
increased revenue estimate  
gains of 6% or more<sup>15</sup>



**45%**

note their average time to  
market from idea to use case  
in production is between 3–6  
months (vs. 43% in 2024)<sup>16</sup>

<sup>14</sup> HCLS executives: 2024: n=190, 2025: n=605; Question: In what timeframe do you expect gen AI to deliver ROI to the following areas of your business?

<sup>15</sup> HCLS executives reporting increased revenue from gen AI solutions: 2024: Insufficient sample size, 2025: n=221; Question: (1) In what ways did your company experience business growth as a direct result of gen AI? (2) Based on your past/existing gen AI initiatives, how much did gen AI directly increase overall annual company revenue?

<sup>16</sup> HCLS executives: 2024: n=190, 2025: n=604; Question: What is the average time to market from idea to use case in production?



# Top gen AI impacts across business areas

Business benefits are used to measure the health of technology transformation initiatives and serve as leading indicators of financial performance.

01

Productivity

72%

of healthcare and life sciences executives report improved productivity from gen AI (-2pp YoY)

02

Patient experience

61%

report improved patient experience from gen AI (-5pp YoY)

03

Business growth

52%

report business growth from gen AI (-6pp YoY)

04

Marketing

49%

report meaningful impact to marketing from gen AI (new to 2025)

05

Security

46%

report security improvements from gen AI (-8pp YoY)

Among HCLS executives: 2024: n=190, 2025: n=605; Question: In which of the following areas have your gen AI solutions created meaningful impact?



# Productivity

Healthcare and life sciences executives report tangible improvements in gen AI-driven productivity.

Specifically, among those reporting increased productivity, executives indicated a significant jump in non-IT business process and staff productivity.<sup>17</sup> This reflects AI's growing role across the entire operational journey, from drug discovery and clinical research to patient care and billing, ultimately driving efficiency and market responsiveness for life-saving innovations.

However, fewer executives reported that productivity at least doubled.<sup>18</sup> This may suggest that while broad productivity gains from things like automated claims processing are easier to achieve, the leap to doubling efficiency requires deeper integrations with complex clinical and research systems that organizations are still navigating.

72%

report gen AI has improved productivity (vs. 74% in 2024)<sup>19</sup>

33%

indicate their employee productivity has at least doubled as a result of gen AI (of those reporting increased organizational productivity) (vs. 38% in 2024)<sup>18</sup>

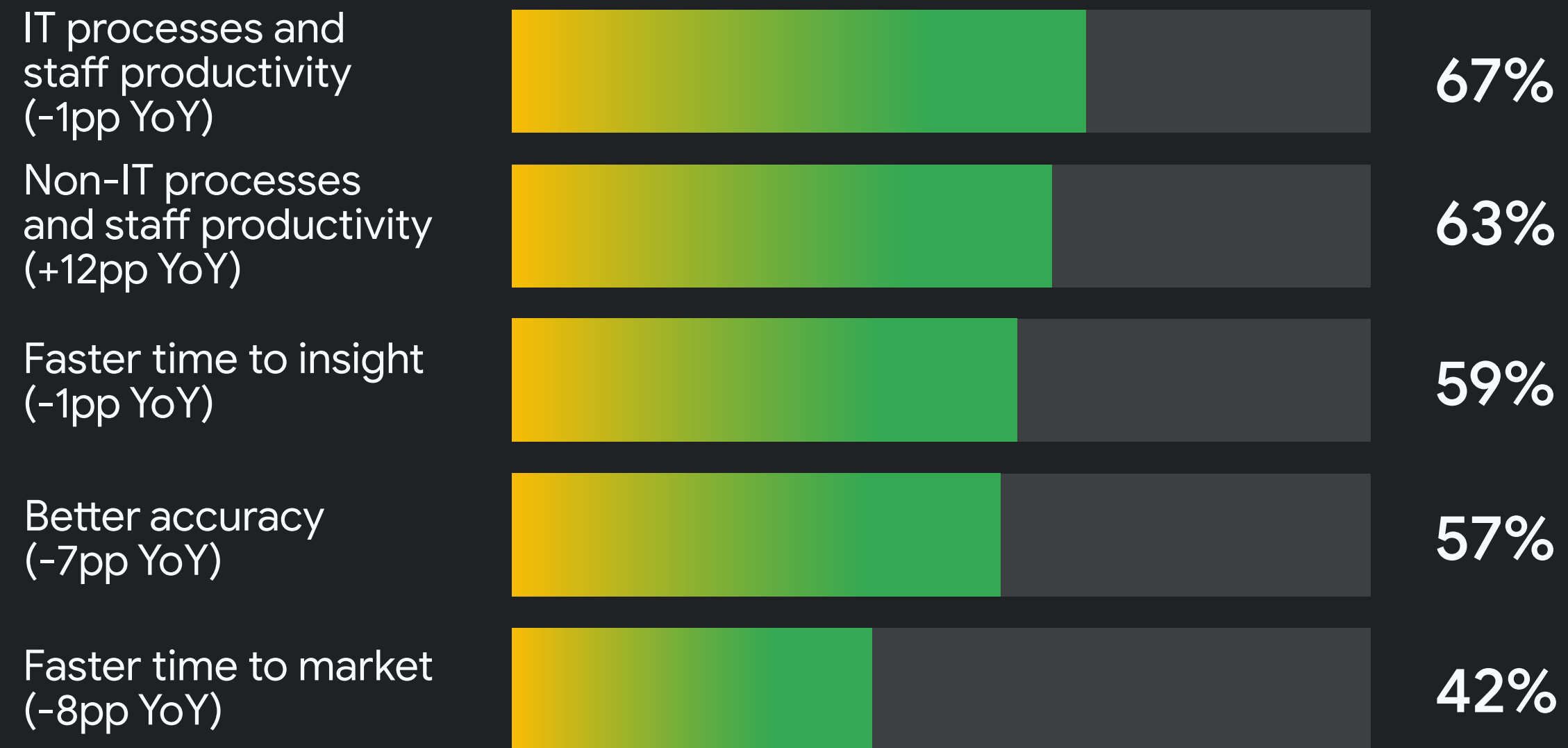
<sup>17</sup> HCLS executives reporting improved productivity from gen AI solutions: 2024: n=139, 2025: n=412; Question: (1) When gen AI helped your employees increase productivity, what was the approximate average % increase in their productivity over a sustained period of time (e.g., several months)? (2) In what ways did gen AI directly increase productivity for your company?

<sup>18</sup> HCLS executives reporting improved productivity from gen AI solutions: 2024: n=141, 2025: n=436; Question: When gen AI helped your employees increase productivity, what was the approximate average % increase in their productivity over a sustained period of time (e.g., several months)?

