



3 Key Trends Shaping the I&O Landscape

Introduction

Today's infrastructure and operations (I&O) leaders are navigating a rapidly evolving landscape shaped by new leadership priorities and strategic imperatives.

As AI adoption accelerates across their organizations, I&O teams are being called upon to develop robust business cases and enterprisewide AI roadmaps. This shift requires greater collaboration to optimize resources, avoid siloed decisions and ensure alignment with organizational objectives. At the same time, the ongoing challenge of technical debt remains a critical focus. Leaders must establish targeted reduction programs that prioritize the most impactful areas — balancing cost, efficiency and innovation — to support the most critical business initiatives.

Aligning on shared priorities with CIOs and other stakeholders is more important than ever. Achieving a common understanding of roles and expectations is essential to optimize costs, enhance value and reduce risk in support of long-term I&O strategies.

To succeed in 2026 and beyond, I&O leaders must foster collaboration, prioritize effectively and embrace experimentation. This report serves as a practical guide to help leaders address these challenges, drive strategic outcomes and inspire organizational success.

Key questions



What are the **major trends** defining the I&O landscape in 2026?

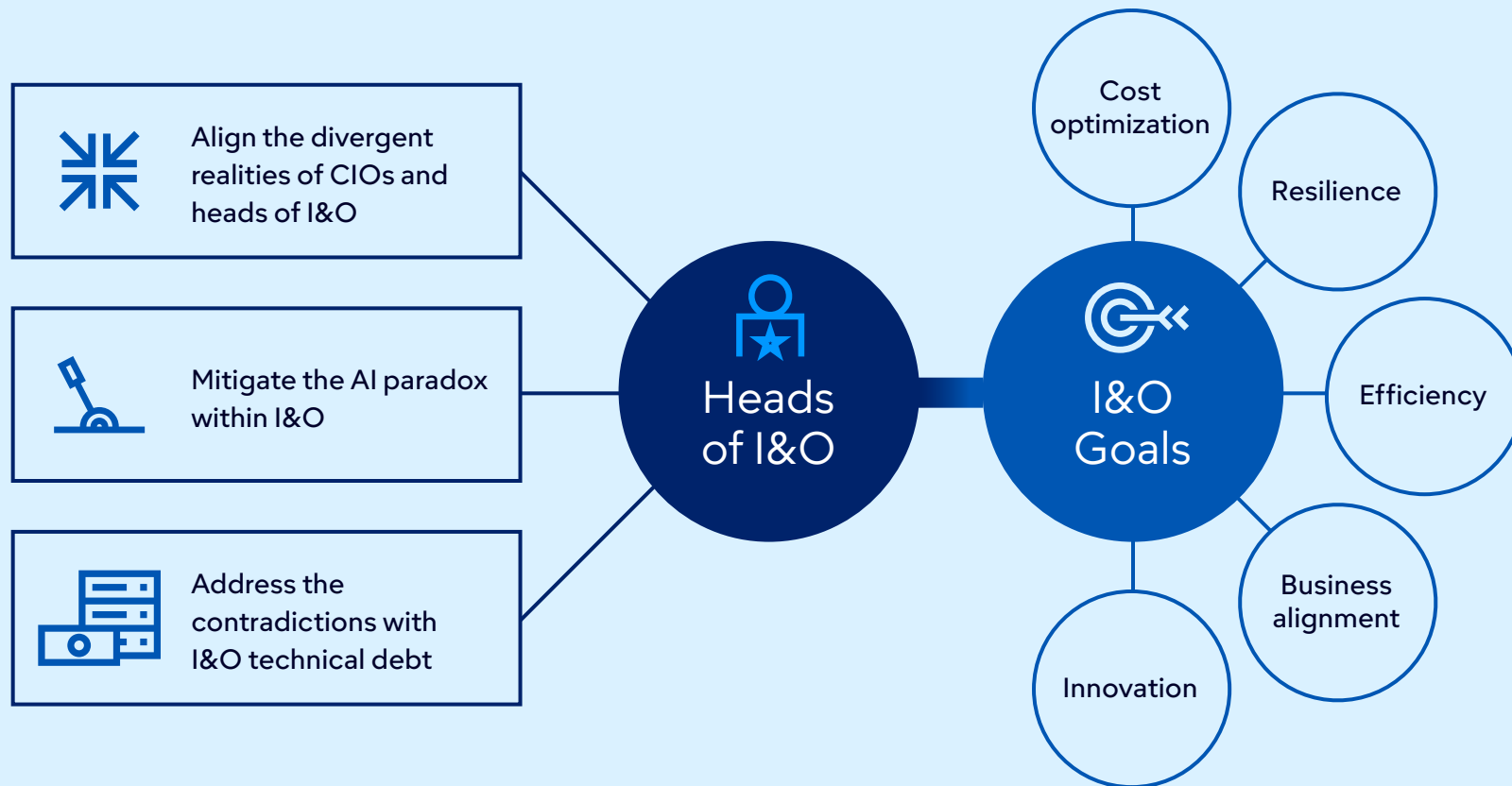


What are the **top challenges** for heads of I&O in the year ahead?



