White Paper

# AI in Life Sciences Commercialization

## *Strategic insights and practical recommendations from 2025 survey of Commercial Leaders*

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# Executive summary

Artificial Intelligence (AI) has become an indispensable component of life sciences commercialization, reshaping how companies allocate resources, engage customers, and drive growth. To understand this transformation, IQVIA surveyed 107 senior commercial leaders across five critical areas: adoption and maturity, investment and ROI, impact by function, barriers to scale, and partnership strategy. Our goal was to capture the full journey from AI ambition to real-world execution to help leaders benchmark their progress, understand how peers are adapting their strategies, and make informed decisions about where to focus next.

Survey findings show that AI is moving rapidly from experimentation to execution. Over 80% of organizations have advanced beyond pilots, and more than a third now describe themselves as "AI Advanced." AI Advanced organizations are defined as those that have widely adopted AI technologies, with a clear strategy and ongoing optimization.

Investment in AI is rising, and the returns are real. Nearly half of the surveyed companies dedicate more than 20% of their commercial budgets to AI, with another quarter investing between 11% and 20%. This level of commitment reflects AI's growing role in commercial strategy with proven results. The returns are compelling: 58% of leaders report achieving 2X ROI from their AI initiatives within a single year, with 7% seeing 3X or more.

However, scaling AI — and realizing its full value — remains challenging. Data privacy, legacy systems, and talent shortages are the most common barriers. Notably, 36% of organizations say their data is either "mostly insufficient" or only "moderately sufficient" to support AI, highlighting a persistent gap in data readiness. Just over half (52%) rate their data as "mostly sufficient," and only 11% say it is "fully sufficient." Because many organizations still face data readiness gaps, partnerships are helping accelerate progress. 89% of those surveyed are already co-developing or actively considering co-development of AI solutions with external vendors, with selection driven by criteria such as domain expertise, data security, and proven innovation.

All of these insights begin to tell the story of what life sciences organizations need to successfully adopt, and utilize, AI moving forward. The survey results reveal that successful organizations demonstrate the ability to embed AI into cross-functional workflows, move from pilots to broad adoption, and build resilient, data-driven commercial models. Their experience shows that the next wave of value will come from disciplined execution, strong governance, and the right partnerships — not just technology.

**For leaders looking to translate these insights into action, the "Playbook for scaling AI" section outlines six practical moves to scale AI with impact.**

*All data and insights are from a May 2025 IQVIA Survey on AI in Life Sciences Commercialization.*

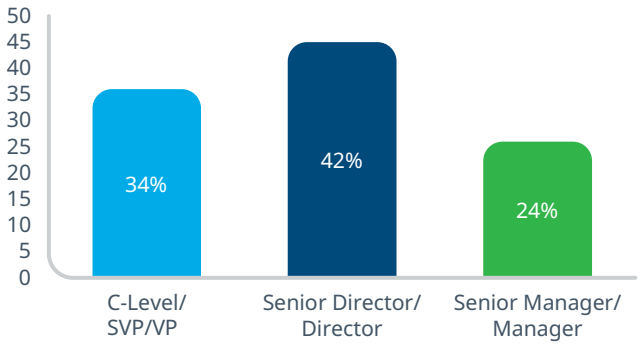
# Survey methodology

To understand how AI is transforming life sciences commercialization, in May 2025, IQVIA conducted a survey of senior commercial leaders across the industry. The goal was to gain a comprehensive view of how organizations are investing in, deploying, and scaling AI — and what barriers and enablers are shaping that journey.

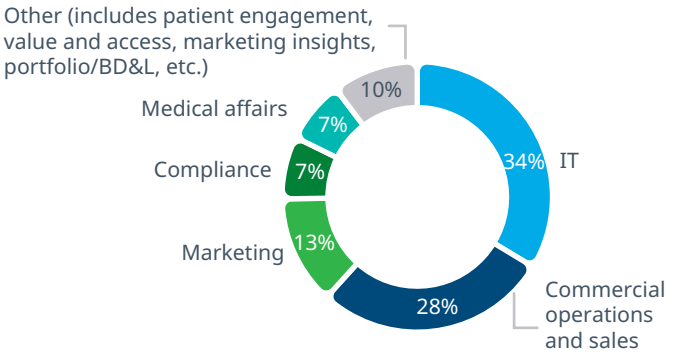
The survey included 107 respondents, representing a diverse mix of geographies, company sizes, and commercial functions. Participants held senior roles across Sales, Marketing, Market Access, Compliance, and Data Operations, ensuring a well-rounded perspective on both strategic priorities and operational realities.