<sup>19</sup> HCLS executives: 2024: n=190, 2025: n=605; Question: In which of the following areas have your gen AI solutions created meaningful impact?



## Improved employee productivity resulting from gen AI solutions



HCLS executives reporting improved productivity from gen AI solutions: 2024: n=139, 2025: n=412; Question: In what ways did gen AI directly increase productivity for your company?

## Key area where AI is driving ROI

# 42%

saw ROI on gen AI use cases for individual productivity (emails, documents, presentations, meetings, chat) (vs. 37% in 2024)<sup>20</sup>

<sup>20</sup> HCLS executives whose organization is currently using or planning to use gen AI for individual productivity: 2024: n=175, 2025: n=575; Question: In what timeframe do you expect gen AI to deliver ROI to the following areas of your business?

“



It's human nature to want to do more. Now that we can outsource repetitive tasks to AI, it's made a big difference in individual productivity.”



**Leeza Constantoulakis**

Chief Nursing Officer, Drive Health

# Patient experience

The patient experience plays a critical role in improving health and clinical outcomes.

Yet following last year's widespread adoption, gen AI has had less impact on patient experience<sup>21</sup> and underlying metrics like Net Promoter Score (NPS) that measures patient engagement and satisfaction this year.<sup>22</sup>

What's more, fewer respondents now report significant improvement in patient experience.<sup>23</sup>

This shift suggests that while initial, easy-to-implement solutions (like basic chatbots for frequently asked questions) saw early gains, healthcare and life sciences organizations are now struggling to enhance the patient experience with gen AI.

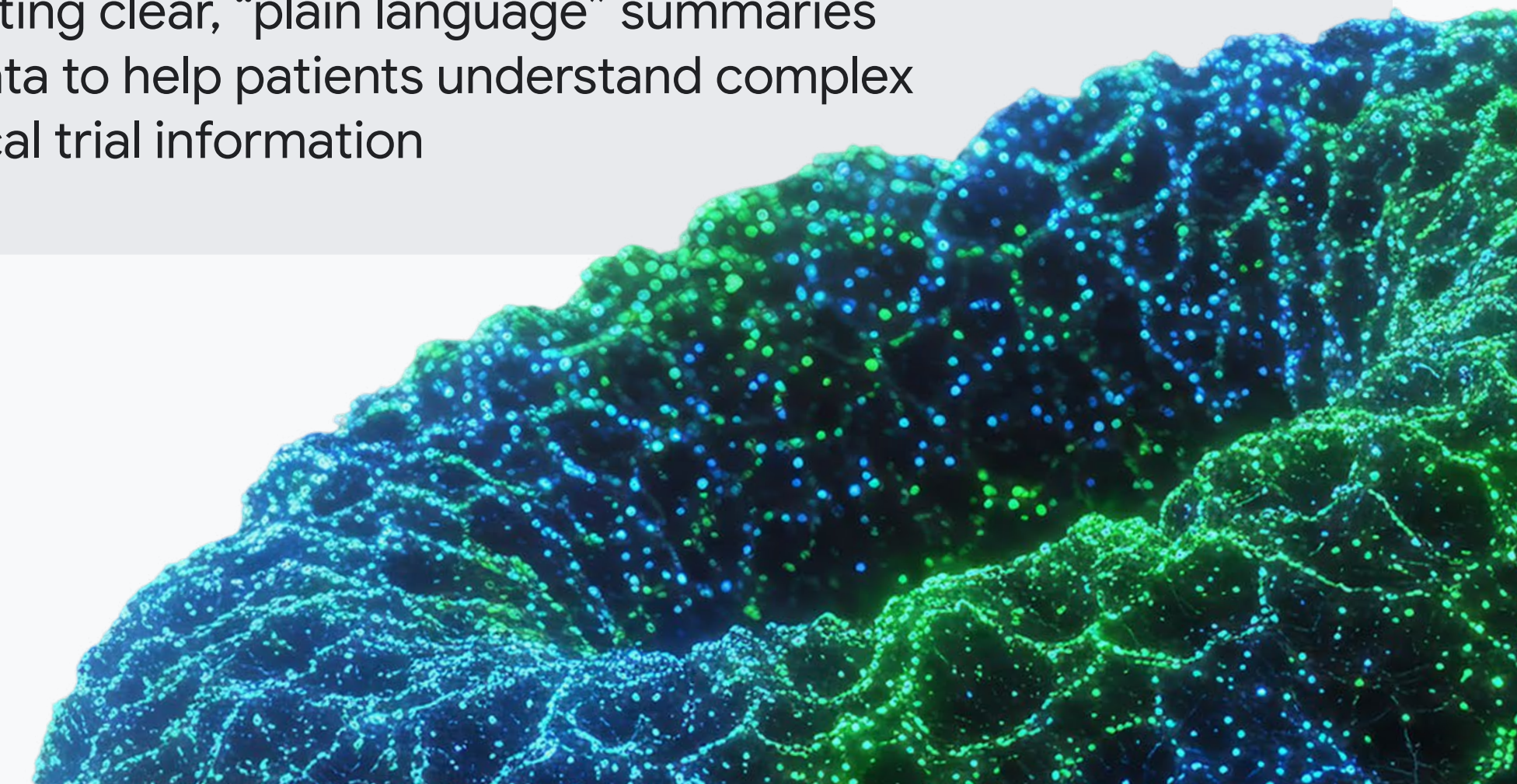
Gen AI can help improve the patient experience by:

- ✓ Providing 24/7 patient support by answering questions and scheduling appointments
- ✓ Drafting clinical notes and patient summaries, freeing up clinicians to focus on the patient
- ✓ Supporting physicians in creating customized care plans by analyzing a patient's medical and genetic data
- ✓ Summarizing complex medical records and answering patient questions in plain language
- ✓ Creating clear, "plain language" summaries of data to help patients understand complex clinical trial information

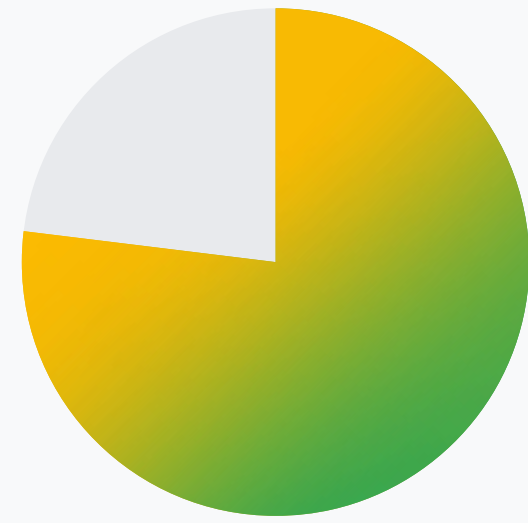
<sup>21</sup> HCLS executives: 2024: n=190, 2025: n=605; Question: In which of the following areas have your gen AI solutions created meaningful impact?

