



Enabling Agentic AI with Data

From Databases and Platforms to Data Products

Marlanna Harrington

Senior Research Analyst | IDC

Devin Pratt

Research Director | IDC

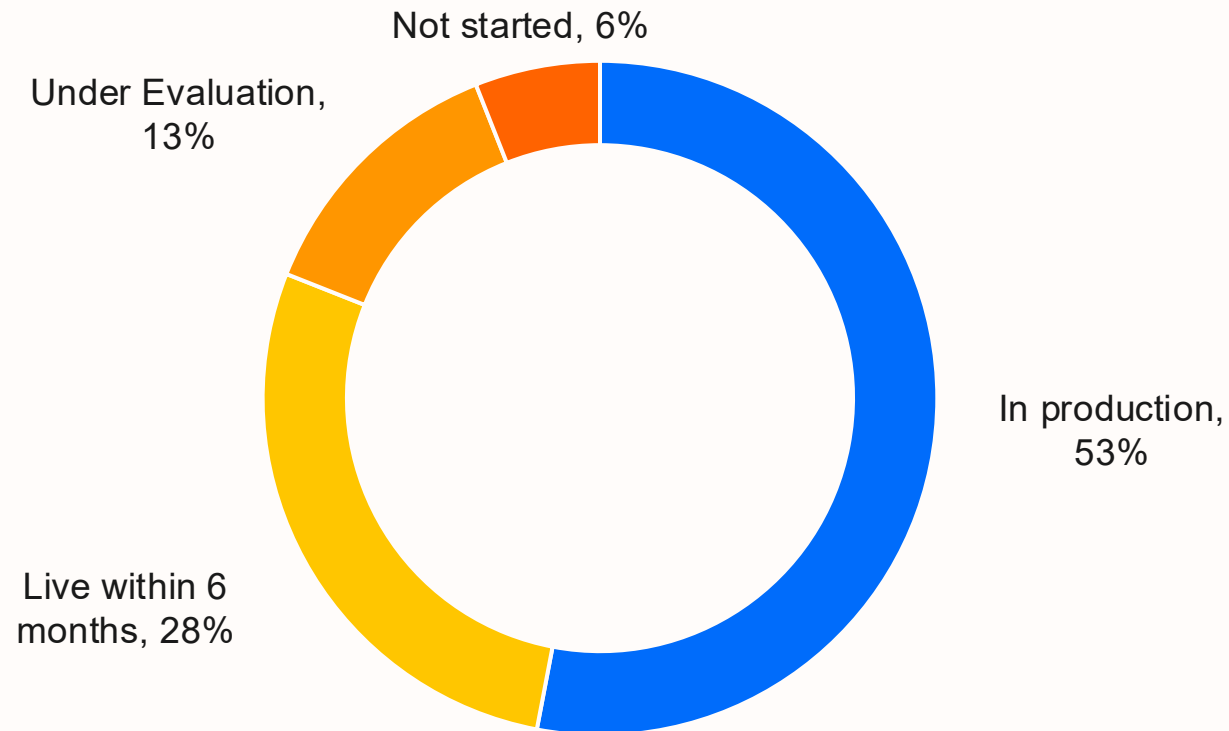


Agenda

- 1 Market Reality & Maturity**
- 2 Data-for-AI Architecture Building Blocks**
- 3 AI-for-data Automation in the Stack**
- 4 Key Takeaways**