**Figure 1 A-D: Domains covered in the IQVIA AI commercialization survey**

**A: Seniority levels of survey respondents (n=107)**



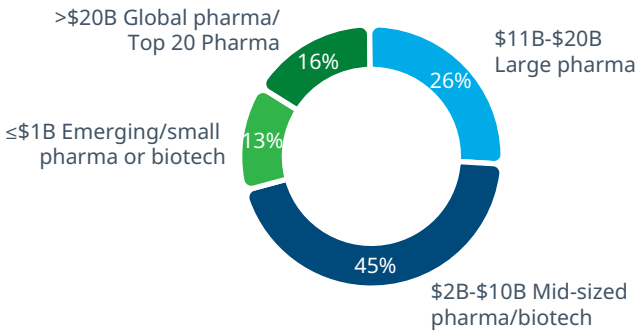

**B: Functional area of respondents (n=107)**




**C: Geographic distribution of survey respondents (n=107)**

| | | | | | |
|---|---|---|---|---|---|
| USA | 23% | Germany | 8% | France | 6% |
| Canada | 14% | Italy | 6% | Japan | 5% |
| China | 14% | Spain | 6% | Singapore | 4% |
| India | 8% | UK | 6% | | |

**D: Annual global revenue of respondents' organizations (n=107)**



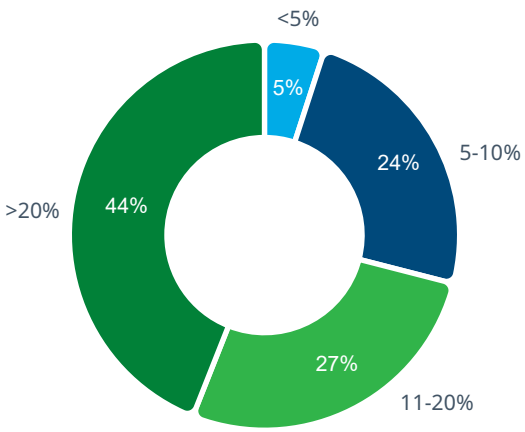

In addition to multiple-choice and scaled-response questions, the survey included free-text questions to capture emerging use cases, data challenges, and vendor experiences in respondents' own words. These qualitative insights were analyzed alongside quantitative data to surface patterns, priorities, and points of divergence across the industry.

# State of AI adoption

## AI investment, maturity, and organizational readiness to scale AI

For life sciences companies today, investment in AI has become a defining feature of commercial strategy. According to the IQVIA survey, nearly half of organizations (44%) now dedicate more than 20% of their commercial budget to AI initiatives. Only 5% — allocate less than 5% of their commercial budget to AI, underscoring how rare it is for AI to remain a marginal spend category.

**Figure 2: Distribution of commercial budget allocated to AI initiatives (n=107)**




This shift in spending reflects a broader transition: AI has become a core operational priority. 36% of surveyed organizations already operate at an advanced maturity level, with AI integrated across functions and governed centrally.

Leaders are moving beyond isolated pilots and fragmented tools to embed AI into the fabric of their commercial models. This means aligning AI investments with business KPIs, building scalable data infrastructure, and fostering cross-functional collaboration to accelerate time-to-impact. Reflecting this shift, Figure 3 shows that nearly two-thirds of organizations report achieving at least a 2X ROI from their AI initiatives within one year, with 7% reaching 3X or more.

