

Roadmap

Unlock Efficiency With Agentic AI: Redesigning I&O for Future-Ready Success



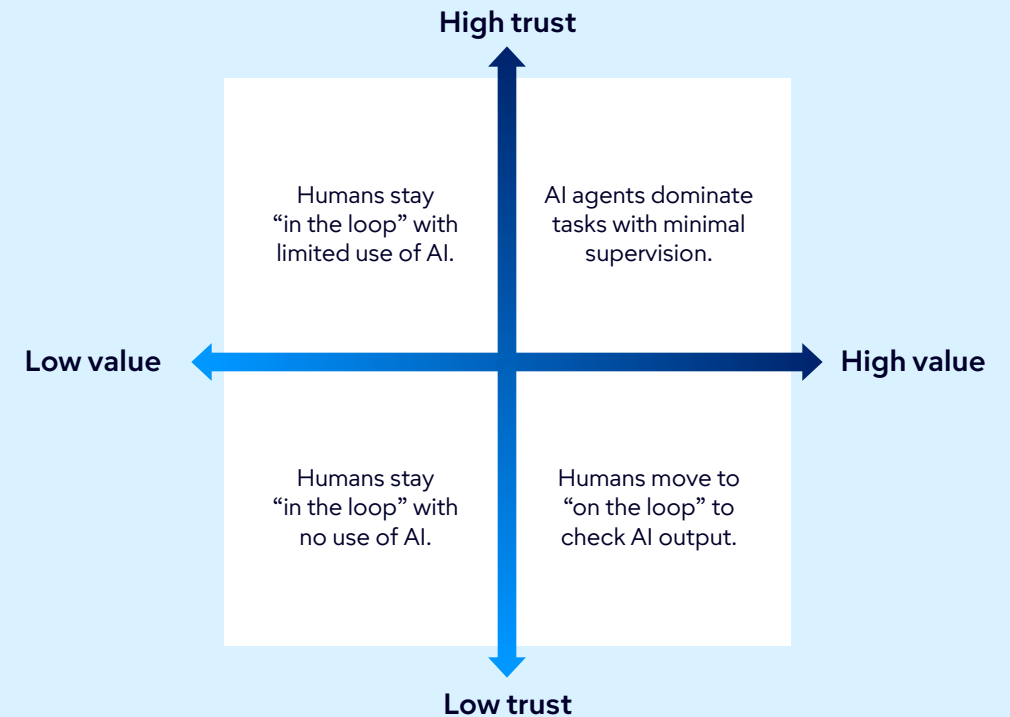
Operationalizing agentic AI governance in I&O

As agentic AI rapidly scales within organizations, heads of infrastructure and IT operations (I&O) face the challenge of adapting traditional structures and governance models. Human-centric I&O, defined by rigid hierarchies and reactive risk management, is no longer sufficient.

The shift to AI-centric I&O demands flexible, cross-functional teams focused on architecture and governance, with decision making at machine speed and a proactive, preventive approach to risk. Managing agents, policies and outcomes — rather than just people and processes — becomes essential. To keep pace with innovation while managing risk, regulation and trust, organizations must embed AI-native governance capabilities and incrementally implement organizational changes.

This enables heads of I&O to evaluate the value and trustworthiness of AI agents, manage the dynamic between human and agent-driven functions, and build toward a resilient, accountable future-state AI organization.