Current state of evaluating or using Agentic AI agents

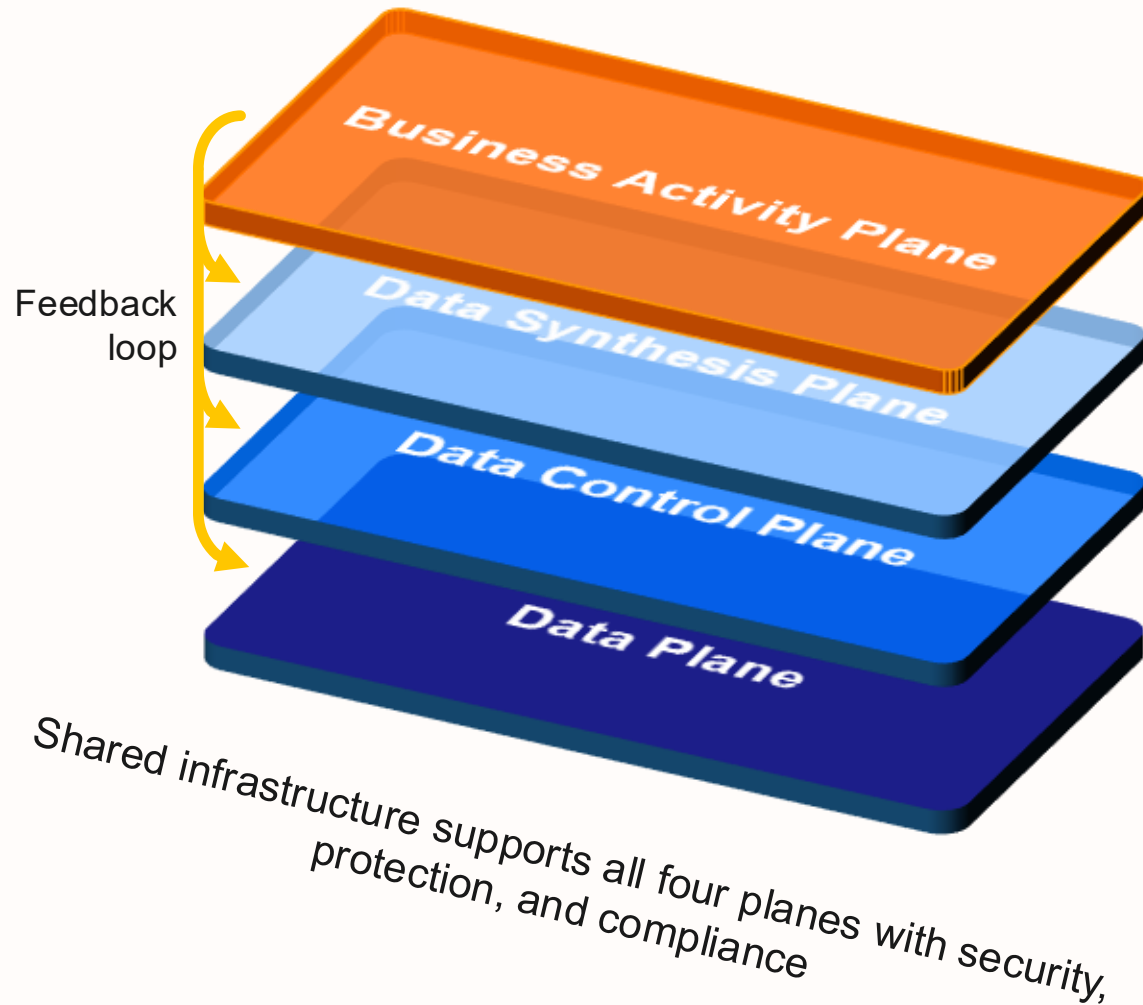
What is your organization's current state of evaluating or using AI Agents?



Source: IDC's AI Tech Buyer Survey, N=2296, June 2025



Four-planes of Enterprise Intelligence Architecture



Uses AI in business workflows to drive actions and results

Combines data and models to generate insights, recommendations, and content

Governs data quality, stewardship, security, and compliance

Organizes enterprise data so it can be accessed, integrated, and managed

Buyer maturity shapes adoption pathways

Organizations start agentic AI from different maturity levels. As maturity rises, buying shifts from point tools to orchestrated platforms.



Early / Low Maturity (Build the foundation)

- Simplify fragmented data
- Modernize platforms and automate work
- Establish baseline governance