**Figure 3: One-year ROI from AI commercial initiatives (n=107)**

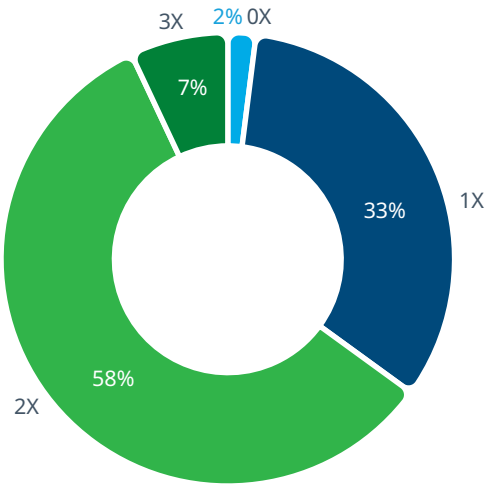
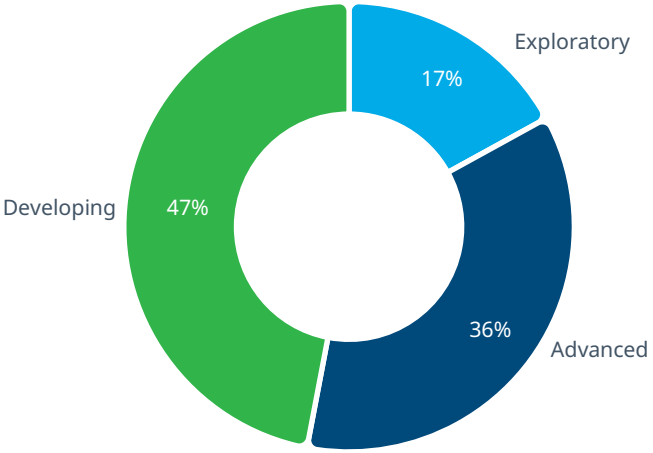



**Figure 4: AI maturity levels across organizations (n=107)**




Further, as AI becomes embedded in commercial strategy, the conversation is shifting from "How much are we investing?" to "How fast are we learning?" and "How broadly are we scaling?" The next wave of differentiation will come from scaling intelligently.

It's also important to recognize that AI investment is not uniform across the industry. While some organizations are moving aggressively, 17% of respondents report being in the exploration phase, with limited implementation and isolated use cases.

While AI adoption is accelerating across life sciences, organizational readiness to scale remains uneven. According to the IQVIA survey, nearly two-thirds (64%) of executives say their organizations are "very" or "extremely" ready to scale AI. Figure 4 illustrates this distribution, highlighting the varying degrees of preparedness across the industry.

Survey findings suggest that organizations self-identifying as "AI Advanced" also reported higher ROI and broader implementation of AI use cases. By isolating responses from this group, we observed consistent traits such as centralized governance, cross-functional AI teams, and faster pilot-to-production cycles — factors that appear to contribute to their success. The readiness to scale AI is increasingly becoming a competitive differentiator. Companies that treat AI as a core business capability are pulling ahead by investing in the technology, people, processes, and partnerships needed to operationalize at-scale.

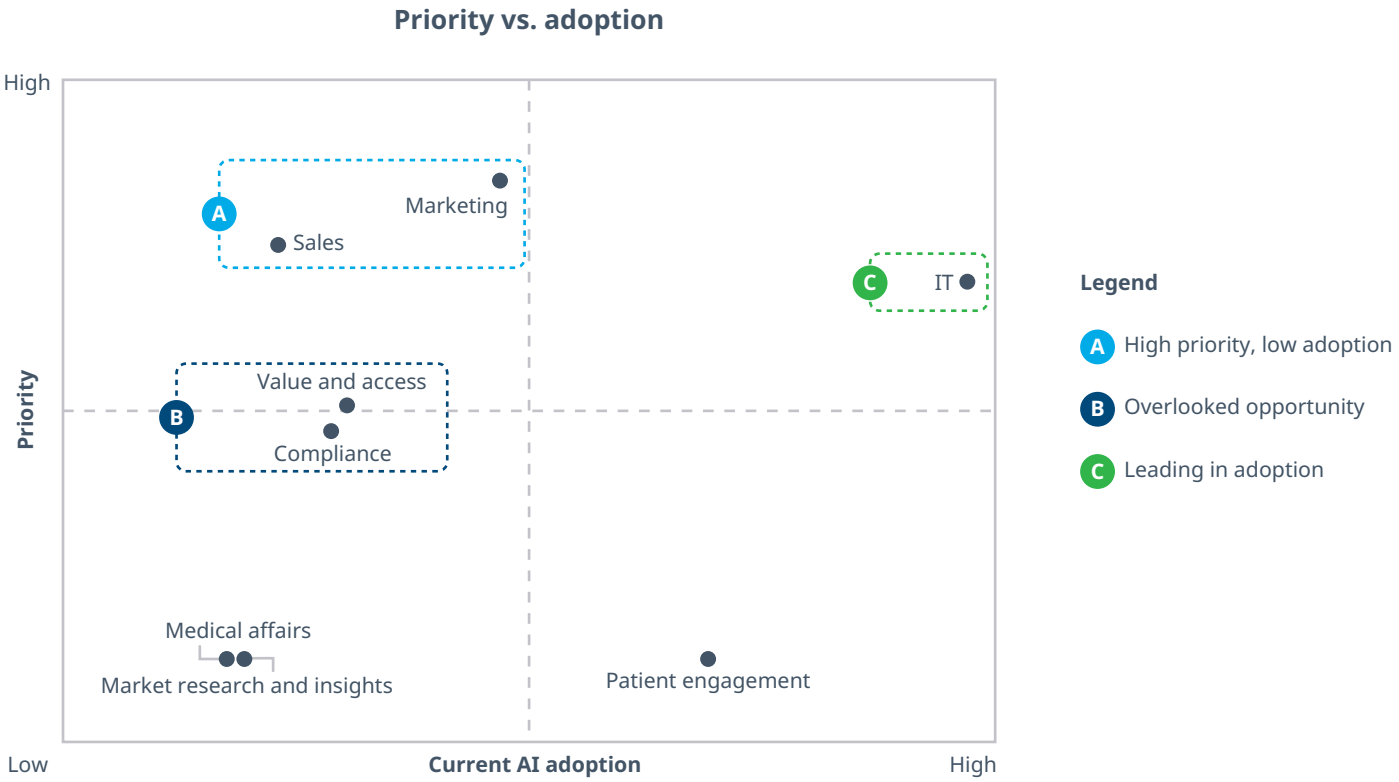
***AI is no longer experimental, it's essential to commercial execution.***