What **actions** should heads of I&O and their teams take to succeed?

Top actions for heads of I&O in 2026



3 key trends shaping the I&O landscape

Divergent realities of CIOs and heads of I&O



There is a general misalignment between heads of I&O and CIOs. CIOs prioritize resilience and reducing technical debt, while heads of I&O prioritize cost optimization and aligning with the business.

AI paradox



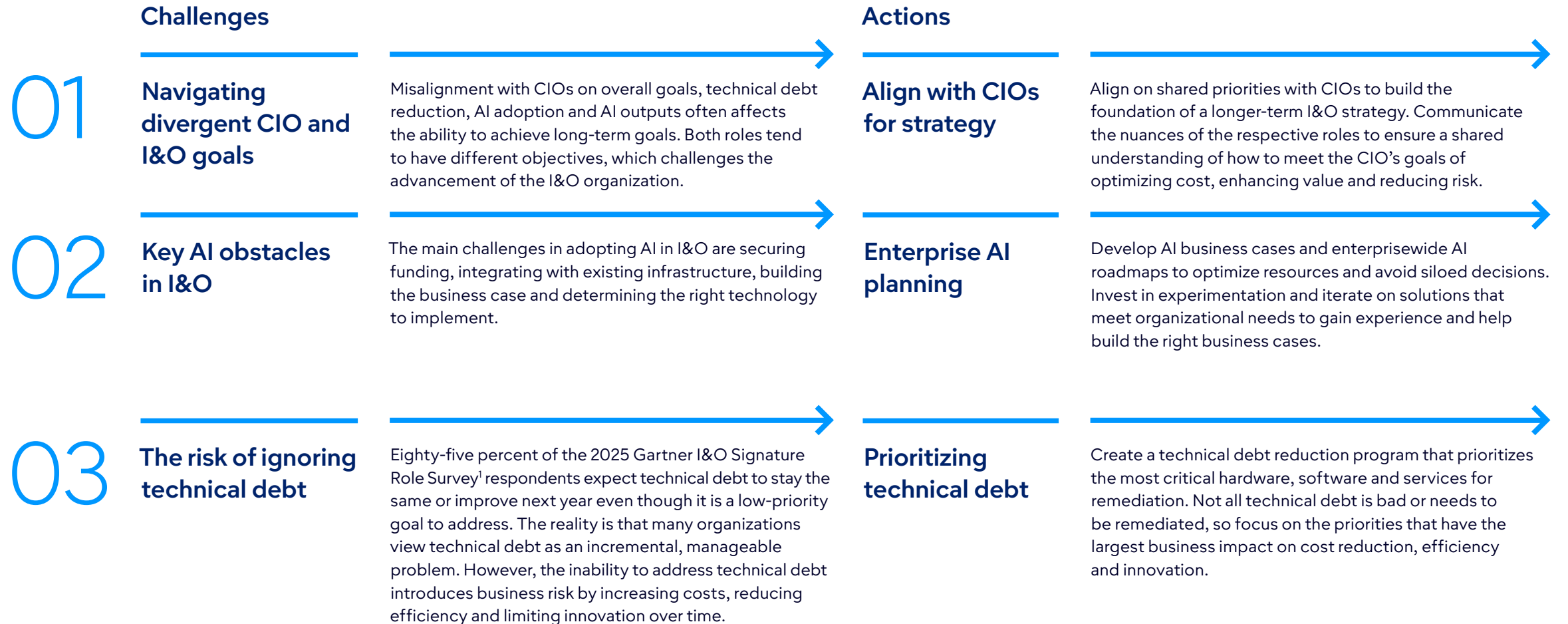
AI adoption is relatively low across I&O, as was infrastructure automation before AI. However, for organizations that have adopted AI, most heads of I&O are satisfied with the outcomes.

Elevated technical debt



Technical debt continues to be pervasive in IT operations, impacting roughly 34% of hardware, software and service team members and adding seven hours per week per person.

