



The state of enterprise AI agents

INSIGHTS FROM 1,000+ IT LEADERS

By the end of 2025, 90% of enterprises will embed AI agents into core operations—but 57% risk failure without robust security and integration. This report breaks down the strategies, challenges, and investments CIOs need to balance speed and stability for long-term success.

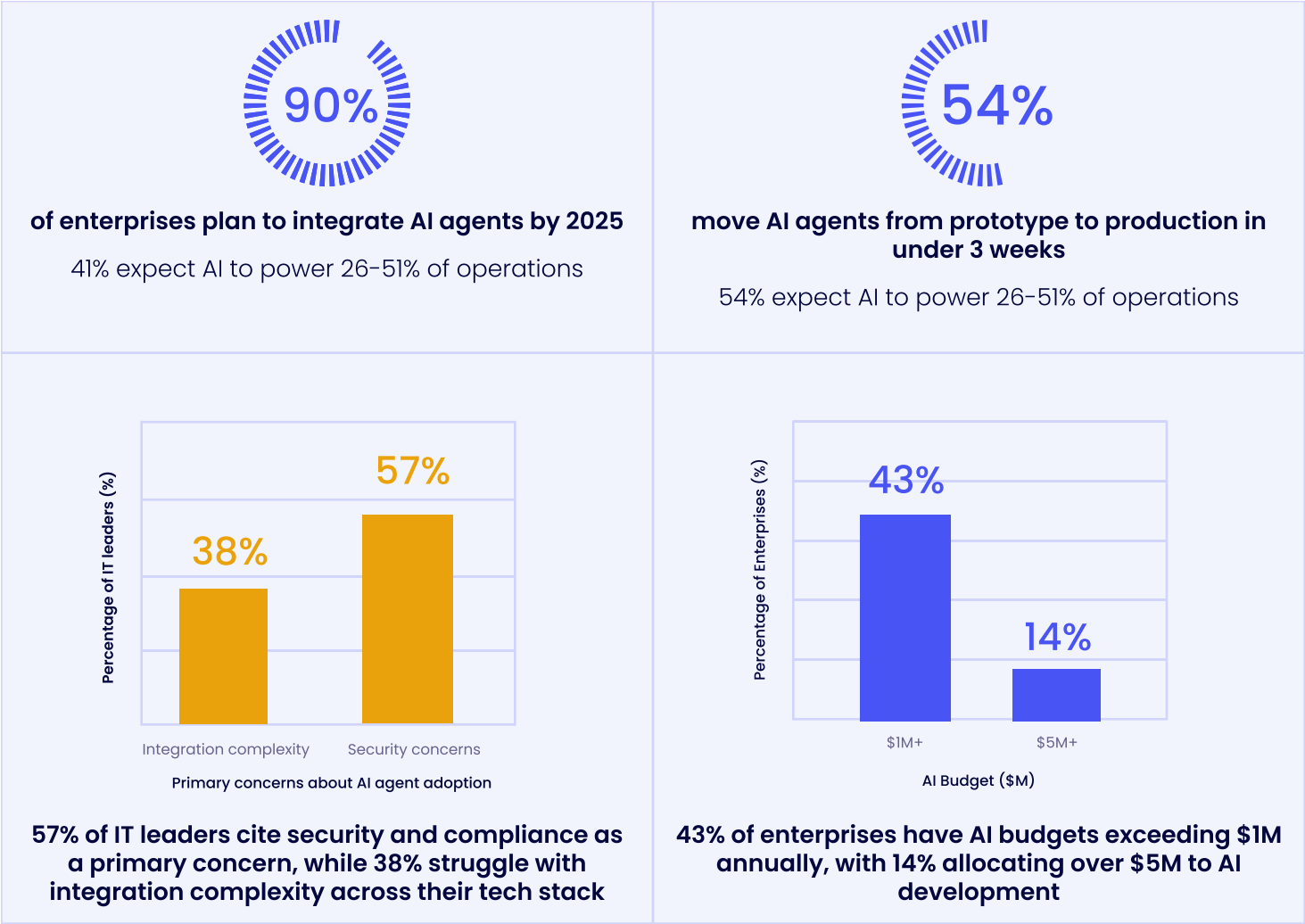
The state of enterprise AI agent adoption

By the end of 2025, **90% of enterprises** will rely on AI agents for core operations—yet most are unprepared for the risks ahead. While the mandate for AI adoption is clear, the path forward isn’t and hinges on a critical tension: deploying fast while ensuring stability.