*Companies that align AI with business goals, embed it across teams, and scale with intent are unlocking real, measurable value.*

## AI impact by commercial function

While enthusiasm for AI is strong across commercial functions, adoption remains uneven. IQVIA's survey reveals a clear pattern: the functions expected to benefit most from AI are often the ones where execution lags. This mismatch highlights where organizations may be leaving significant value on the table.

**Figure 5: AI priority and implementation across commercial functions**




**KEY FINDINGS:**

**A Sales and Marketing: High priority, low adoption** — Sales and marketing are rated highest in strategic importance, yet low current average adoption. Despite the promise of AI to drive field productivity, omnichannel targeting, and content personalization, many organizations have not yet industrialized these tools. The barriers are less about ambition and more about scaling enablement across decentralized teams.

**B Value and Access, and Compliance: Overlooked opportunity** — Value and access along with Compliance also carry priority but show even lesser adoption. AI use cases frequently cited in these areas include payer analytics, audit automation, and pricing simulation.

**C IT and Data Operations: Leading in adoption** — IT and data operations are rated as high priority and report the highest adoption across all commercial functions. Use cases are focused on building data infrastructure and integration capabilities that support AI across the organization.

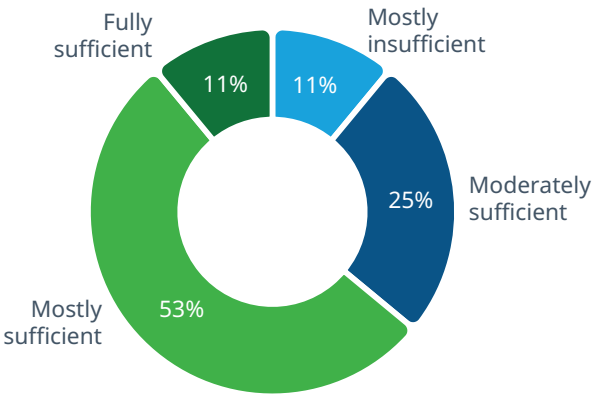
***The next phase of commercial AI requires closing the gap between strategy and execution.***

*Organizations that align AI across Sales, Marketing, and Market Access can turn isolated projects into unified growth engines.*

## Barriers to scale

The IQVIA survey reveals that while over 80% of organizations now prioritize AI investment in key commercial functions, most still face significant data challenges. Only a small minority report their data is "fully sufficient" to support commercial AI applications, while the majority describe their data as "mostly" or "moderately" sufficient (see Figure 6).

**Figure 6: Data sufficiency for commercial AI applications (n=107)**




The IQVIA survey of 107 senior commercial leaders surfaced five core barriers that continue to slow the enterprise-scale adoption of AI in commercial functions:

**51%** **Privacy and regulatory constraints**
GDPR, HIPAA, and AI governance demands create friction for enterprise-scale adoption.