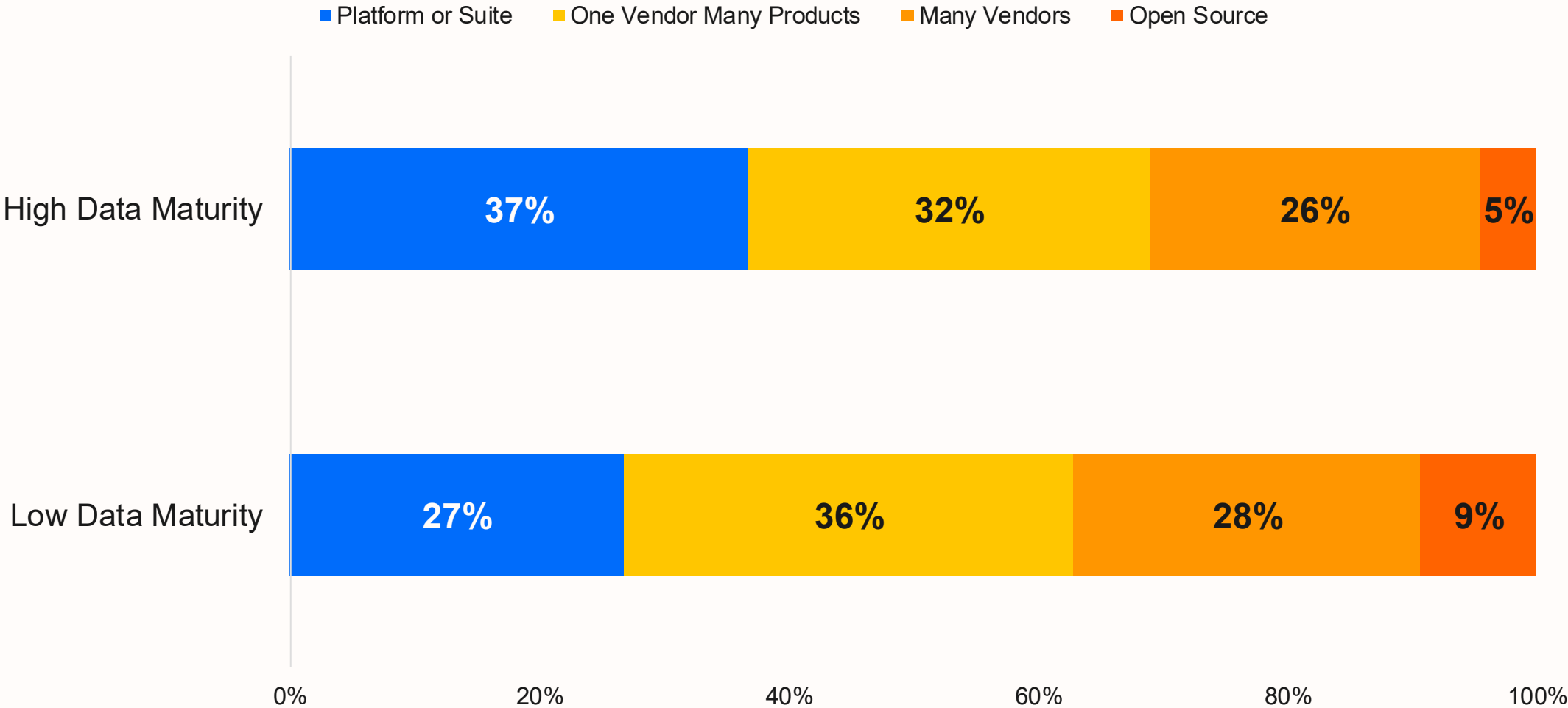


Advanced / High Maturity (Scale AI Operations)

- Enable real-time, AI-ready architecture
- Deliver governed, reusable data products
- Unify policy, control, and workloads

Buying shift: Point solutions to platform orchestration

Technology buyers prefer one source when buying data management solutions



Data for AI and AI for data



Data for AI

Building the trusted foundation for intelligent systems

- Unifies structured, unstructured, and emerging data types
- Delivers high-quality, governed data at scale
- Supports real-time training, inference, and agentic workflows
- Ensures AI operates on secure, compliant, context-rich data



AI for Data

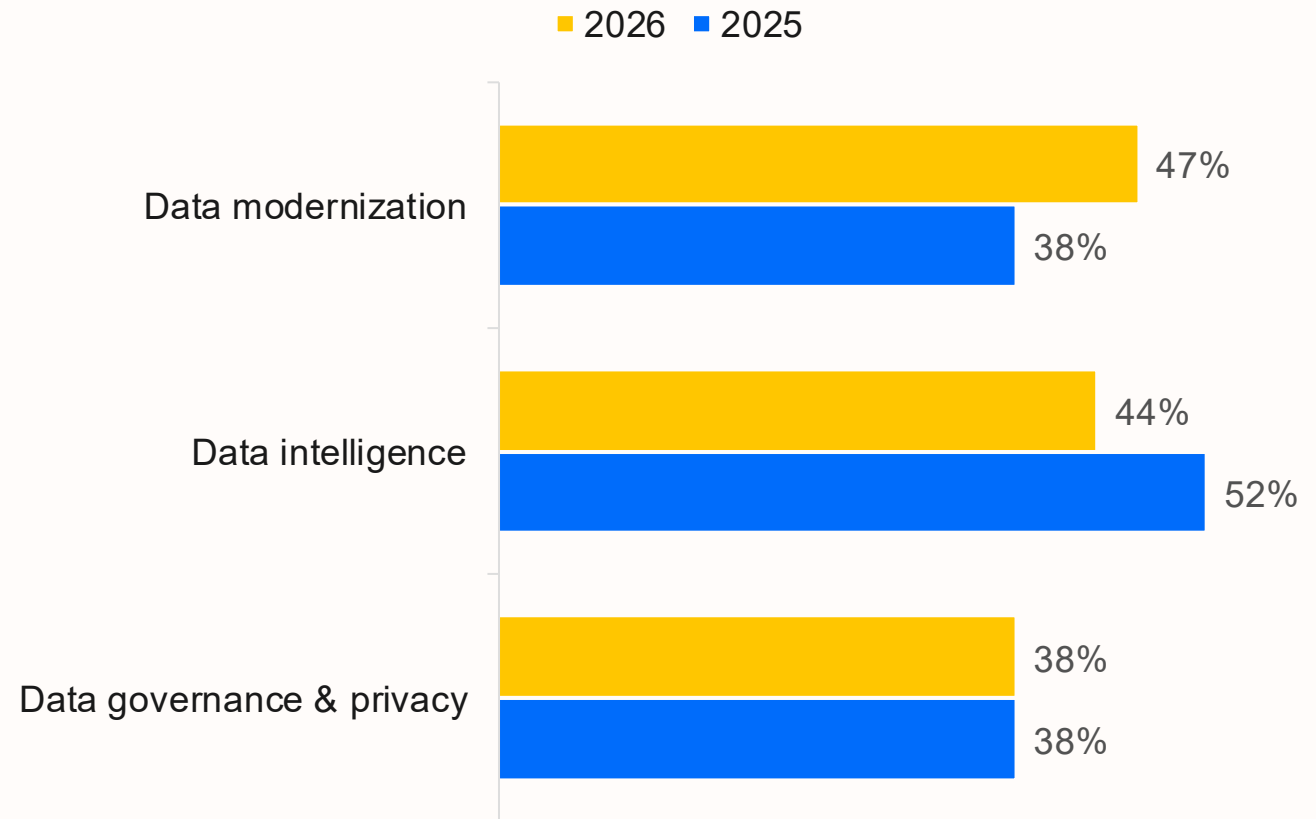
Making data environments intelligent and self-optimizing