<sup>22</sup> HCLS executives reporting improved customer (patient) experience from gen AI solutions: 2024: n=125, 2025: n=372; Question: In what ways did your company experience improved user (patient) experience as a direct result of gen AI?

<sup>23</sup> HCLS executives reporting improved customer (patient) experience from gen AI solutions: 2024: n=123, 2025: n=353; Question: (1) In what ways did your company experience improved user (patient) experience as a direct result of gen AI? (2) Based on your past/existing gen AI initiatives, how much did gen AI directly improve user (patient) experience?

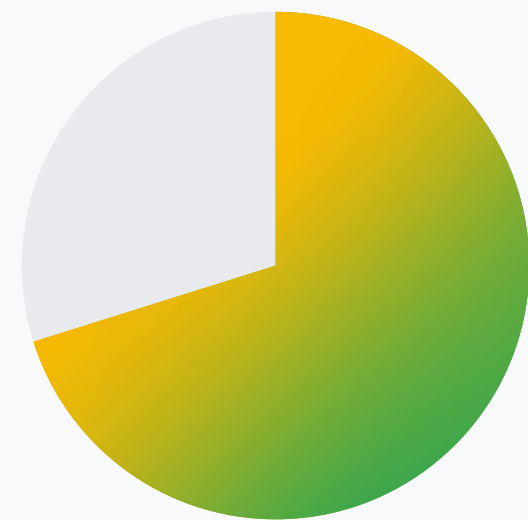


## Impact on patient experience resulting from gen AI solutions



**79%**

increased patient engagement (i.e., engagement score, traffic or click through rate (CTR), time on site) (-8pp YoY)



**70%**

improved patient satisfaction/ Net Promoter Score (-13pp YoY)

HCLS executives reporting improved customer (patient) experience from gen AI solutions: 2024: n=125, 2025: n=372; Question: In what ways did your company experience improved user (patient) experience as a direct result of gen AI?

## Key area where AI is driving ROI

**35%**

saw ROI on gen AI use cases for patient experience and field service (including chat, call centers, and in-field technician support) (vs. 36% in 2024)<sup>24</sup>

**61%**

report gen AI has improved patient experience (vs. 66% in 2024)<sup>25</sup>

**28%**

indicate improvement in patient experience of more than 10% (of those reporting improved patient experience) (vs. 31% in 2024)<sup>26</sup>

<sup>24</sup> HCLS executives whose organization is currently using or planning to use gen AI for customer (patient) experience and field service: 2024: n=172, 2025: n=570; Question: In what timeframe do you expect gen AI to deliver ROI to the following areas of your business?

<sup>25</sup> HCLS executives: 2024: n=190, 2025: n=605; Question: In which of the following areas have your gen AI solutions created meaningful impact?

<sup>26</sup> HCLS executives reporting improved customer (patient) experience from gen AI solutions: 2024: n=123, 2025: n=353; Question: (1) In what ways did your company experience improved user (patient) experience as a direct result of gen AI? (2) Based on your past/existing gen AI initiatives, how much did gen AI directly improve user (patient) experience?

# Business growth

Gen AI's impact on business growth is more subdued this year.

Slightly fewer executives reported business growth due to gen AI.<sup>27</sup> This trend suggests a maturing landscape where initial, broad-stroke gains are more challenging to realize. Organizations are now moving from readily achievable improvements to more complex integrations of gen AI for use cases such as drug discovery or clinical trial recruitment and management. These may take longer to translate into widespread business growth.

Among those reporting that gen AI has resulted in business growth, 83% saw an increase in overall annual revenue of 6% or more.<sup>28</sup> This indicates that getting value from gen AI depends on moving past pilots into scaled, integrated deployments that are aligned with the business growth strategy.

<sup>27</sup> HCLS executives: 2024: n=190, 2025: n=605; Question: In which of the following areas have your gen AI solutions created meaningful impact?

<sup>28</sup> HCLS executives reporting increased revenue from gen AI solutions: 2024: Insufficient sample size, 2025: n=221; Question: (1) In what ways did your company experience business growth as a direct result of gen AI? (2) Based on your past/existing gen AI initiatives, how much did gen AI directly increase overall annual company revenue?

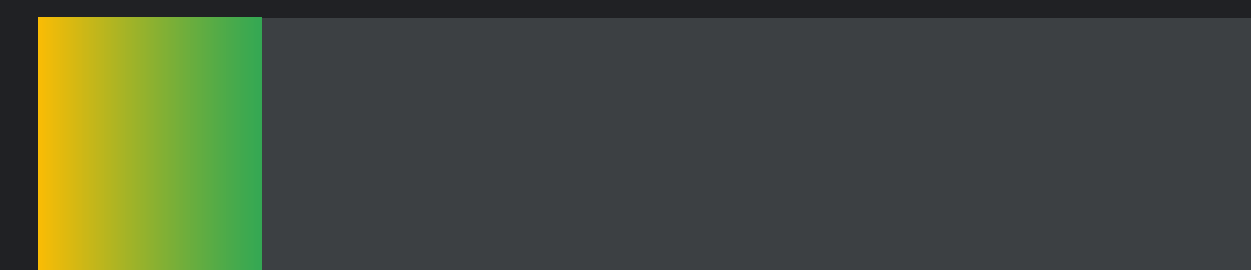


## 52%

report gen AI has resulted in business growth (vs. 58% in 2024)<sup>27</sup>

## Revenue growth resulting from gen AI solutions

Increased overall annual revenue between 1–5%



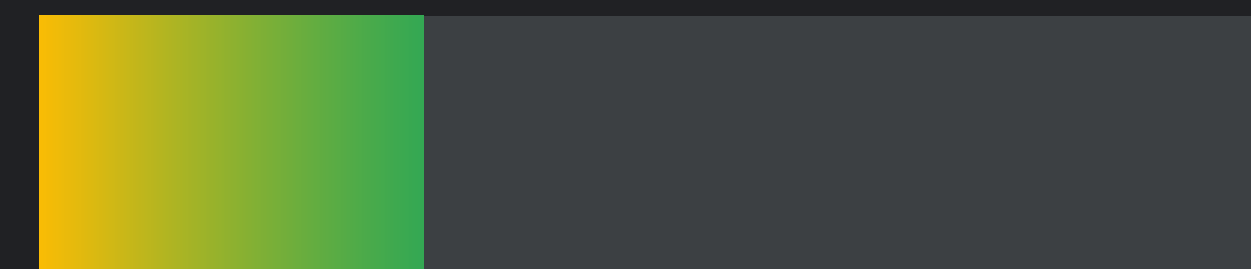
15%

Increased overall annual revenue between 6–10%



53%

Increased overall annual revenue more than 10%



30%

HCLS executives reporting increased revenue from gen AI solutions: 2025: n=221; Question: (1) In what ways did your company experience business growth as a direct result of gen AI? (2) Based on your past/existing gen AI initiatives, how much did gen AI directly increase overall annual company revenue?