**50%** **Integration with existing systems**
Outdated CRM and ERP platforms consume resources and delay implementation timelines.

**47%** **High implementation costs**
Annual funding cycles favor quick wins over long-term investment in AI platforms.

**46%** **Limited internal expertise**
Many teams still lack embedded AI talent or structured execution frameworks.

**41%** **Fragmented data**
Siloed, inconsistent datasets stall AI integration and undermine model reliability.

Respondents also cited inconsistent data quality and limited access to real-time or longitudinal data as key barriers to strengthening their data infrastructure to keep pace with the demands of enterprise-scale AI.

These challenges are not just technical but also strategic and operational. Respondents cited fragmented systems, inconsistent data quality, and limited access to real-time or longitudinal data as key barriers to strengthening their data infrastructure to keep pace with the demands of enterprise-scale AI.

While organizations use varied data sources — such as CRM, field activity, claims, prescriptions, digital engagement, patient support, and market data — these are often siloed and inconsistently structured, limiting their utility for enterprise-scale AI. As one respondent put it, "We have the data — we just can't use it the way we need to."

The persistent challenge of fragmented data and integration difficulties underscores the need for investment in interoperability and data governance. Companies that can unify their data sources across regions, standardize access, and embed governance into their infrastructure will be best-positioned to scale AI and realize its full commercial value.

***AI ambition is outpacing data infrastructure.***

*To scale effectively, organizations must invest in data governance and interoperability to unify and standardize data across systems.*

### DATA — THE ENABLER AND THE BOTTLENECK

*"We're not short on data — we're short on usable, connected data."*

This sentiment, echoed by many survey respondents, captures a growing tension in commercial AI. As organizations scale their ambitions, they're running into the reality that data infrastructure hasn't kept pace. The issue isn't just about volume — it's about structure, accessibility, and integration.

*"The ambition is there, but the infrastructure isn't."*

This gap between strategic intent and operational readiness is where many organizations now find themselves. As AI becomes more embedded in commercial models, the ability to unify, govern, and activate data across systems will define the next generation of leaders in life sciences.

## Vendor strategy and partnership models

As AI becomes more deeply embedded in commercial strategy, the role of external partners is evolving and plays a decisive role in enabling scalable AI. Survey findings show:

- 89% of organizations co-develop AI solutions with external partners
- Of those, 64% prefer large, established vendors with proven delivery models
- 61% say partner selection is made through centralized, executive-level decision-making

The most forward-looking companies treat vendors not as service providers, but as strategic collaborators — co-owning outcomes, sharing risk, and scaling together. AI vendor strategy is no longer a departmental decision — it is a leadership imperative.

While internal capabilities such as proprietary data and therapeutic expertise remain essential, surveyed companies increasingly rely on vendors to bridge capability gaps in infrastructure, data integration, and model development as they move from pilots to enterprise-wide execution. In fact, life sciences leaders are no longer looking for point solutions; they expect partners to deliver scalable value, securely and at speed.

Survey respondents identified three areas where vendors are currently creating the greatest impact and where demand will remain strong over the next 12–24 months:

- Data integration and interoperability
- Model development and deployment
- Ongoing performance monitoring and optimization

To support these priorities, companies are adopting a range of partnership models:

- 55% of companies now operate through joint governance structures, including shared KPIs and roadmaps
- 38% use performance-linked contracts, when vendor compensation flexes with business outcomes
- 7% pursue co-investment models, including shared IP and commercialization efforts

These models reflect a broader shift in mindset — from vendor oversight to integrated delivery. While not all organizations are pursuing every model, the data suggests a growing appetite for partnerships that drive accountability, accelerate innovation, and enable enterprise-scale AI. For vendors, this means demonstrating not only technical capabilities but also strategic alignment, domain expertise, and the ability to deliver measurable business value.