AI agent prioritization



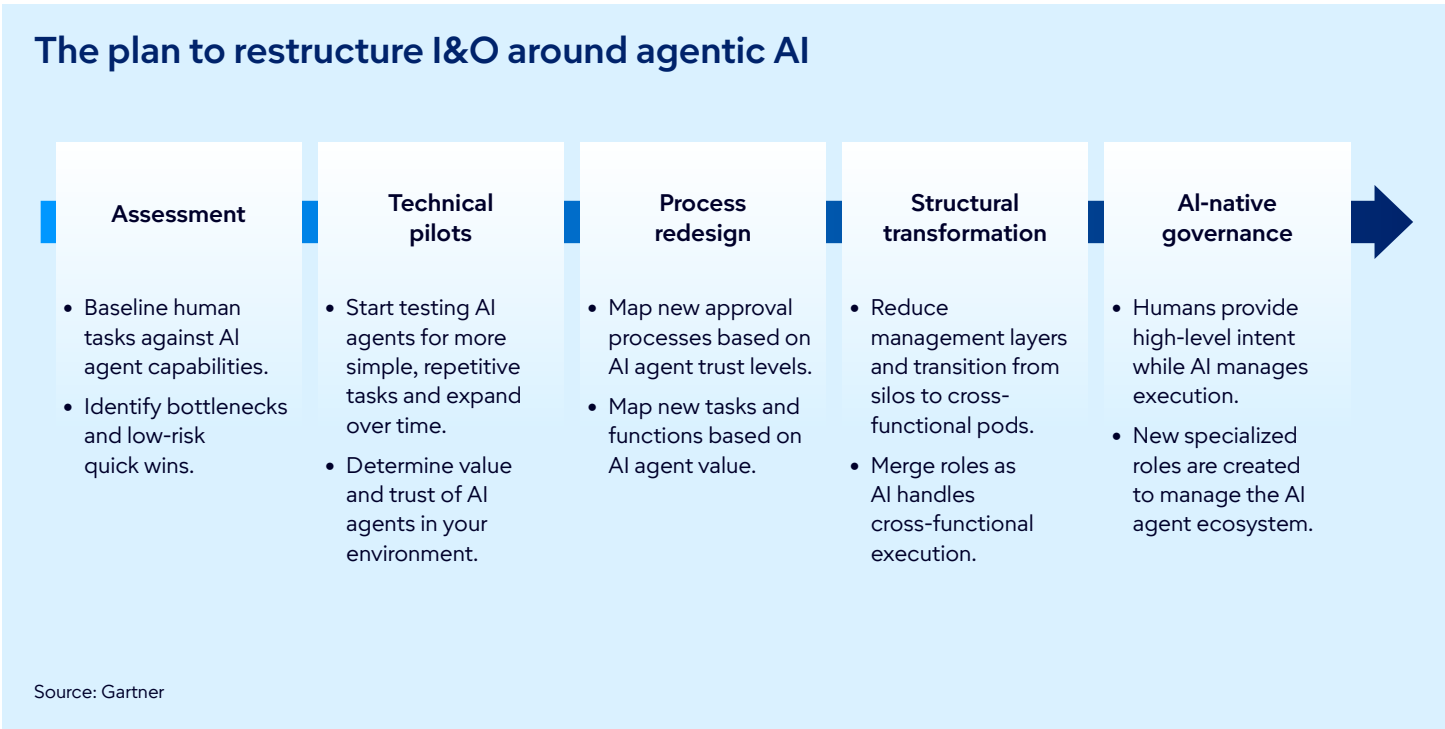
Source: Gartner

Redesigning I&O for agentic AI: Structural transformation and governance

Once agent opportunities, trust levels and human-oversight requirements have been established, heads of I&O can translate those decisions into a future-state operating model.

The transition should proceed in stages: validate agent capabilities, redesign processes around policy-based decisions and exceptions, and then reshape roles and teams as agents assume more execution. I&O shifts from siloed execution and maintenance toward cross-functional architecture, supervision and governance.

To succeed, heads of I&O must classify roles by the level of AI oversight required and adapt their organizations to leverage both human and agentic capabilities. Embedding AI-native governance is essential for managing the transition and ensuring accountability, compliance and operational resilience in an AI-agent-centric future.