- Automates discovery, curation, governance, and performance tuning
- Continuously optimizes workloads and resource use
- Detects anomalies and enforces policy in real time
- Reduces complexity while accelerating trusted insights

Focus areas in making data AI-ready



What is your organization's most important data-related area of focus and investment? Top 3 Responses



Sources: IDC Future Enterprise Resiliency & Spending Survey Wave 1, February 2025; IDC Future Enterprise Resiliency & Spending Survey Wave 10, December 2025. Both filtered to organizations prioritizing AI data readiness, N=353 and N=357, respectively.

Technical Challenges Shift for Agentic Users

What are the top 3 technical data challenges data leadership faces in the next 12–18 months?

Total Sample

- 1 Data Quality
- 2 Data Security, Privacy, and Governance
- 3 AI Model Tuning/Training

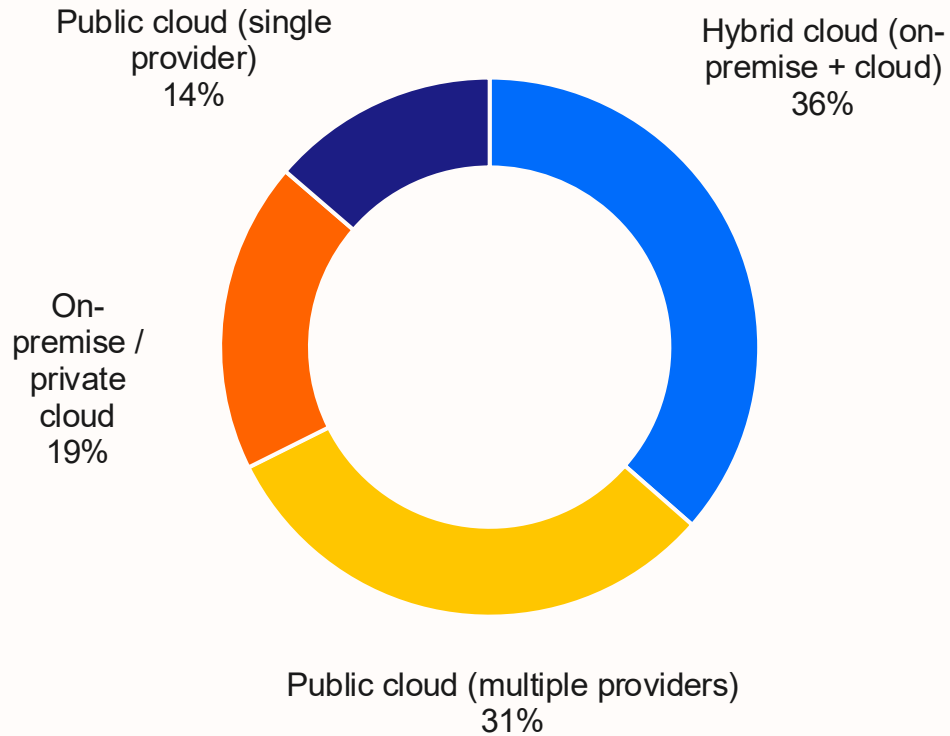
Agentic AI Deployers

- 1 AI Outcome Accuracy and Relevance
- 2 Cross Environment Data Distribution
- 3 Data Changes, Movement and Streams

