Cisco Research: A Major Infrastructure Shift Is Underway. AI Could Double the Strain or Solve It

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Most outages stem from congestion, cyberattacks, and misconfiguration — but IT Leaders believe the right infrastructure can protect performance and unlock future value.

News summary:

- **Architectural shift already underway:** Cisco research shows 97% of IT leaders see modernized networks as critical to deploying AI, IoT, and cloud, with 91% increasing network investment.
- **AI Drives Demand for Resilience:** One severe outage per business per year adds up to $160B globally[1] – driven by congestion, cyberattacks, and software misconfigurations – prompting an evolution in network architecture.
- **Modern networks unlock business value:** 89% say improved infrastructure will drive revenue, while 93% expect meaningful cost savings from smarter, more secure, and adaptive networks.
- **CEO priorities align with IT action:** In line with Cisco's previous CEO research, 97% are expanding AI and 78% rely on CIOs/CTOs for investment – backing IT leaders to lead from the network.

SAN JOSE, Calif., June 4, 2025 /PRNewswire/ -- Cisco (NASDAQ: CSCO), the worldwide leader in networking and security, today released a new global study revealing a major architectural shift underway across enterprise networks. As AI assistants, agents, and data-driven workloads reshape how work gets done, they're creating faster, more dynamic, more latency-sensitive, and more complex network traffic.

Combined with the ubiquity of connected devices, 24/7 uptime demands, and intensifying security threats, these shifts are driving infrastructure to adapt and evolve. The result: IT leaders are changing how they think about the network: what it is, what it enables, and how it protects the organization. The network they build today will decide the business they become tomorrow.

Six signals that an architectural shift is underway

The network has become a strategic priority: 97% say a modernized network is critical to rolling out AI, IoT, and cloud. **91%** of IT leaders plan to increase the share of their overall IT budget allocated to networking.
Secure networking is mission critical: 98% say secure networking is important to their operations and growth; **61%** say it's critical. **94%** believe an improved network will enhance their cybersecurity posture.
AI intensifies demand for resilient networks: 95% of IT leaders say a resilient network is critical, at a time when **77%** faced major outages – driven largely by congestion, cyberattacks, and misconfigurations – adding up to $160B globally from just one severe disruption per business, per year.
Leaders look to AI to grow revenue: 55% of IT leaders say a modernized network's greatest impact on revenue will come from deploying AI tools that automate and tailor customer journeys – enabling faster, more personalized experiences that can strengthen loyalty and drive growth.
AI is reshaping computing infrastructure: 71% say their data centers can't yet meet today's AI demands, and **88%** plan to expand capacity – on-prem, in the cloud, or both.
Leaders want to make networks smarter: 98% say autonomous, AI-powered networks are essential to future growth – yet only **41%** have deployed the intelligent capabilities – like segmentation, visibility, and control – to make their network adaptive.
"AI is changing everything — and infrastructure is at the heart of that reinvention. The network has powered every wave of digital transformation, accelerating the convergence of IoT, cloud, hybrid work, and defending against rising security threats," said Chintan Patel, CTO and Vice President Solutions Engineering, Cisco EMEA. "IT leaders know the network they build today will shape the business they become tomorrow. Those who act now will be the ones who lead in the AI era."

The Network is the Value: Modern Infrastructure Unlocking Growth and Savings
IT leaders are already delivering financial value from today's networks – largely by improving customer experiences (55%), boosting efficiency (52%), and enabling innovation (51%). But much of that value is at risk if it comes from infrastructure that hasn't been designed for AI or real-time scale. To unlock the full growth and savings they expect, leaders have identified critical gaps they must close: siloed or partially integrated systems (58%), incomplete deployments (51%), and reliance on manual oversight (48%). Smarter, more secure, more adaptive networks are the business case for investment. Nearly 9 in 10 (89%) say improved networks will directly drive revenue, and almost everyone (93%) expects meaningful cost savings – driven by smarter operations, fewer outages, and lower energy use.

The C-suite is turning to IT leaders and partners to lead the architectural shift
Cisco's recent research shows CEOs are aligned with IT leaders on the importance of infrastructure in the AI era. 97% are expanding the use of AI, and 78% rely on their CIO or CTO for investment decisions. But they also recognize the risk: 74% say outdated infrastructure is already holding back growth. As enterprise networks undergo a major architectural shift, the C-suite is backing their tech leaders to lead from the network – and 96% believe trusted partnerships will be critical to success.

Discover more of the key findings from Cisco's Networking Research here.

About the research
This global study is based on a survey of 8,065 senior IT and business leaders responsible for networking strategy and infrastructure at organizations with 250 or more employees. The survey was conducted across 30 markets in December 2024 by Sandpiper Research & Insights, on behalf of Cisco.

About Cisco
Cisco (NASDAQ: CSCO) is the worldwide technology leader that is revolutionizing the way organizations connect and protect in the AI era. For more than 40 years, Cisco has securely connected the world. With its industry leading AI-powered solutions and services, Cisco enables its customers, partners and

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[1] Estimated using the average cost of disruption reported by IT leaders, extrapolated globally based on the number of companies with 250+ employees (source: Statista) and aligned to the profile of Cisco's survey sample.

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