3 challenges and actions for heads of I&O



01 Action

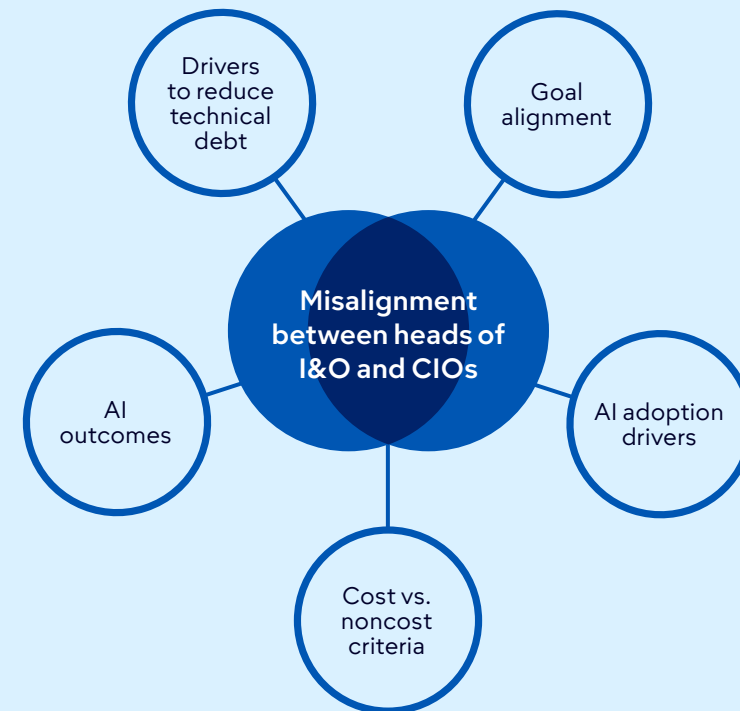
Aligning with CIOs for strategy

Building a robust I&O strategy requires close collaboration with CIOs and other key stakeholders. Teams must work together to align on shared priorities, ensuring everyone understands the nuances of their respective roles and responsibilities. This shared understanding is critical for meeting the CIOs' goals of optimizing costs, enhancing value and reducing risk across the enterprise.

Achieving alignment can be challenging. Different business units and IT teams often have varying perspectives and objectives. To overcome these challenges, it is essential to establish a common foundation and communicate openly about expectations, resource allocation and success metrics.

By agreeing on shared priorities and clarifying roles, organizations can create a unified starting point. This enables all stakeholders to work toward optimizing costs, maximizing value and minimizing risk, ultimately supporting the long-term success of I&O strategies.

Top drivers of misalignment between I&O and CIOs



Source: Gartner

02 Action Enterprise AI planning

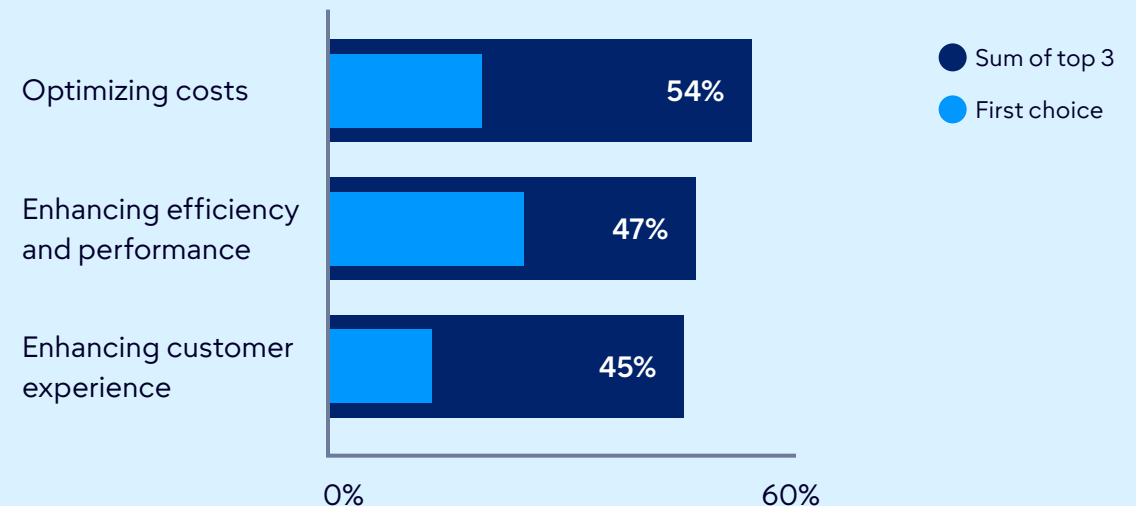
Developing effective AI strategies requires collaboration across business units and IT to avoid siloed decision making. It's more critical than ever to build strong business cases and create enterprisewide AI roadmaps that optimize resources and ensure alignment with organizational goals. This collaborative approach helps clarify priorities and enables stakeholder understanding of the roles and responsibilities required for successful AI adoption.

Challenges often arise as different groups may have varying levels of experience and expectations around AI. To address these challenges, organizations must invest in experimentation and iterative solution development. This not only builds valuable experience but also strengthens the business cases needed for broader AI initiatives.