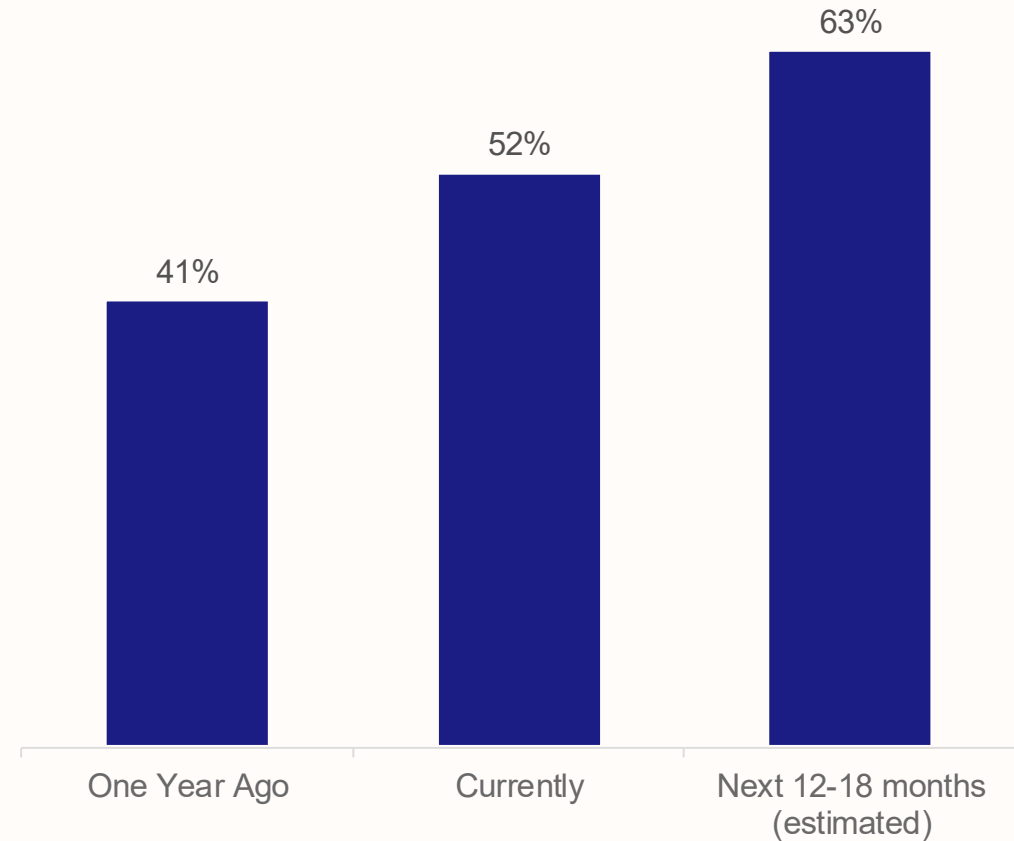


Combining disparate data sources

What deployment option best describes where your analytical data repositories are stored?

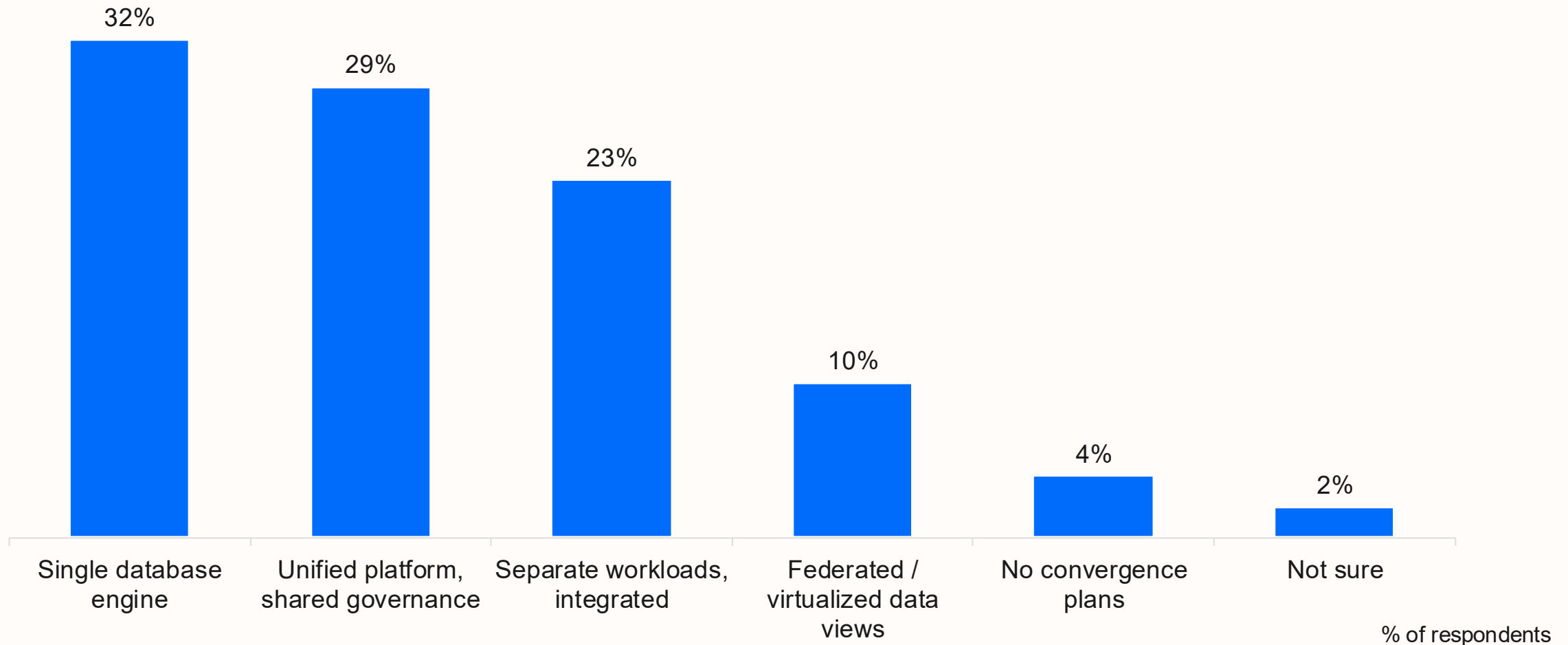


What proportion of analytic data is stored in open table formats (Iceberg, Delta, Hudi)?