“

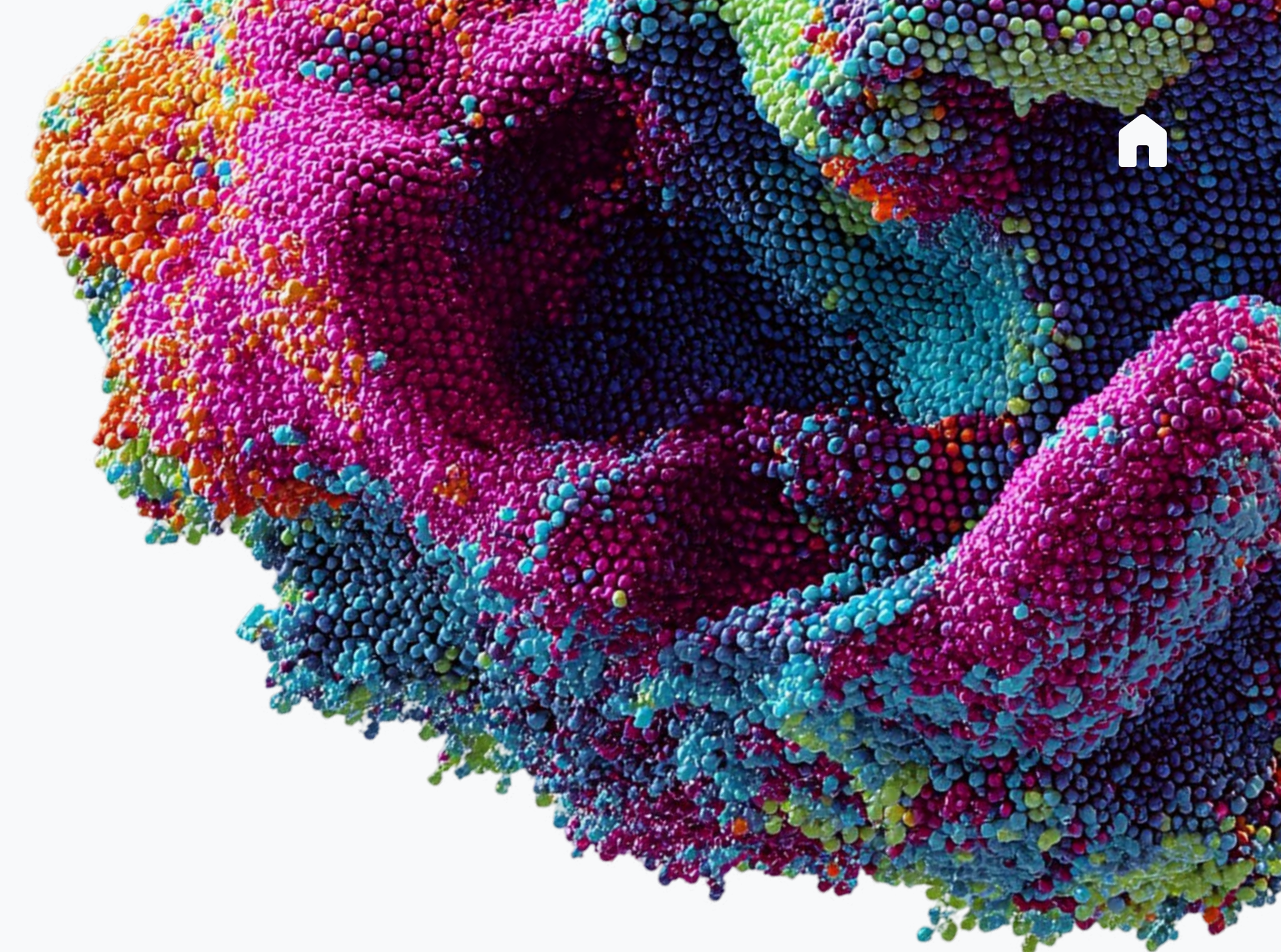


Servier is leveraging AI and generative AI to accelerate drug discovery, enhance clinical development, and optimize our entire value chain, ultimately aiming to deliver innovative solutions faster to patients with unmet medical needs.”



**Claude Bertrand**

EVP Research and Development  
and Chief Scientific Officer, Servier



# Marketing

In the highly regulated healthcare and life sciences industry, marketers must balance creativity with the need for clear, compliant communications.

Gen AI can enable more personalized marketing campaigns focused on complex health conditions, treatment options, or new pharmaceutical products, ensuring that diverse patient and professional audiences can understand the information. It can also help streamline marketing programs that drive desired actions like appointment scheduling, adherence to treatment plans, or adoption of new therapies.

However, while improvements are evident, those reporting ROI for gen AI use cases in sales and marketing saw a slight decline.<sup>29</sup> This suggests that while the potential for impact is broadly acknowledged, initial returns from “low-hanging fruit” like basic content generation are maturing. To achieve the next level of ROI, organizations need to tackle challenges with fragmented data and secure more investment. Only then will they be able to scale personalized campaigns in a way that provides measurable value.

<sup>29</sup> HCLS executives whose organization is currently using or planning to use gen AI for sales and marketing: 2024: n=173, 2025: n=553; Question: In what timeframe do you expect gen AI to deliver ROI to the following areas of your business?