By fostering collaboration between business units and IT, organizations can avoid siloed decision making and build unified AI strategies. This ensures resources are optimized and business cases are strengthened for successful enterprisewide AI adoption.

Top 3 factors driving AI adoption within IT I&O

Sum of top 3 ranks



n = 251 respondents, excluding don't know and not applicable

Q: What are the most important factors driving the adoption of AI within your IT infrastructure and operations (I&O) function?

Source: 2025 Gartner I&O Signature Role Survey

03 Action Prioritizing technical debt

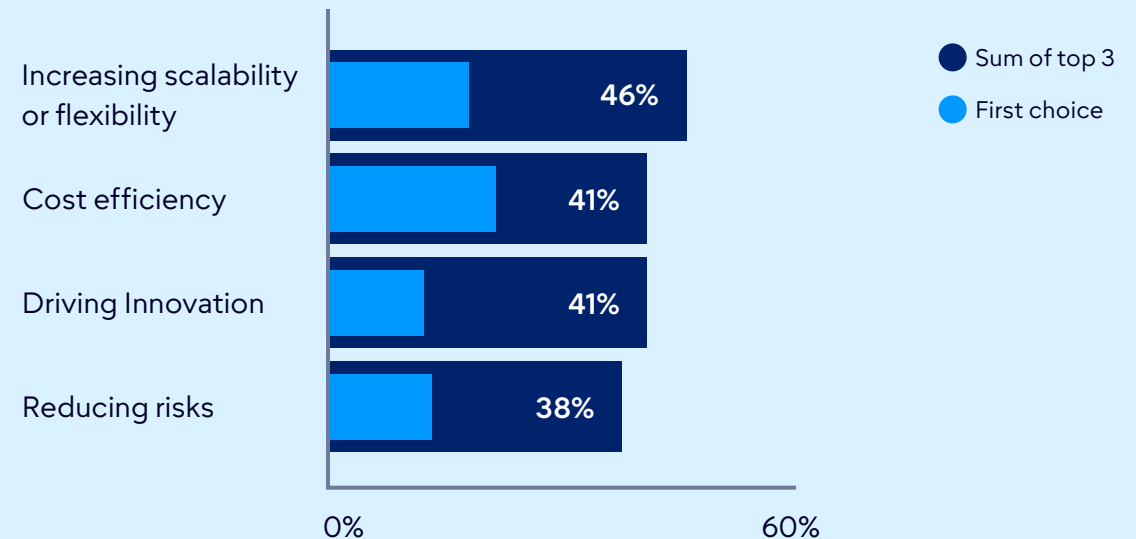
Effectively addressing technical debt requires a targeted and collaborative approach across IT and business units. I&O and business groups must work together to create a technical debt reduction program that prioritizes the most critical hardware, software and services for remediation. By aligning on which areas have the greatest business impact, organizations can ensure efforts are focused on reducing costs, driving efficiency and enabling innovation.

It's important to recognize not all technical debt is inherently negative or should be eliminated. Different stakeholders may have varying perspectives on what constitutes acceptable debt. Establishing clear priorities and communicating openly about risk, value and resource allocation helps create a shared understanding that guides decision making.

By focusing on the technical debt that matters most, organizations can optimize resources, minimize unnecessary remediation and support long-term modernization goals. This collaborative approach ensures that technical debt reduction efforts deliver the greatest value to the enterprise.

Top 3 drivers for reducing technical debt within IT infrastructure and operations

Sum of top 3 ranks



n = 252; all respondents, excluding don't know, and not applicable and no plans to reduce technical debt
Q: What are the top 3 drivers for reducing technical debt within your IT infrastructure and operations (I&O) function?
Source: 2025 Gartner I&O Signature Role Survey

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[Infographic: 2026 Technology Adoption Roadmap for Infrastructure and Operations](#)

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[Predicts 2026: AI Agents Will Transform IT Infrastructure and Operations](#)

[The Future of I&O 2030: The Impact of AI](#)

¹2025 Gartner I&O Signature Role Survey. This survey was conducted to identify the key goals and challenges faced by I&O leaders. Additionally, the study focuses on understanding key aspects related to technical debt, the primary drivers of investment decisions, and the adoption of AI within the I&O function. The study was conducted online from May through July 2025 among 253 respondents from the United States (n = 119), the United Kingdom (n = 52), India (n = 51) and Germany (n = 31). Qualifying organizations operated in multiple industries and reported enterprisewide revenue for fiscal year 2024 of at least \$50 million or equivalent. Qualified respondents were screened to be heads of I&O or CIOs. All respondents led, participated in or influenced strategies and investment decisions related to I&O. Disclaimer: The results of this study do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

Actionable, objective insights

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