CIOs and IT leaders face mounting pressure to deliver AI agents that are fast, safe, and flexible, yet **57%** cite security as a barrier, and **38%** wrestle with integration complexity.

This report, based on a Tray.ai survey of 1,000+ IT leaders, provides critical insights into how enterprises are navigating AI agent adoption, the roadblocks they face, and the actions they must take now to ensure AI success.

Key insights: The trends shaping AI agent adoption

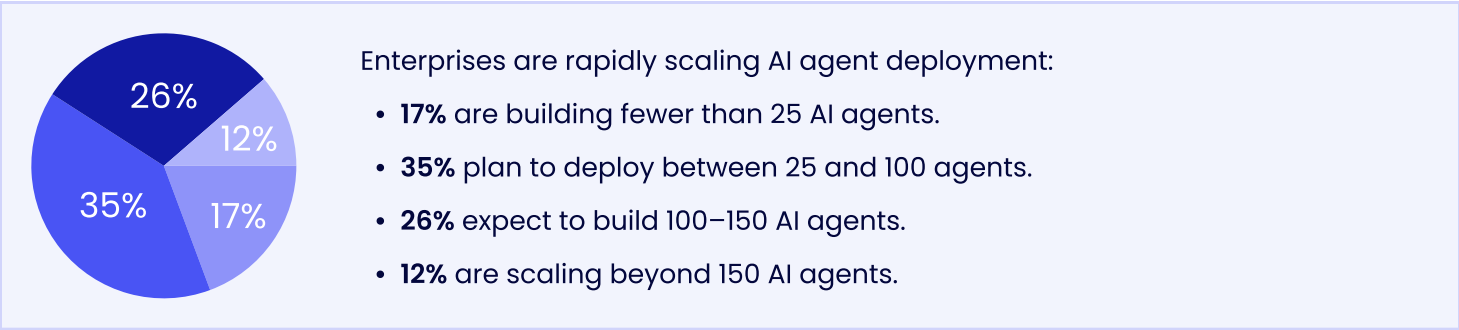


AI adoption and business priorities

Where are enterprises currently deploying AI agents?



How many AI agents are enterprises building?



Key takeaway: Scaling AI agents is the new challenge

As these numbers indicate, AI agents are shifting from one-off projects to enterprise-wide automation strategies. With 90% of IT leaders committed, the challenge is integrating and securing AI agents across sprawling operations.