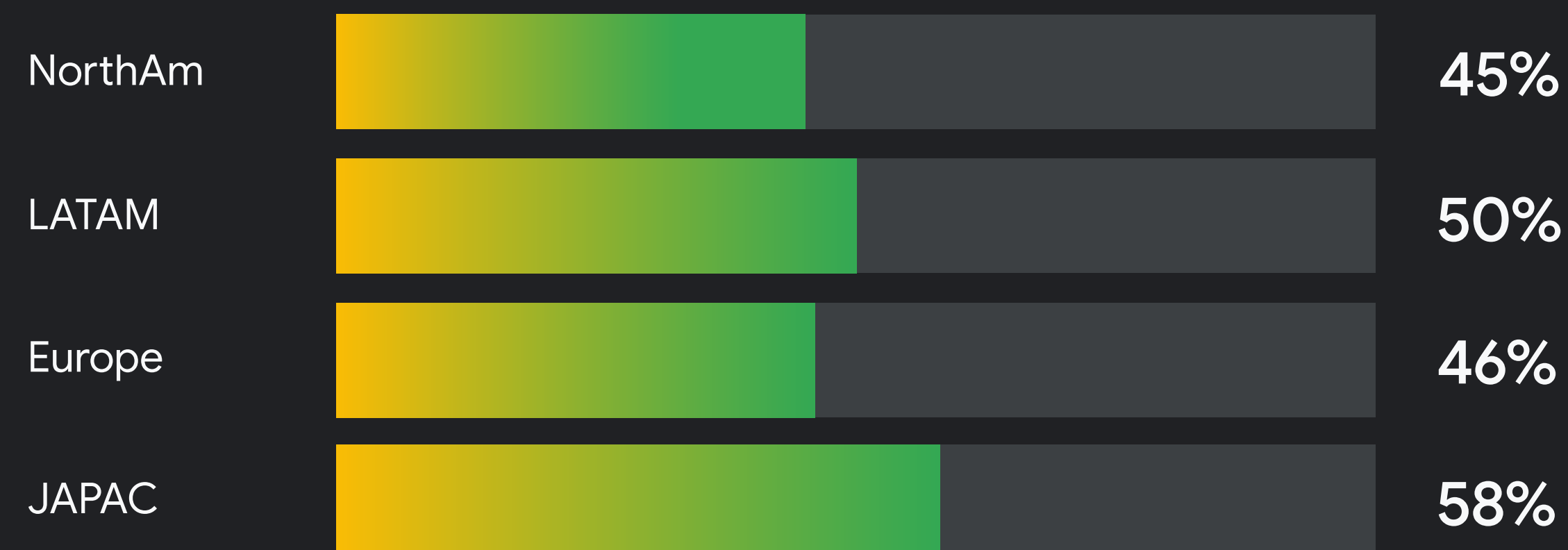
<sup>30</sup> HCLS executives: 2025: n=605; Question: In which of the following areas have your gen AI solutions created meaningful impact?



## 49%

report gen AI has resulted in meaningful impact to marketing outcomes (not fielded in 2024)<sup>30</sup>

### Improved marketing resulting from gen AI solutions across regions



HCLS executives: Total (global): n=605, Northam: n=272, LATAM: n=103, Europe: n=111, JAPAC: n=103; Question: In which of the following areas have your gen AI solutions created meaningful impact?

### Key area where AI is driving ROI

## 31%

saw ROI on gen AI use cases for sales and marketing (field sales activities, marketing operations, and content creation) (vs. 36% in 2024)<sup>29</sup>



“

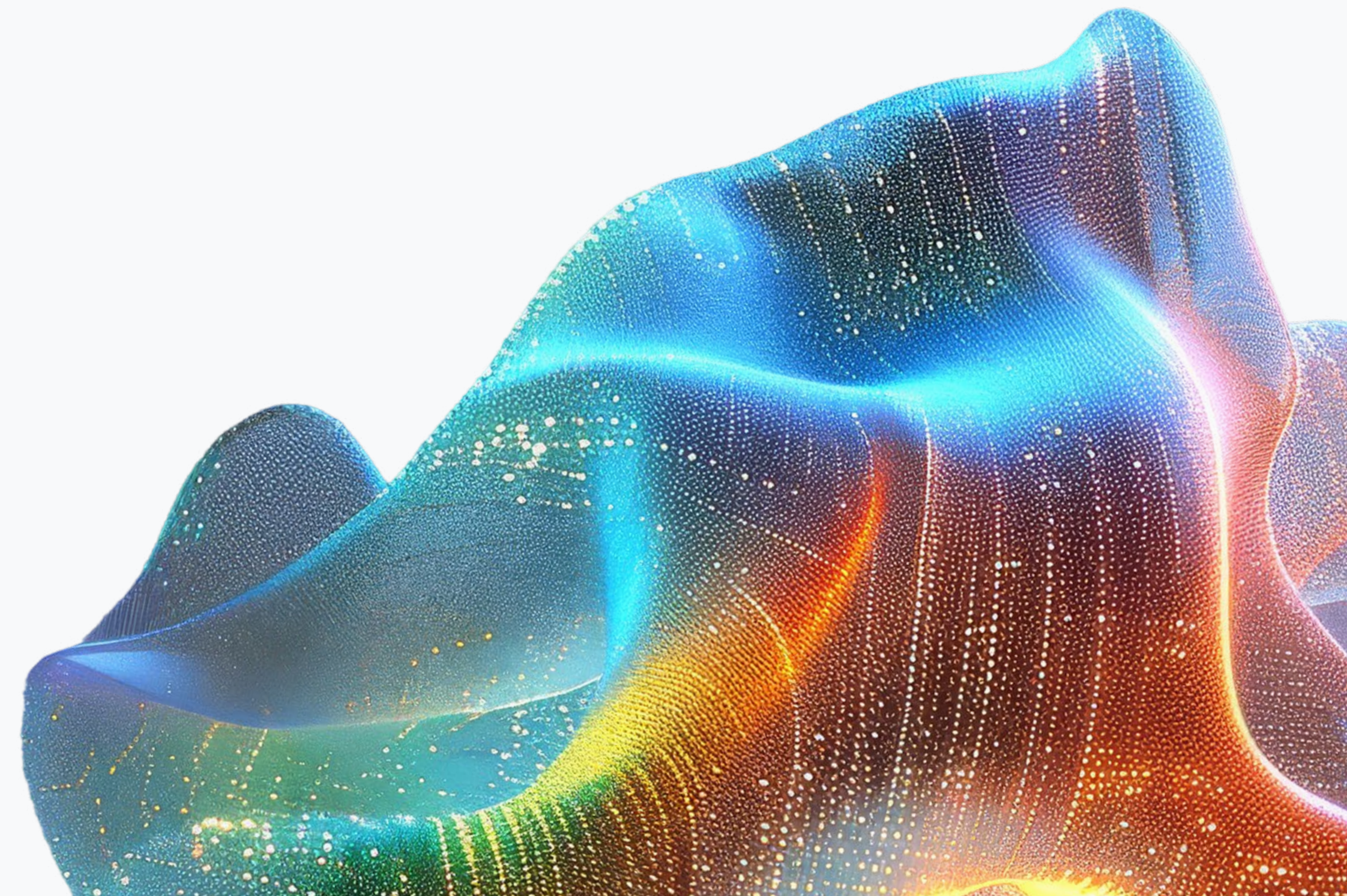
**DASA**

Gen AI for marketing is a game changer, especially because it can personalize content at scale, rapidly analyze marketing trends, and predict customer behavior. All of this helps improve how we interact with our customers.”



**Anaterria Oliveira**

Vice President of Technology, Dasa



# Security

Given the high value of patient data, intellectual property, and proprietary research, gen AI's ability to improve the security posture for healthcare and life sciences organizations is critical.

Yet, fewer executives reported a meaningful impact on security posture<sup>31</sup> and its underlying metrics<sup>32</sup> this year.

