

Bridging the AI Value Gap: A Strategic Guide for I&O

Reinvent I&O to unlock AI business value.

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As AI transitions from aspiration to operational reality, the stakes have never been higher for heads of infrastructure and IT operations. With AI investments accelerating **4x** faster than traditional IT, leaders must architect an AI-driven future or risk becoming an irrelevant legacy cost center.

48% of I&O leaders say that integrating AI into their current Infrastructure is one of their top challenges to enterprise AI adoption.

AI will not deliver enterprise value through incremental change. Heads of I&O must redesign both infrastructure and operations to support agentic automation, enforce governance at scale and shift investment toward speed and quality — otherwise, I&O risks becoming a constraint on AI, not its catalyst.

To lead this shift, heads of I&O must:

- Architect infrastructure and operations that enable scalable, production-ready AI and agentic outcomes across the enterprise.
- Enable innovation while controlling cost and risk through operationalized governance.
- Optimize value, cost, risk and agility through the pragmatic application of AI.



George Spafford
Vice President
Analyst

Your roadmap to success

Heads of I&O must drive AI strategy, develop essential talent and operationalize AI governance. To reinvent the function, leaders must architect scalable hybrid infrastructures, eliminate bottlenecks and automate controls in production to accelerate enterprise AI value.

Gartner equips heads of I&O with strategic guidance, proven framework and actionable insights to operationalize AI at scale. With Gartner, heads of I&O accelerate AI value, scale performance and transform infrastructure into a driver of enterprise impact.

1. Assess IT infrastructure alignment to the organization's strategic AI ambitions.

2. Diagnose IT operations' AI maturity and eliminate bottlenecks for automation ROI.
3. Enable IT operations with AI-ready data management and governance.
4. Evolve risk frameworks to accommodate risks and speed of AI deployment.
5. Change reward structures and internal policies to establish an AI-first culture.
6. Establish a talent and skills strategy to acquire the necessary I&O AI skills.
7. Design a hybrid infrastructure to maximize AI performance, scalability and compliance.

2 key outcomes to consider in Step 1

Align infrastructure platforms and IT operations execution with enterprise AI priorities to accelerate value realization and eliminate misaligned investment.

Close capability gaps that limit AI scale and unlock performance, speed and execution confidence.

Key questions your I&O peers are asking Gartner

Gartner clients can click to explore answers.

How can I integrate AI into my current IT operations?

Explore Answer ↗

How should I deal with systems and processes most incompatible with AI augmentation?

Explore Answer ↗

How should my I&O organizational roles and responsibilities change with the integration of AI agents?

Explore Answer ↗

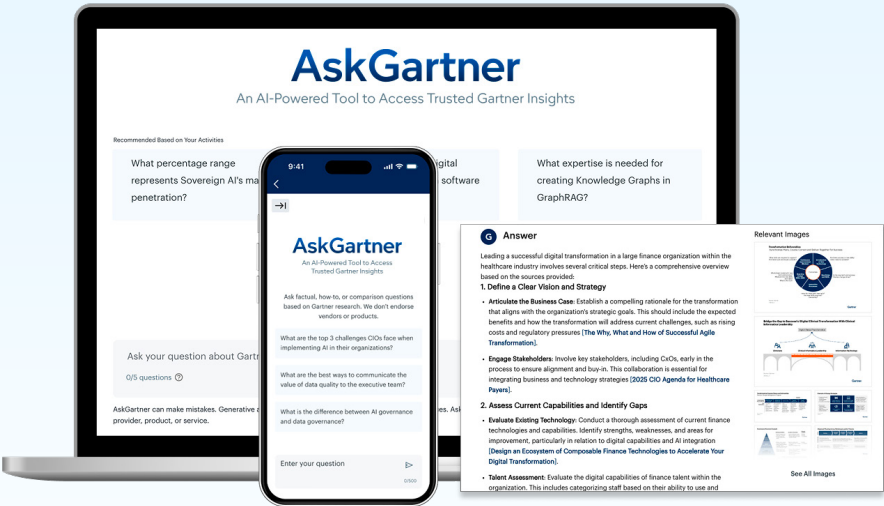
How can I mitigate risks and maintain compliance when adopting AI-driven automation?

Explore Answer ↗

How do I enable experimentation and innovation yet also manage costs and risks?

Explore Answer ↗

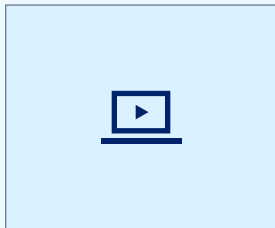
Your peers use AskGartner to answer these questions in minutes.



Learn More

Gartner resources turn your priorities into plans and actions

Assess IT infrastructure alignment to the organization's strategic AI ambitions.