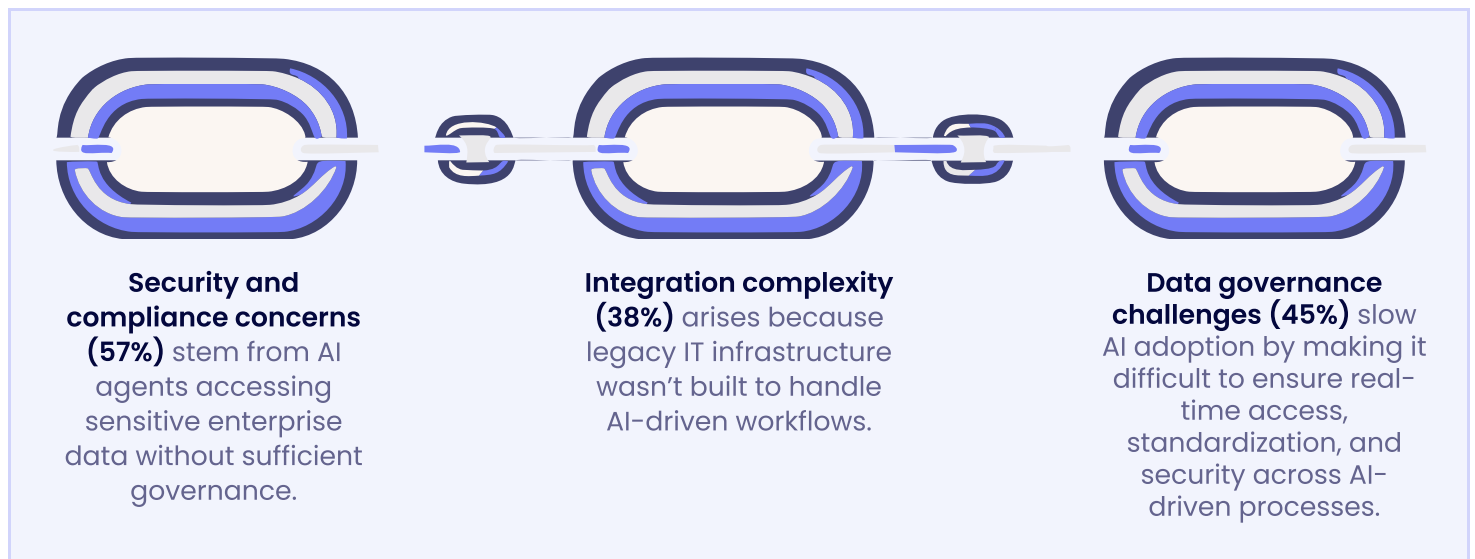
The challenges of scaling AI

AI is moving from prototype to production—fast

54% of IT leaders report moving AI agents from prototype to production in under three weeks. Speed is essential, but enterprises must balance rapid deployment with security, compliance, and integration requirements.

Security, compliance, and integration are deeply linked

The top concerns IT leaders face aren't independent challenges but interconnected issues that, if unaddressed, can stall AI adoption:

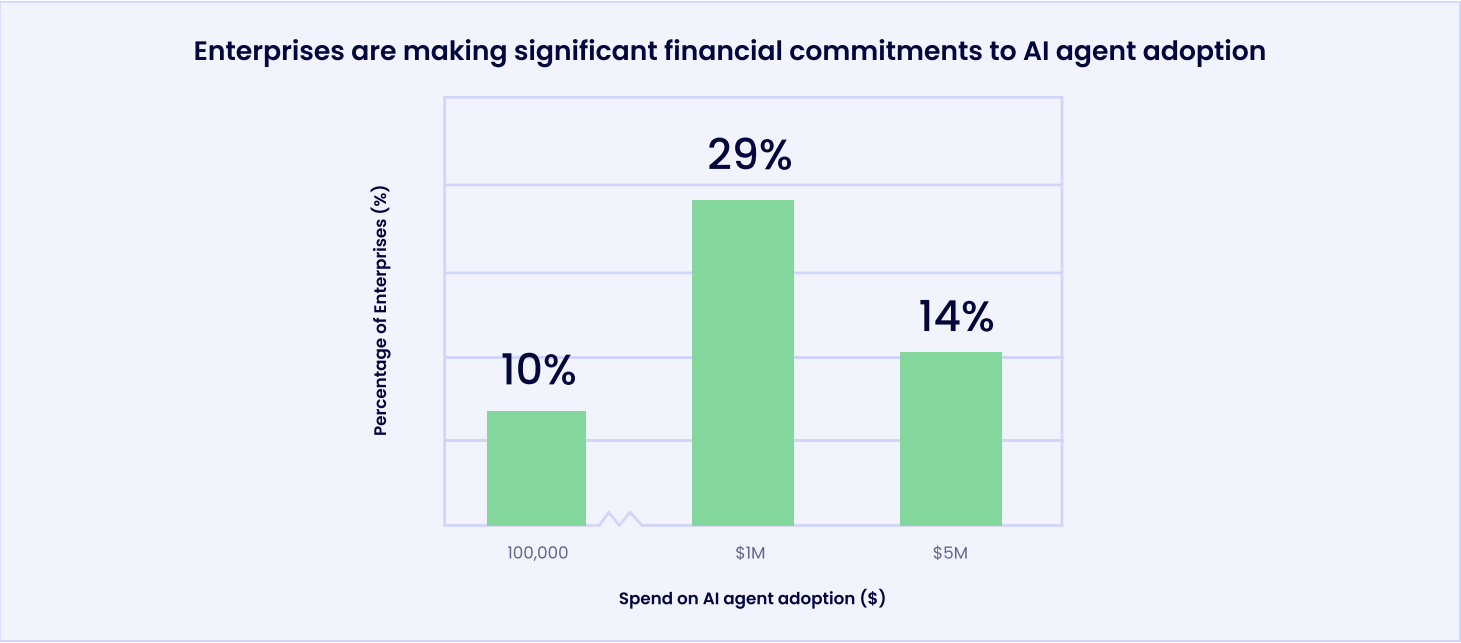


Key takeaway: AI challenges are actually integration challenges

AI is only as good as the systems it connects to. Without the right integration, workflows break, security gaps widen, and AI investments fail to deliver results. Traditional integration platforms weren't built for real-time AI automation, unstructured data processing, or scalable orchestration. IT leaders must prioritize AI-first integration strategies to avoid security risks, compliance failures, and operational bottlenecks.

Future investments and strategic outlook

What AI budgets signal about enterprise strategy



Key takeaway: Agentic AI is an enterprise-wide priority

With nearly half of enterprises committing over \$1M annually to AI agents, the focus has shifted from proof-of-concept to full-scale deployment. The question for IT leaders is no longer if they should invest in AI agents—but how to deploy them at scale while maintaining security, compliance, and governance.

AI-ready iPaaS for fast, safe, and flexible AI agents

AI agent adoption is surging, but security, integration complexity, and governance remain major barriers. Enterprises need an AI-ready iPaaS that enables AI-driven workflows without creating compliance risks or operational silos.

How AI-ready iPaaS solves AI agent adoption challenges:

- **AI-native automation:** Ensures real-time integration across enterprise systems.
- **Security fit for the enterprise:** Protects AI-driven workflows with built-in compliance and governance.
- **Low-code deployment:** IT teams can build, test, and deploy AI agents without complex development cycles.

As IT leaders face growing complexity in AI agent deployment, enterprises can use AI-ready integration platforms like Tray.ai to scale AI securely without sacrificing governance, security, or efficiency.

See how [Tray.ai](#) helps enterprises connect AI to real business results — without the integration headaches.



Charting a path to fast, safe, and flexible AI agents: Recommendations for IT leaders

For AI agents to succeed, IT leaders need to act now in three critical areas:

AI-ready infrastructure

80% of IT leaders cite data challenges as an obstacle. AI won't succeed without modern infrastructure that can handle unstructured data and real-time processing.

 **Recommendation:** Evaluate and upgrade integration platforms that cannot support AI-first automation and scalable orchestration.

Security and compliance as a first priority

57% of enterprises cite security and compliance as their biggest challenge. AI-driven automation needs built-in governance to prevent data security risks and regulatory violations.

 **Recommendation:** Ensure AI agents operate securely by adopting a platform that enforces enterprise-wide governance, access controls, and compliance policies.

Flexible, scalable AI deployment

54% of enterprises move AI agents from prototype to production in under 3 weeks. AI strategies must be iterative, adaptable, and scalable.

 **Recommendation:** Adopt a low-code AI integration platform to accelerate deployment timelines and make AI-powered automation more accessible.