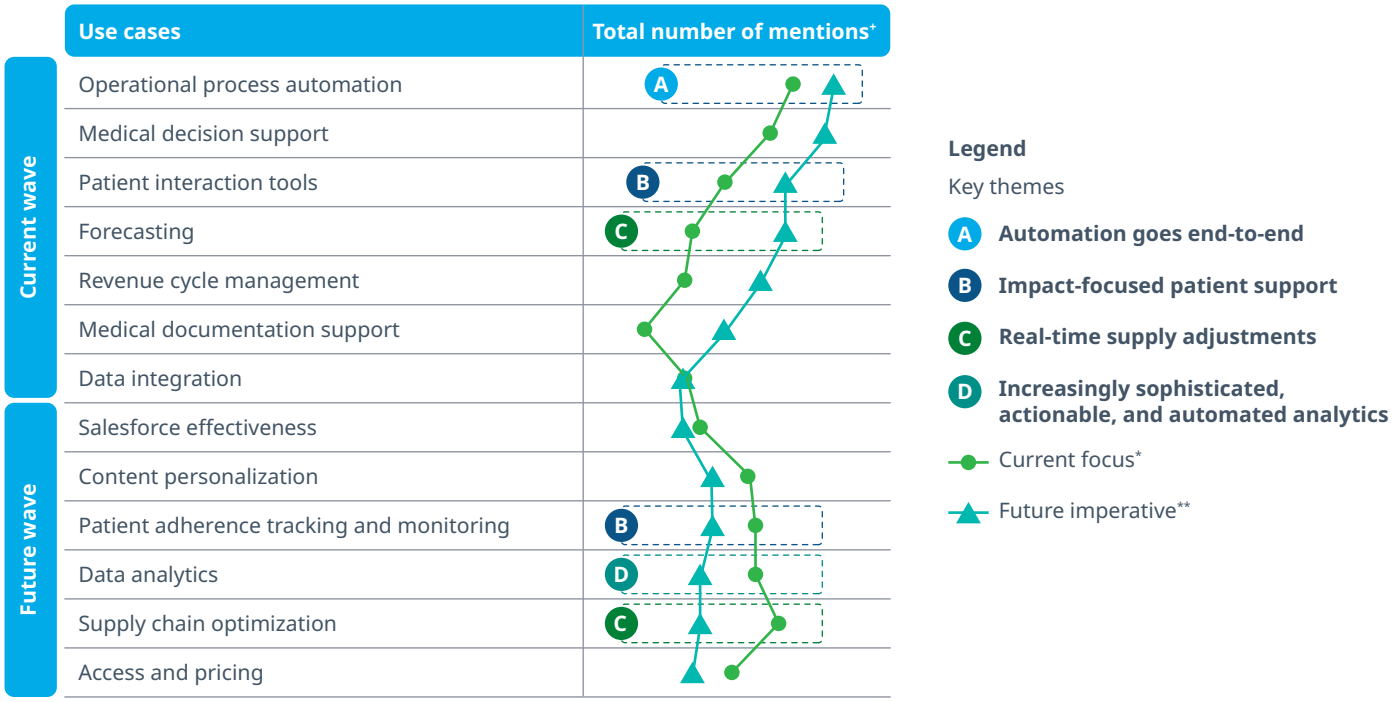
***High-impact AI depends on strategic partnerships, not just vendors.***

*Leading companies co-develop with partners through shared governance, outcome-based contracts, and co-investment models to drive scale and innovation.*

## Outlook

Life sciences organizations are currently prioritizing AI use cases such as patient interaction tools, forecasting, and operational process automation. The next step will be focusing on AI systems that drive performance across multiple functions.

**Figure 7: Priority AI use cases**




*Count of use cases mentioned is shown on a scale of 1–30, based on the number of times each was mentioned by survey respondents. Survey responders were able to select multiple responses. *Current use cases were identified in response to the question: "What are the top AI use cases now live or in pilot?" **Future imperatives reflect responses to: "Which future commercial capabilities do you hope AI will enable that are not yet widely available?"

The letters A-D in above figure correspond to the four key themes detailed below.

A **Automation goes end-to-end:** Operational process automation remains the most widely cited use case. In the future, most will have already optimized routine workflows and shift focus to connecting them into full end-to-end processes.

B **Impact-focused patient support:** Use of chatbots and field prompts will become commonplace. We will see higher growth in adherence tracking, reflecting a shift in focus toward behavior change and measuring impact of support.

C **Real-time supply adjustments:** In addition to prioritizing forecasting, companies are doubling down on supply chain AI, reflecting a move from static demand predictions to systems that detect disruptions and adapt in real-time.

D **Increasingly sophisticated, actionable, and automated Analytics:** As AI becomes increasingly advanced, its capabilities will expand to include triggering actions such as content delivery, account targeting, and sequencing with minimal human input. The goal is no longer visibility, it's intelligent activation at the point of decision.