Top questions for heads of I&O as agentic AI transforms organizational structures include:

- 1

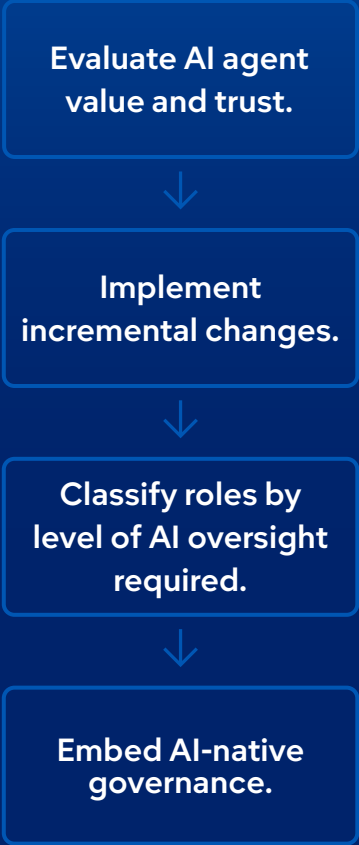
How should we classify and manage the roles of AI agents with the right human oversight to ensure accountability and compliance?
- 2

What changes are needed in our governance model to move from managing people and processes to managing agents, policies and outcomes?
- 3

How do we adapt our risk model from reactive firefighting to proactive prevention as decision speed shifts to machine-time?

What are the key stages?

This roadmap outlines the sequence of objectives and outcomes for a successful transition to AI-centric I&O, based on Gartner insights and best practices.





Evaluate AI agent value and trust

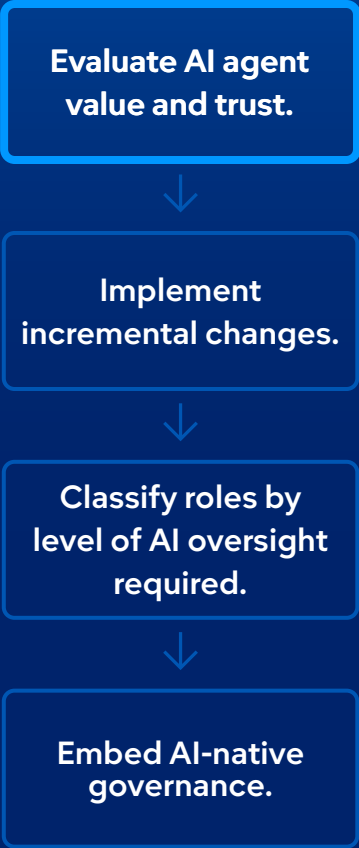
Key outcome: Assess agent output reliability for specific use actions.

Actions to take:

- ☐ Assess agent performance and reliability in key tasks.
- ☐ Determine trust in AI agent outputs.
- ☐ Involve I&O leaders in agent evaluation.

Sample of associated Gartner resources includes:

- | Insights | Tools |
|---|--|
| <ul style="list-style-type: none">• Stop Focusing on Use Cases to Unlock the AI Opportunity in I&O• I&O Automation Framework: Evaluating Deterministic vs. AI-Enabled Workflows• Predicts 2026: AI Agents Will Transform IT Infrastructure and Operations• AI Agent Management Control Plane: Evaluation Guide for Infrastructure and Operations | <ul style="list-style-type: none">• Tool: AI Agent Assessment Framework• Cut Through the Noise and Navigate the Complex AI Governance Market• The Future of I&O 2030: The Impact of AI |





Implement incremental changes

Key outcome: Manage risk and correct errors.

Actions to take:

- ☐ Apply tactical, incremental changes to I&O.
- ☐ Manage risk and correct errors as you build forward.
- ☐ Limit disruption by phasing in new structures.

Sample of associated Gartner resources includes:

Insights

- [Redesign Your I&O Organizational Structure Around Agentic AI or Risk Irrelevance](#)
- [Recasting I&O for Autonomous AI Agent Support](#)
- [Agentic I&O Requires AI-Ready Data: A Blueprint for Future Autonomy](#)
- [Why Most Agentic AI Strategies Fail: 8 Critical Pitfalls I&O Must Avoid](#)

Tools

- [Use This Framework to Evaluate AI Agents](#)
- [AI Adoption: A Practical Journey Map for I&O](#)
- [Essential Patterns: Operational Patterns for LLM-Based AI Agents](#)
- [Integrate AI Governance Into AI Architectures](#)

Evaluate AI agent value and trust.