96% of organizations expect to run converged workloads

Looking ahead 12–24 months, which approach best describes how you expect to run converged workloads together to enable real-time decisions and actions (including agentic AI workflows)?



Converged workloads for real-time intelligence

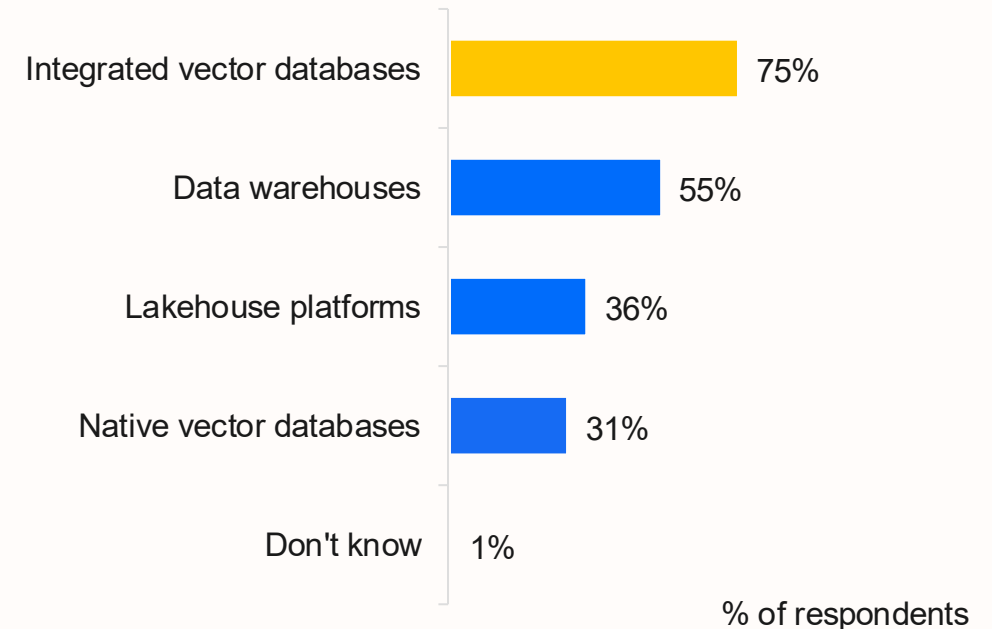
By 2029, 60% of enterprise data platforms will unify transactional and analytical workloads to power agentic AI, enabling real-time data access and continuous intelligence.

What converged workloads bring together:

- ✓ Live Operational Data
- ✓ Analytical insight
- ✓ Vector-based semantic retrieval
- ✓ Real-time event streams
- ✓ Governance and observability

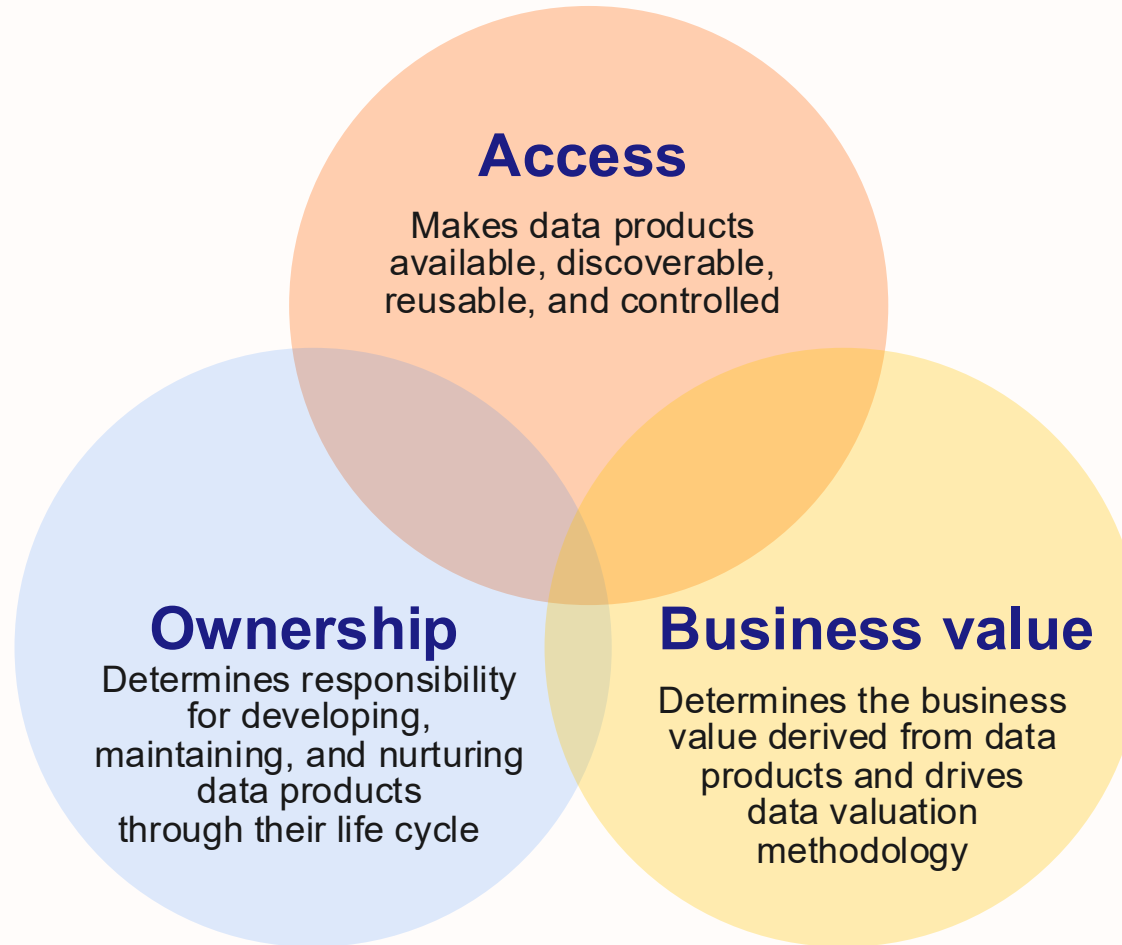
Reduce the distance between event, insight, and action