This suggests that while gen AI delivers foundational benefits, organizations are turning to specialized agentic AI to combat increasingly complex, AI-driven cyberthreats targeting patient records and proprietary R&D data. It's no surprise, then, that security operations and cybersecurity is one of the most highly adopted AI agent use cases in healthcare and life sciences (43%).<sup>33</sup> This indicates a strategic shift towards a layered, AI-powered defense to ensure core assets and patient trust remain intact.

## 46%

report gen AI has resulted in meaningful impact to security posture (vs. 54% in 2024)<sup>31</sup>

## Improved security resulting from gen AI solutions



## 76%

improved ability to identify threats (-8pp YoY)



## 71%

improved intelligence and response integration (new to 2025)



## 62%

reduction in time to resolution (-10pp YoY)



## 53%

reduction in number of security tickets (-13pp YoY)

HCLS executives reporting improved security posture from gen AI solutions: 2024: n=102, 2025: n=276; Question: Based on your past/existing gen AI initiatives, how did gen AI directly improve your company's security posture?

<sup>31</sup> HCLS executives: 2024: n=190, 2025: n=605; Question: In which of the following areas have your gen AI solutions created meaningful impact?

<sup>32</sup> HCLS executives reporting improved security posture from gen AI solutions: 2024: n=102, 2025: n=276; Question: Based on your past/existing gen AI initiatives, how did gen AI directly improve your company's security posture?

<sup>33</sup> HCLS executives whose organization is leveraging agentic AI: n=269; Question: What use cases has your company deployed AI agents for?



“

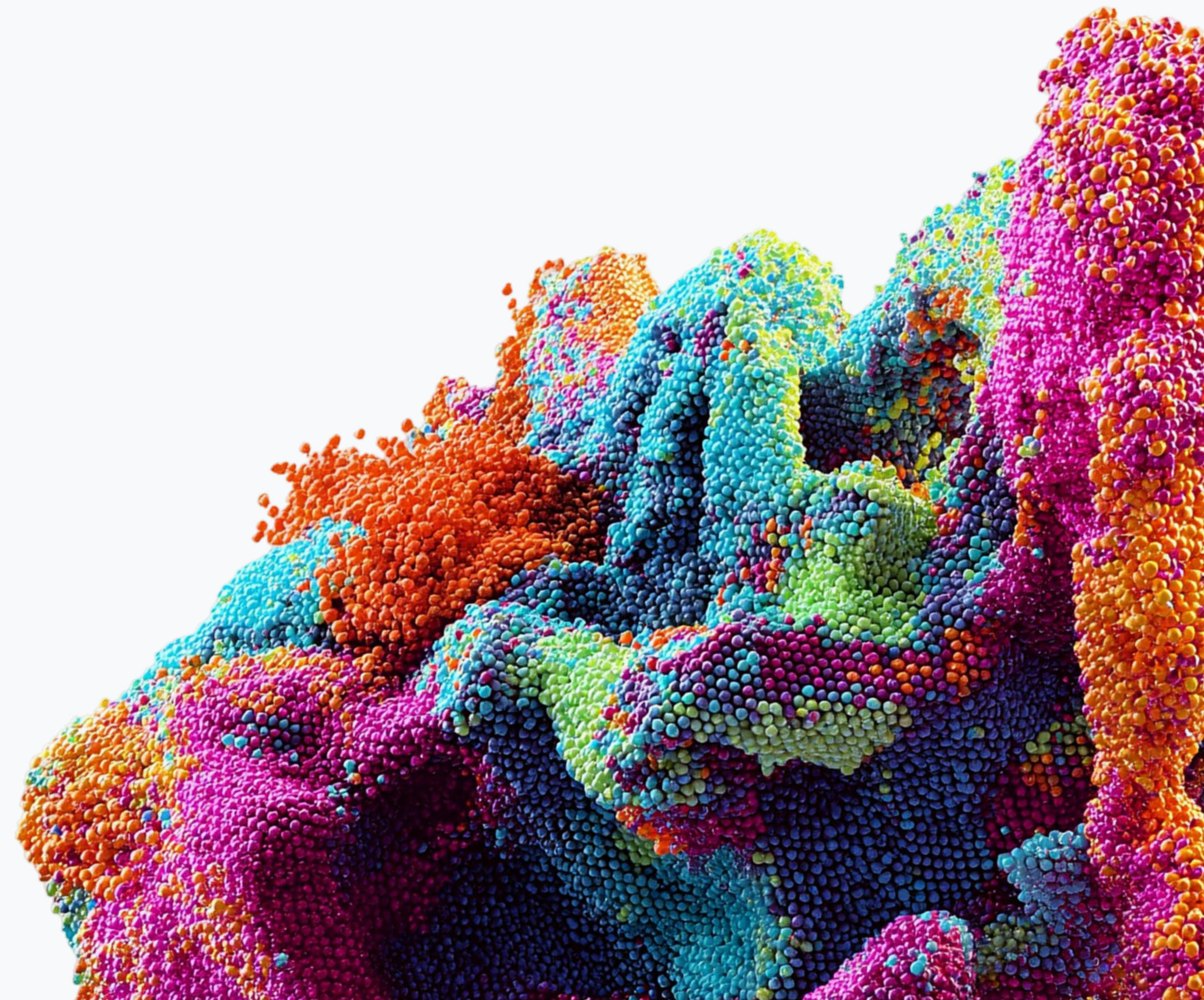


Security is the perfect use case for gen AI. It can hunt down threats and even remediate them around the clock.”



**Zafar Chaudry**

Chief Digital Officer & Chief AI and Information Officer,  
Seattle Children's Hospital