Implement incremental changes.



Classify roles by level of AI oversight required.



Embed AI-native governance.



Classify roles by level of AI oversight required

Key outcome: Define whether AI supports or is managed by humans — and the level of human supervision of AI needed.

Actions to take:

- ☐ Define roles by AI support or management level.
- ☐ Reference agent-centric role models for guidance.
- ☐ Adjust classifications as adoption and maturity grow.

Sample of associated Gartner resources includes:

Insights

- [Infographic: 2026 IT Skills Roadmap for I&O](#)
- [The 2026 Agentic AI Skills Framework for I&O](#)
- [I&O in 2030: Prepare for AI to Transform Operations and Administration Roles](#)
- [I&O in 2030: Prepare for AI to Transform Engineering and Platform Roles](#)
- [Which IT Infrastructure and Operations Roles Will Be Redesigned by AI in 2030?](#)

Tools

- [Essential Skills for AI Infrastructure Engineering](#)
- [Emerging Developer Skills for Agentic Coding](#)
- [Getting Started With Anthropic’s Claude Code CLI for I&O](#)

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Implement incremental changes.



Classify roles by level of AI oversight required.



Embed AI-native governance.



Embed AI-native governance

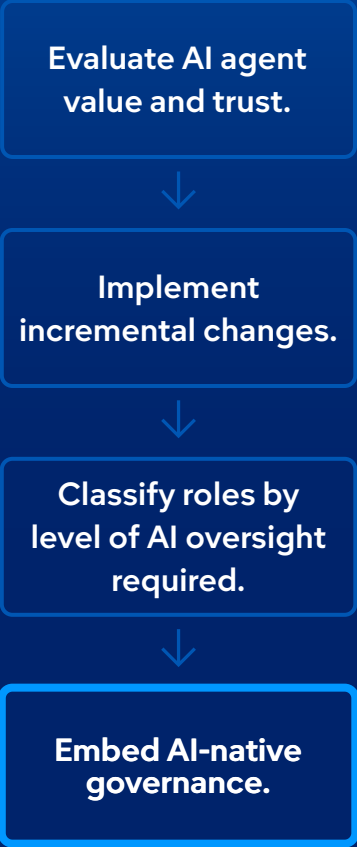
Key outcome: Provide ongoing management and accountability.

Actions to take:

- ☐ Add AI governance tools to support transition.
- ☐ Integrate agent, policy and outcome management.
- ☐ Ensure accountability with continuous oversight.