Which platforms does your organization use or expect to use to store and query vector embeddings in your agentic AI workflows?



Data products as agent interfaces

These three dimensions define data products:



Data products impact success

AI for Data 

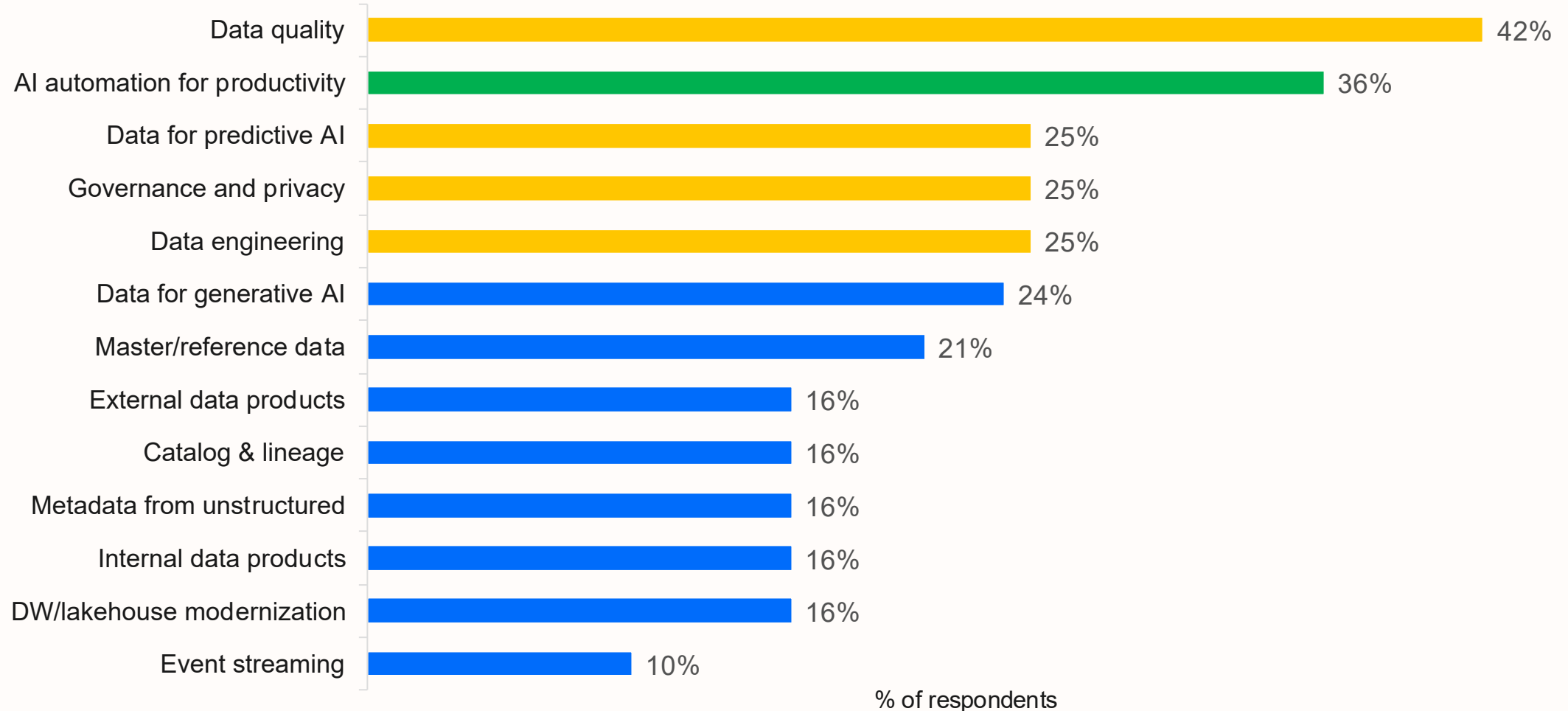
Data for AI 

	Organizations with Low Data Product Maturity	Organizations with High Data Product Maturity
Production Generative AI	13%	72%
Production Agentic AI	14%	65%
Leveraging AI for data	16%	65%
Highly effective collaboration	11%	61%
Mature data governance practices	6%	48%
Financial KPI Improvement	2.9%	10.2%
Operational KPI Improvement	3.9%	10.1%



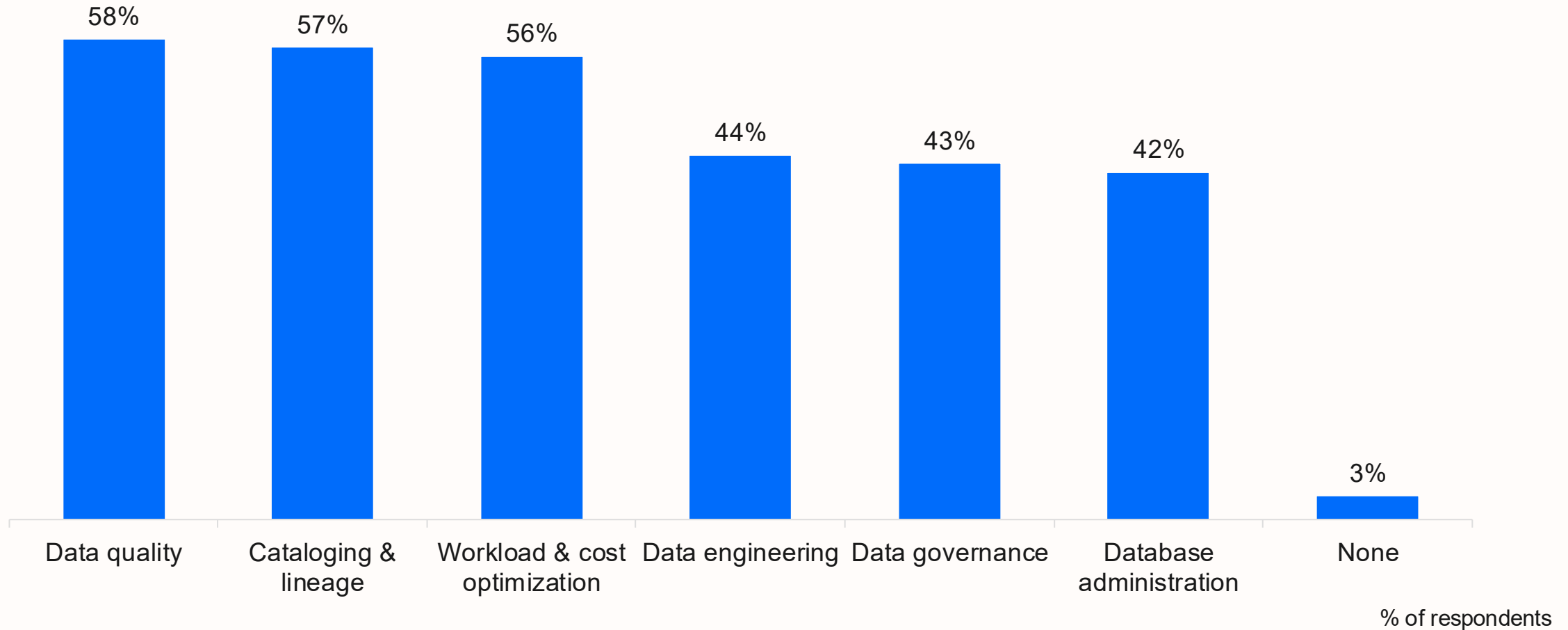
Automation continues to be a priority

What are the organization's overall top 3 strategic investment priorities for data in the next 12-18 months?



97% of organizations are automating data management practices

What data management functions is your organization supplementing with AI tools or AI agents?





Key takeaways for vendors

- ✓ Understand your role in the enterprise intelligence stack
- ✓ Map offerings to customer maturity stages
- ✓ Lead with governed platforms, not point tools
- ✓ Help customers operationalize data for AI
- ✓ Show how you enable real-time intelligence
- ✓ Differentiate with AI for data



 IDC
The logo icon for IDC, consisting of five horizontal white bars of varying lengths, creating a stylized globe or sphere.

DIRECTIONS

The word "DIRECTIONS" in a bold, white, sans-serif font. The letter "O" is replaced by a stylized globe icon with a blue arrow pointing right.