***Leading organizations are moving from isolated tools to integrated AI systems.***

*To stay ahead, companies should prioritize adaptive use cases that enable agility, cross-functional decisions, and measurable outcomes.*

## Conclusion: From ambition to advantage

AI is no longer “nice to have”— it has become essential to life sciences commercialization. However, realizing AI’s full potential requires more than investment in tools. It demands strategic clarity, operational readiness, and a willingness to rethink how commercial functions are executed and scaled. The organizations pulling ahead are those that embed AI into their enterprise strategy, supported by strong governance, agile teams, and trusted partnerships.

As AI use cases expand and adoption deepens, the next challenge is orchestration: aligning AI with business KPIs, integrating it across functions, and continuously optimizing for impact. Successful organizations will approach  AI as an enterprise capability that is intelligent, integrated, and built to scale.

***The organizations that act now to embed AI at the core of their commercial strategy will define the next era of growth in life sciences.***

# Playbook for scaling AI

**High-performing organizations embed AI across their entire commercial strategy.**

**Here are six ways companies can scale AI to maximize impact:**

### Commit to an enterprise AI strategy

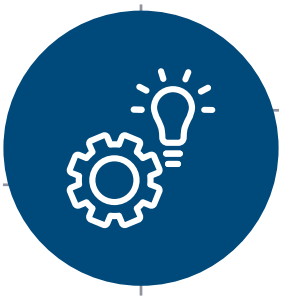
**64%** of organizations have not yet reached AI-advanced status — where AI is integrated, governed, and continuously improved. Closing this gap starts with leadership by embedding AI into enterprise strategy and aligning it with business goals from the start.

### Build a strong data foundation

**41%** of companies struggle with fragmented data. Effective data organization and governance — spanning sales, HCPs, patients, omnichannel engagement, payers, third party, market intelligence, and real-world — is essential before scaling AI models.

### Create AI-focused, cross-functional teams

The fact that "AI Advanced" organizations report broader implementation of AI use cases suggests that focused, cross-functional collaboration contributes to accelerated delivery and scaling.



### Focus where value is shifting

**53%** of survey respondents identified strong interest in use cases that support agility, insights, and patient outcomes such as supply chain optimization, data analytics, and adherence tracking.

### Share risk with partners

**38%** of companies now link vendor compensation to business outcomes, enabling more accountable, scalable delivery.

### Embed compliance from the start

Build transparency, explainability, and bias checks into AI models during design, not post-launch. With over **30%** of leaders citing regulation and data security as top constraints, proactive governance is essential for scalable AI.

**By prioritizing these six principles, life sciences leaders can drive measurable impact across the commercial enterprise.**

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# About the authors

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Shravan Kotakonda leads Strategic Operations for IQVIA's Global Commercial Solutions Business Unit and has more than 15 years of experience in life sciences and healthcare. He leads strategic planning, market intelligence, M&A, commercial operations, and organizational effectiveness, guiding teams to align priorities with execution and drive growth. Shravan actively engages with industry partners and thought leaders to influence the advancement of AI-driven commercialization. He is responsible for leading Agentic AI strategy within the commercial business unit and contributes to the ongoing growth of IQVIA's analytics capabilities.

Previously, Shravan was chief of staff to the President, Commercial Solutions, and led strategic planning and operations for Global Market Insights and MedTech Business Units. He holds a Bachelor of Pharmacy (Hons.) from Birla Institute of Technology and Science, Pilani, and has been with IQVIA since July 2012.

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Pravindra Awasthi has over 16 years of experience in life sciences, with expertise in cardiology and oncology. He focuses on strategic planning, commercial analytics, market intelligence, and go-to-market strategy — supporting both internal initiatives at IQVIA and external work with Pharma and MedTech clients. He has led global and regional projects across the U.S., EU5, India, and key emerging markets, helping organizations expand into new geographies, enter new markets, and optimize product portfolios. His work combines forecasting, primary and secondary research, and AI/ML-driven insights to guide commercial AI strategy and improve execution. Pravindra holds a veterinary degree from G.B. Pant University and an MBA in Marketing from Christ University, bringing together clinical and business knowledge to deliver practical, evidence-based solutions. He also contributes to IQVIA's efforts in AI-enabled commercialization and advances data-driven decision-making by promoting the use of data, analytics, and AI.

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