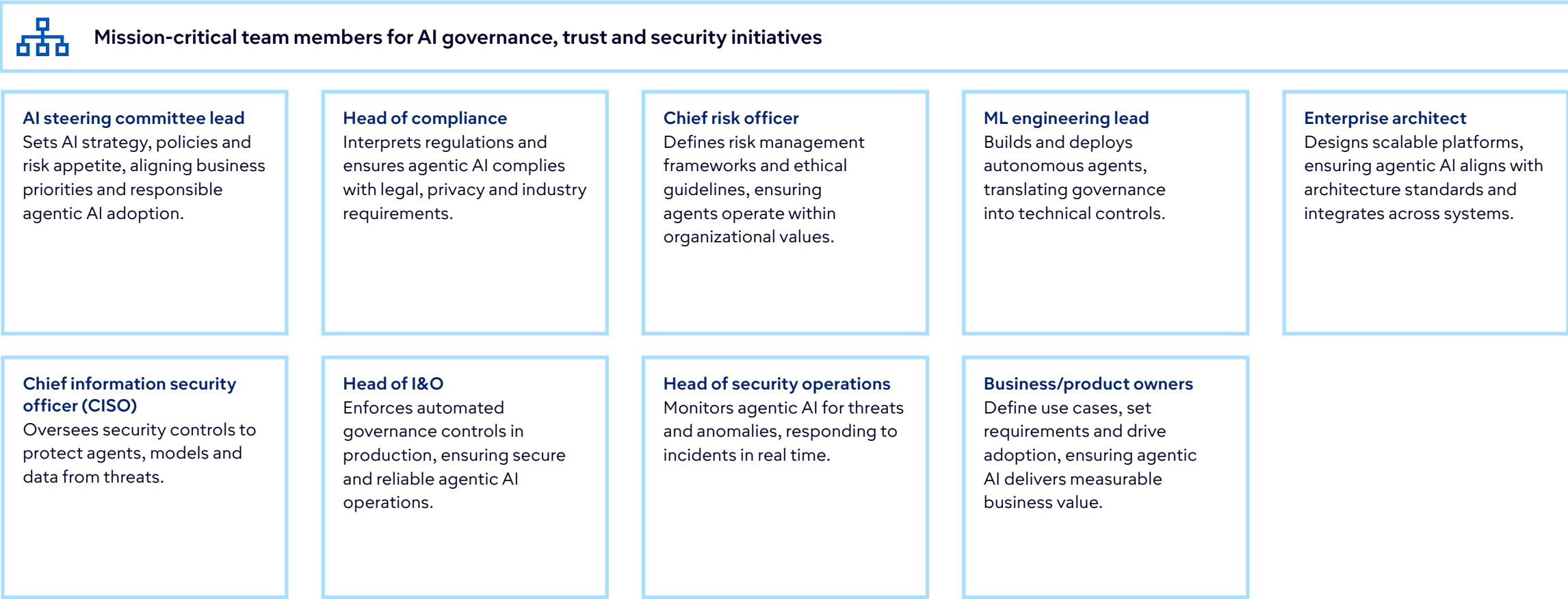
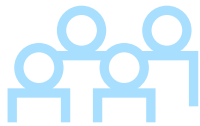
Sample of associated Gartner resources includes:

- | Insights | Tools |
|--|---|
| <ul style="list-style-type: none">• The Agentic AI Governance Framework for Infrastructure and IT Operations• When AI Goes Rogue: Building Guardrails and Kill Paths for Agentic I&O• Agentic AI Governance: Prevent Technical Debt Before Agents Scale• Governance Playbook for Agentic AI Infrastructure Automation• AI Infrastructure Health Quadrant: A Framework to Optimize Performance and Token Efficiency | <ul style="list-style-type: none">• Emerging Skills for Agentic AI Operations• Agentic AI: Why Infrastructure and Operations Must Act Now• The Claude Managed Agents Playbook for Infrastructure and Operations |



Who needs to be involved?

The most successful organizations build cross-functional teams to maximize value from agentic AI. Include these key roles and functions for effective governance, trust, risk and security.



How Gartner supports your priorities

In addition to guidance on effective AI governance, Gartner also supports the priorities of CIOs, CDAOs and CISOs.

Gartner for Chief Information Officers



With Gartner for CIOs, you can confidently navigate complex technological environments, make smarter decisions and deliver stronger results. Our insights, guidance and tools are designed to focus specifically on the mission-critical priorities of CIOs and their teams.

Whether you're looking to unlock better value with AI, optimize costs or lead organizational change, Gartner for CIOs can help you act fast and demonstrate value – from strategy to execution.

Gartner for Infrastructure & IT Operations Leaders



Gartner for Infrastructure & IT Operations Leaders helps heads of I&O and their teams make stronger, faster decisions. Our insights, guidance and tools focus on the mission-critical priorities that matter most to your organization and stakeholders.

From enabling AI value and modernizing cloud strategy to managing technical debt and optimizing operations, Gartner empowers I&O leaders with actionable insights, expert guidance and proven tools to drive business value, mitigate risk and improve efficiency.

Gartner for Chief Information Security Officers



Gartner for CISOs delivers insights, guidance and tools designed to directly address today's complex cybersecurity challenges and the imperatives that matter most to your stakeholders.

As the CISO role moves closer to the front lines of strategic influence, Gartner supports leadership effectiveness with data-driven cybersecurity coverage on your top priorities, including protection level agreements, third- and fourth-party risk, talent management, AI governance and more.