Appendix (Full survey results)

1. What size is your company?

- 6% – 1 - 999 employees
- 13% – 1,000 - 1,249 employees
- 10% – 1,250 - 1,499 employees
- 17% – 1,500 - 1,999 employees
- 55% – More than 2,000 employees

2. Which industry does your company operate in?

- 50% – Technology (IT Hardware, Software, and Services)
- 12% – Manufacturing / Industrial
- 7% – Financial Services
- 4% – Life Sciences and Healthcare
- 3% – Government and Public Services
- 4% – Retail, Ecommerce, Wholesale, and Distribution
- 3% – Energy, Resources, and Industrials
- 14% – All Other Industries

3. Which of the following best describes your position at your company?

- 24% – C-level
- 24% – Manager / Senior manager
- 17% – Director / Department head
- 12% – Practitioner (e.g., business technologist, system analyst, system / solutions architect)
- 8% – Team lead
- 5% – Software Engineer
- 3% – President / Vice president / Senior vice president
- 3% – Developer
- 2% – Solution Architect
- 2% – Enterprise Architect

4. How many AI agent prototypes do you expect to build/prototype?

- 17% – Less than 25
- 14% – 25 - 50
- 7% – 51 - 75
- 14% – 76 - 100
- 15% – 101 - 125
- 11% – 126 - 150
- 12% – More than 150
- 10% – None

5. How many AI agents do you expect to put into production?

- 21% – Less than 25
- 14% – 25 - 50
- 12% – 51 - 75
- 17% – 76 - 100
- 14% – 101 - 125
- 11% – 126 - 150
- 11% – More than 150
- 0% – None

6. How many distinct business problems do you expect AI agents to solve in the next year?

- 12% – 1 - 5 problems
- 20% – 6 - 10 problems
- 27% – 11 - 20 problems
- 17% – 21 - 30 problems
- 19% – More than 30 problems
- 5% – Not sure yet

Appendix (Full survey results)

7. Which business problems will you prioritize for AI agents to solve? (Select top 3)

- 61% – IT service desk automation
- 40% – Data processing & analytics
- 36% – Customer service automation
- 35% – Code development/testing
- 31% – Customer inquiry response
- 24% – Employee onboarding / HR processes
- 22% – Financial reporting & analysis
- 15% – Supply chain optimization
- 10% – Documentation / knowledge management

8. What's your planned annual budget for AI agent initiatives?

- 10% – Under \$100,000
- 22% – \$100,000 – \$499,999
- 25% – \$500,000 – \$999,999
- 29% – \$1 million – \$5 million
- 14% – Over \$5 million

9. For each AI agent, how many data sources will it need to access?

- 12% – 1 – 3 data sources
- 45% – 4 – 7 data sources
- 30% – 8 – 12 data sources
- 12% – More than 12 data sources

10. How long does it currently take to move AI agents from prototype to production?

- 4% – 1 day
- 20% – 2 days – 1 week
- 30% – 2 – 3 weeks
- 27% – 1 – 2 months
- 14% – 3 – 6 months
- 7% – More than 6 months

11. Do you expect data challenges to impact AI agent rollout?

- 80% – Yes
- 20% – No

12. Who is driving demand for AI agents in your organization?

- 38% – IT leadership
- 31% – C-suite / executive leadership
- 14% – Department heads
- 8% – Line of business managers
- 5% – Operations teams

13. Who is responsible for delivering AI agents?

- 49% – IT department
- 18% – Joint IT and business unit teams
- 13% – Cross-functional teams (IT, data, AI/ML experts)
- 12% – Centralized AI team
- 6% – Individual business units

14. How will AI agent success be measured? (Select top 3)

- 64% – Cost reduction
- 60% – Time savings
- 51% – Error reduction
- 51% – Process automation rate
- 49% – Customer satisfaction

15. By the end of 2025, what percentage of your company's core business processes will run with AI agents?

- 7% – Less than 10%
- 24% – 10 – 25%
- 41% – 26 – 50%
- 21% – 51 – 75%
- 7% – Over 75%



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ABOUT TRAY.AI

Tray.ai is the creator of Merlin Agent Builder — the best way to build and deploy high-value AI agents without constraints. Unlike single-purpose SaaS apps, Merlin fits your business needs. Whether you start from scratch or use our pre-built accelerators, configure, deploy and manage horizontal AI agents — all in one place, without coding or complexity. Built on the Tray composable AI integration platform, it includes the connectivity, data integration, guardrails, governance controls, and scalability needed to deploy agents enterprise-wide. Learn more at Tray.ai.