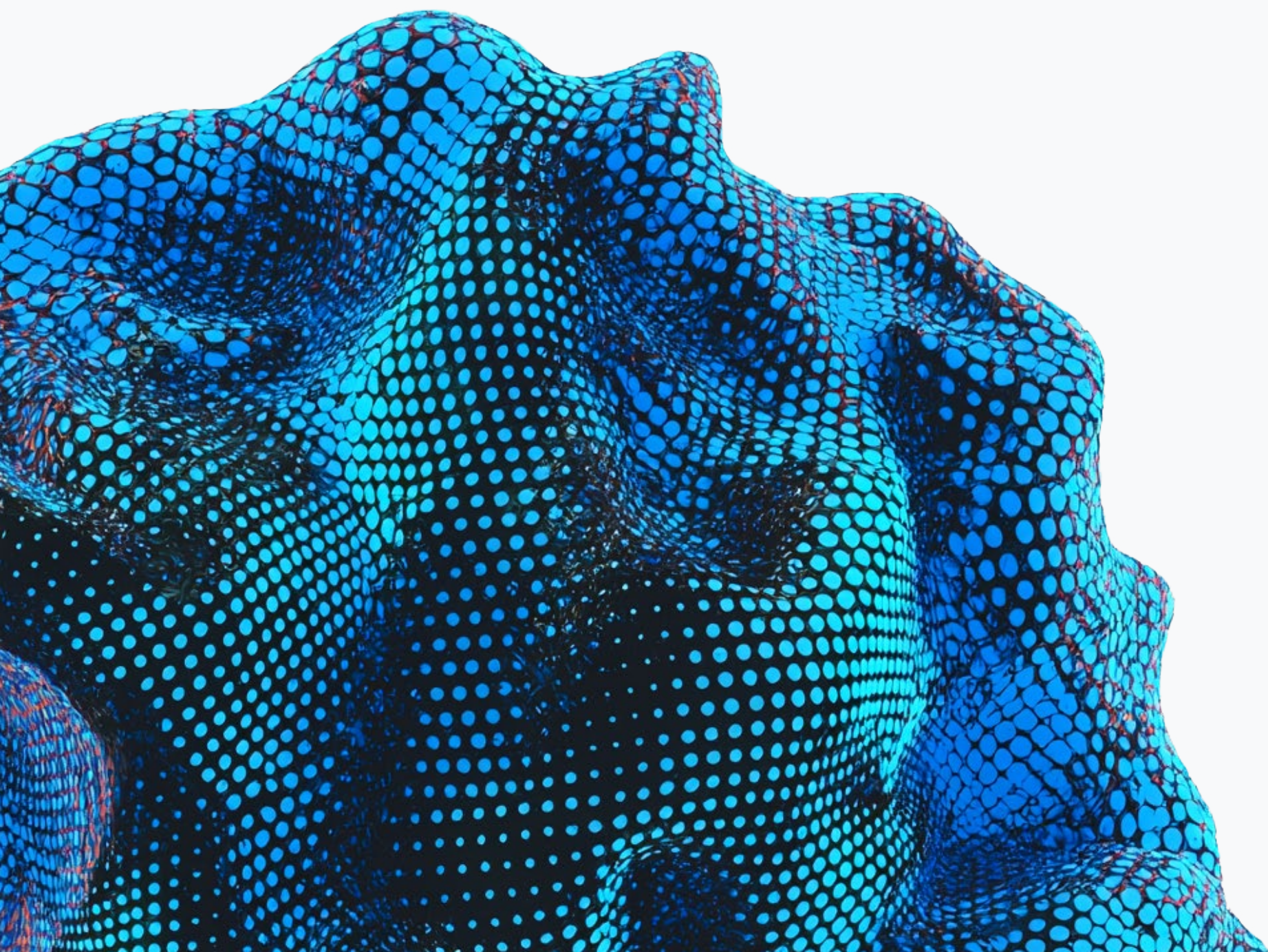


03

# Invest in the AI-ready future

## The maturation of AI signals a shift in business priorities.

As healthcare and life sciences organizations make progress on foundational goals like operational efficiency, business objectives are shifting. The focus is now moving toward the next wave of innovation, with AI agents emerging as a new strategic objective.



## Top business objectives to pursue with gen AI within the following 2–3 years



HCLS executives: 2024: n=190, 2025: n=605; Question: In light of recently completed gen AI initiatives, which of the following business objectives are you planning to pursue with gen AI within the next 2–3 years?



“



With agentic AI as a positive disruptive force for our industry, we have to rethink processes for people and AI consumption—prioritizing agentic AI now is all about setting ourselves up for the future.”



**Cristina Nitulescu**

Head of Digital Transformation and IT,  
Bayer Consumer Health

# AI budgets are following suit

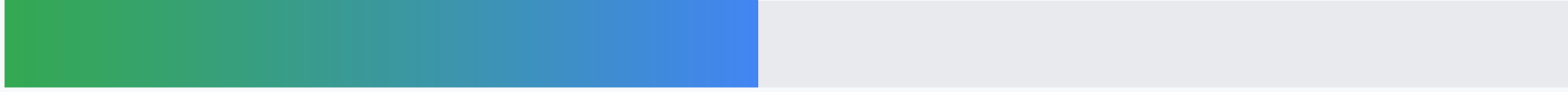
AI is now a mission-critical enterprise investment—evidenced by two clear trends.

Overall spending on AI is rising, even as technology costs fall. These investments are increasingly funded by non-AI budgets,<sup>34</sup> in addition to 23% mean percent of total annual IT spend already allocated for AI.<sup>35</sup>



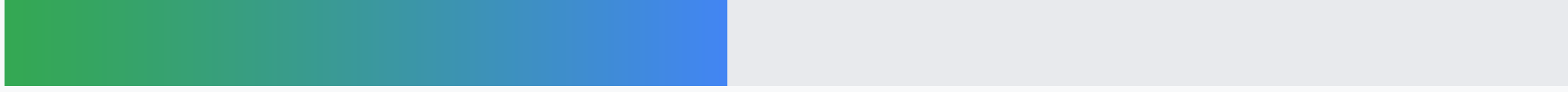
74%

report their organization's gen AI spend has increased as technology costs fall (new in 2025)<sup>36</sup>



48%

report their organization is reallocating non-AI budget for gen AI (vs. 41% in 2024)<sup>34</sup>



46%

report their organization is allocating 50% or more of their future AI budget to AI agents (new in 2025)<sup>37</sup>

<sup>34</sup> HCLS executives: 2024: n=190, 2025: n=605; Question: What is your approach to funding gen AI?

<sup>35</sup> HCLS executives: n=557; Question: What % of your total annual IT spend is allocated for AI? AI expenses would include talent, AI software licenses, AI hardware and infrastructure, AI application development. Please exclude data and BI analytics that are not directly using AI or ML.

<sup>36</sup> HCLS executives: n=605; Question: Did the decreasing costs of AI technology (model training and operating) change your spending on gen AI?

<sup>37</sup> HCLS executives: n=578; Question: What % of your future AI budget is being allocated to agents?

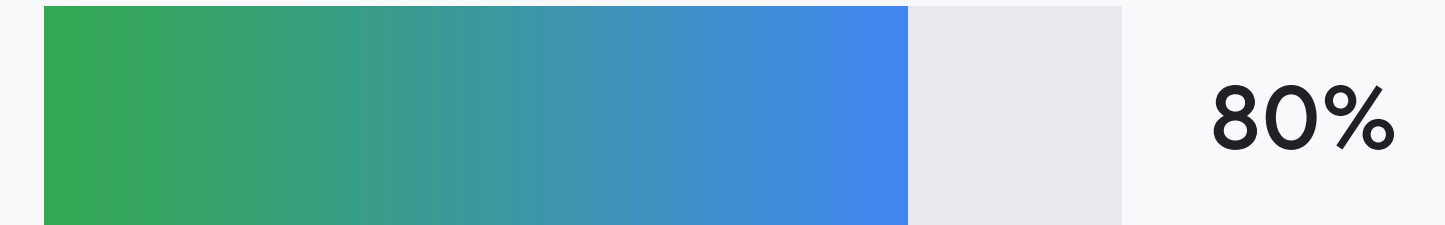
# ROI needs C-suite sponsorship

AI initiatives in the highly regulated healthcare and life sciences industry require deep cross-functional collaboration between clinical, research, and commercial teams.