360-degree coverage for heads of I&O and their teams

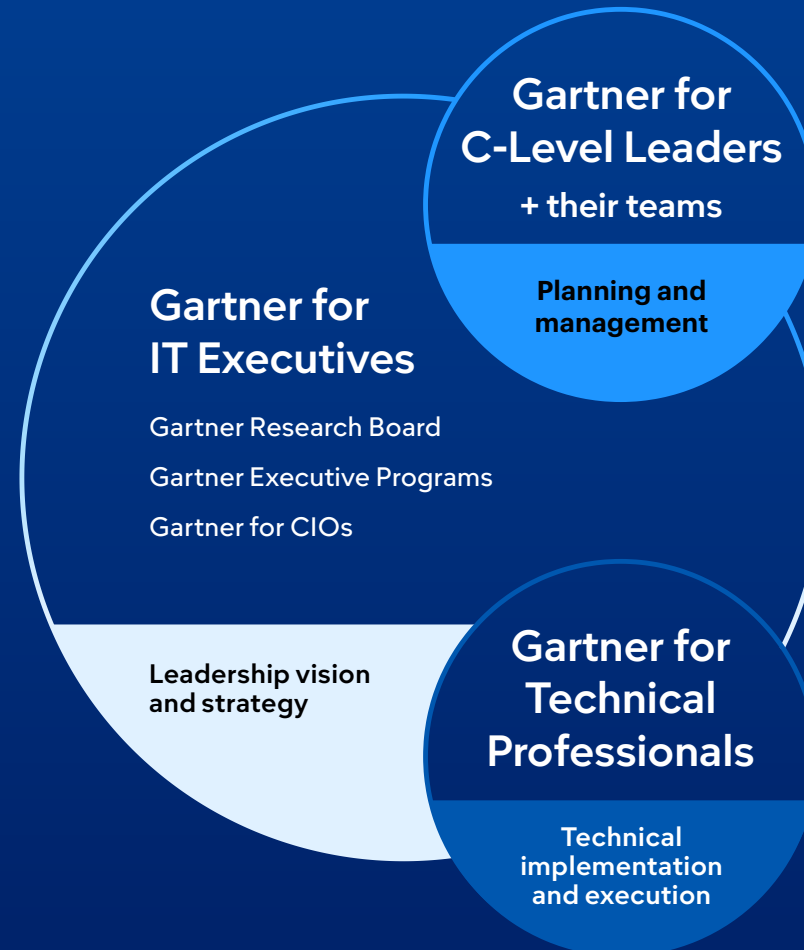
Expert guidance and tools to maximize
success at every level

Validate your vision and empower teams to execute with confidence.

Heads of I&O rely on Gartner for Technical Professionals (GTP) to kick-start their most crucial projects. Instead of starting from scratch, they tap into expert resources to help accelerate their teams' performance. GTP offers purpose-built tools, proven technical plans, assessments, models, step-by-step guides, reference architectures and roadmaps — all designed to help you achieve better business outcomes when you engage as a team.



Get access to technical analysts and role-specific
peer communities with GTP.



CISO/security and risk leaders
CDAO/data and analytics leaders
Software engineering leaders
Heads of infrastructure and
IT operations
Enterprise IT leaders

Data and AI architects
Infrastructure and cloud architects
Software and applications architects
Security architects

Gartner

Actionable, decision intelligence

Explore these additional complimentary resources and tools on AI governance for data and analytics leaders:

Roadmap



Market Guide for Hybrid AI Infrastructure

Explore how to align compute, storage, networking and operations across data centers, edge environments and public cloud for AI workloads.

[Download Now](#)

Webinar



How to Use Generative AI in Cloud Operations

Prioritize high-value GenAI use cases, assess feasibility and establish the foundations needed to deliver measurable outcomes in cloud operations.

[Watch Now](#)

Tool



Accelerators

Accelerate key initiatives through step-by-step guidance, curated insights, proven tools and ready-to-use templates designed for practical execution at scale.

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Conference



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