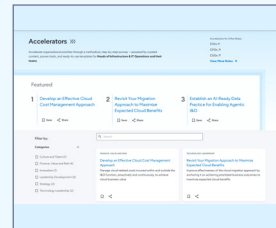
Webinar: How to Use Generative AI in Cloud Operations ↗

Diagnose IT operations' AI maturity and eliminate bottlenecks for automation ROI.



Tool: Heads of Infrastructure & IT Operations Effectiveness Diagnostic ↗

Enable IT operations with AI-ready data management and governance.



Tool: Accelerators for Heads of Infrastructure and IT Operations ↗

Evolve risk frameworks to accommodate risks and speed of AI deployment.



Insights: 3 Key Trends Shaping the I&O Landscape ↗

Change reward structures and internal policies to establish an AI-first culture.



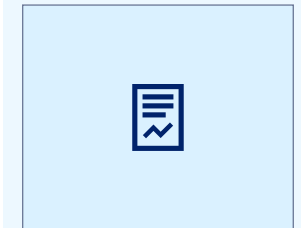
Insights: AI for I&O: How to Communicate Value to the CIO ↗

Establish a talent and skills strategy to acquire the necessary I&O AI skills.



Tool: AskGartner ↗

Change reward structures and internal policies to establish an AI-first culture.



Insights: Market Guide to Hybrid AI Infrastructure ↗

Engage with Gartner

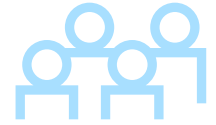
- Connect with an analyst to review your I&O AI strategy and roadmap and prioritize your biggest AI opportunities and gaps.
- Get Executive Partner insights on how heads of I&O can overcome the internal challenges blocking AI success.

Expected outcomes

- A defined AI strategy for I&O linked to enterprise strategic objectives
- Identification and investment in the highest-value AI use cases in I&O

Who needs to be involved?

The most successful organizations establish cross-functional teams for their I&O initiatives. We have outlined the recommended functions to involve and their roles to ensure the best success in hitting the milestones.



CIO/head of technology ↗

Sets a clear enterprisewide AI ambition, identifies use cases; quantifies benefits and risks, aligns teams and competencies, and drives innovation across the organization.

Head of infrastructure and IT operations ↗

Defines and leads infrastructure, cloud and IT operations strategy to deliver secure, scalable and cost-efficient platforms, enabling business continuity today and powering AI-driven growth at scale.

Head of AI ↗

Develops, champions and executes the organization's AI strategy by overseeing AI use case selection and scaling, establishing governance and literacy, implementing solutions, monitoring market trends, building a world-class team and reporting on business impact.

Chief data and analytics officer and team ↗

Leads the organization's AI data strategy by identifying use cases, establishing governance, developing new data value and ensuring data readiness for AI technologies.

Chief information security officer and team ↗

Integrates cybersecurity and data privacy into AI strategy by managing trust, risk, sovereignty and security; overseeing programs; anticipating threats; updating skills; and designing resilient solutions.

Head of enterprise architecture and team ↗

Aligns AI structure and design with organizational value by guiding use cases and requirements, governing architecture investments, leading adoption decisions and architecting AI solutions.

Client Story

Rockwell Automation Drives Scalable Digital Transformation and Operational Excellence

Mission-critical priority

Rockwell Automation needed to rapidly scale infrastructure services to meet growing business demands, while assessing talent and building a resilient organizational structure across platform engineering and IT operations. These priorities directly supported the need to establish a pragmatic operating model aligned with business objectives and capable of delivering results at scale.

**How Rockwell leveraged Gartner resources**

Rockwell Automation partnered with Gartner analysts and leveraged insights, maturity assessments and benchmarking tools to evaluate current capabilities, design an integrated operating model and define a clear transformation roadmap. Gartner also provided guidance on platform engineering integration, financial benchmarking and RFP co-creation, enabling faster decision making and more efficient execution.

**Mission accomplished**

Rockwell Automation established a scalable operating model aligned with business objectives, accelerating digital transformation and improving execution at scale. This included migrating 1,000 workloads in six months, doubling site migrations year over year, streamlining RFP processes and strengthening long-term strategic planning through Gartner insights and analyst engagement.

[Watch the full story ↗](#)



Address your other mission-critical priorities



Reinvent I&O as an enabler of AI value.

Despite **77%** of CEOs viewing AI as transformative, **66%** of CEOs say their business models are not fit for AI.



Transform cloud strategy for disruptive platform demands.

By 2030, companies that fail to optimize the underlying AI compute environment will pay over **50%** more than those that do.



Change the conversation on technical debt management.

Accumulation of technical debt is the top challenge for heads of I&O. **44%** of them rate it as one of their top 3 challenges.

Connect with us

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