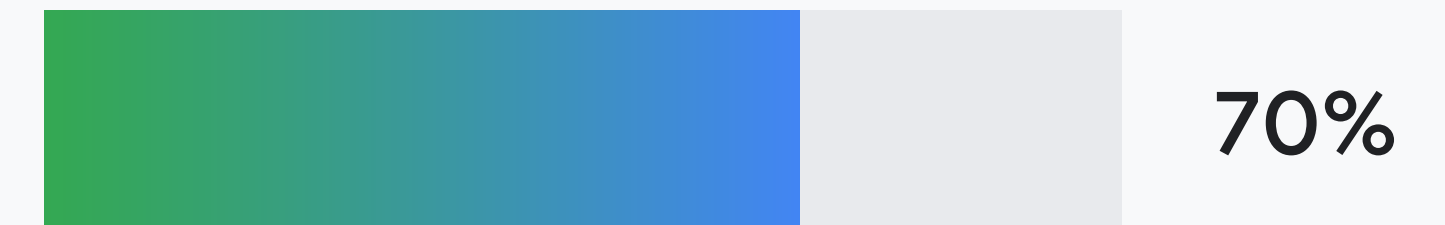
To enable this, C-suite sponsorship is critical. This top-level support can enable organizations to navigate important decisions on the fundamental nature of things like patient care, drug and medical device innovation, and genomic research.

C-level sponsorship remains more strongly correlated with seeing ROI on gen AI

Organizations with comprehensive C-level sponsorship



Organizations without comprehensive C-level sponsorship



HCLS executives who report their organization has comprehensive C-level sponsorship and clear corporate vision for gen AI objectives: n=170; HCLS executives who do not report comprehensive C-level sponsorship and clear corporate vision for gen AI objectives: n=435; Question: In what timeframe do you expect gen AI to deliver ROI to the following areas of your business?





“

**DASA**

C-level sponsorship is essential when rolling out any new technology. Leadership needs to understand what it is, how it works, and the impact it can have in order to secure the right resources and budget for success.”



**Anaterria Oliveira**

Vice President of Technology, Dasa

# Key challenges to consider

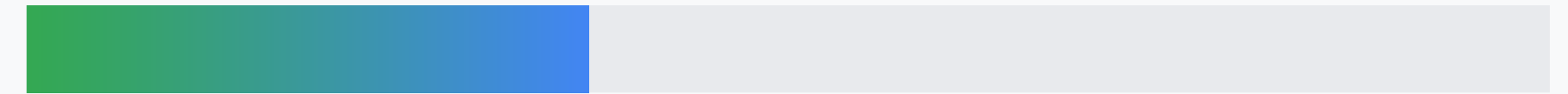
For many organizations, the top challenges with AI are rooted in the foundational work required to support them.

In the healthcare and life sciences industry, data security is a top concern. This is due to the critical need to protect patient data, intellectual property, and proprietary research, and the complex regulatory compliance landscape.

The solution lies in adopting a modern, integrated data strategy that prioritizes strong governance and security protocols from the start. This approach ensures that data is both accessible for innovation and secure throughout the entire AI lifecycle.

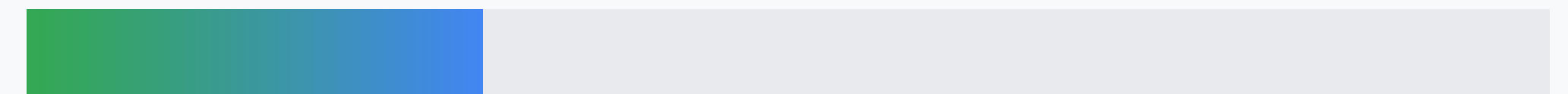
## Top 3 considerations for LLM providers

Data privacy and security



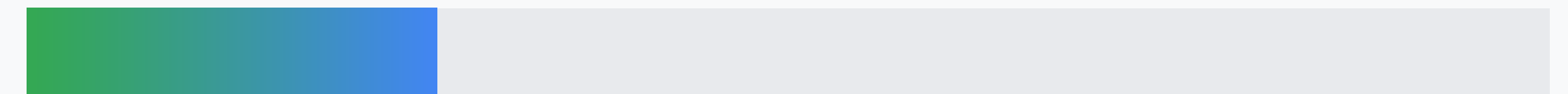
37%

Cost



30%

Ease of use and deployment



27%

HCLS executives: n=605; Question: Which of the following factors are MOST important to your company when considering LLM providers?



“



Data privacy and security is front and center, particularly at the National Cancer Institute where we interface with confidential and personally identifiable information, and must comply with confidentiality regulations. We have strict protocols in place to protect sensitive data as we explore agentic AI.”



**Nastaran Zahir**

Acting Director of the Center for Cancer Training,  
National Cancer Institute





04

# Your next steps

# The AI agent ROI checklist

- 
- ✓ **Find your executive champions.**  
Cultivate C-suite sponsorship to advocate for AI initiatives, clear roadblocks, and align to results.
  - ✓ **Demonstrate value to secure AI budget.**  
Build a compelling business case to secure an additional AI budget to reduce clinical trial costs or administrative overhead.
  - ✓ **Create your AI rulebook now, not later.**  
As AI use grows, so do the risks. Establish enterprise-wide guidelines for AI agent usage to ensure compliance with patient data privacy, research regulations, and evolving regulatory requirements.
  - ✓ **Start with the biggest wins.**  
Not all AI projects are created equal. Focus your energy on building AI agents with clear ROI and high automation potential, such as tech support, patient care, prior authorization requests, and security operations.
  - ✓ **Build trust in AI from day one.**  
First, get your data house in order with a robust data governance and enterprise security framework. Second, always keep a human-in-the-loop to maintain control and safety.
  - ✓ **Give your AI agents the tools to be useful.**  
For an AI agent to do the work, it needs access to necessary systems, like EHR or insurance and billing systems. Grant it secure, governed access.
  - ✓ **Invest in your talent and internal AI education program** to build and manage the AI agents so they can handle sensitive data like patient information and clinical research, and understand ethical implications. The most successful companies don't just buy technology, they build skills.

Google Cloud

See where  
your business  
could realize  
ROI from AI.

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