PANEL

The Role of Silicon, Enabling Technologies, and Networking in AI-Ready Infrastructure

2:00 PM - 2:30 PM

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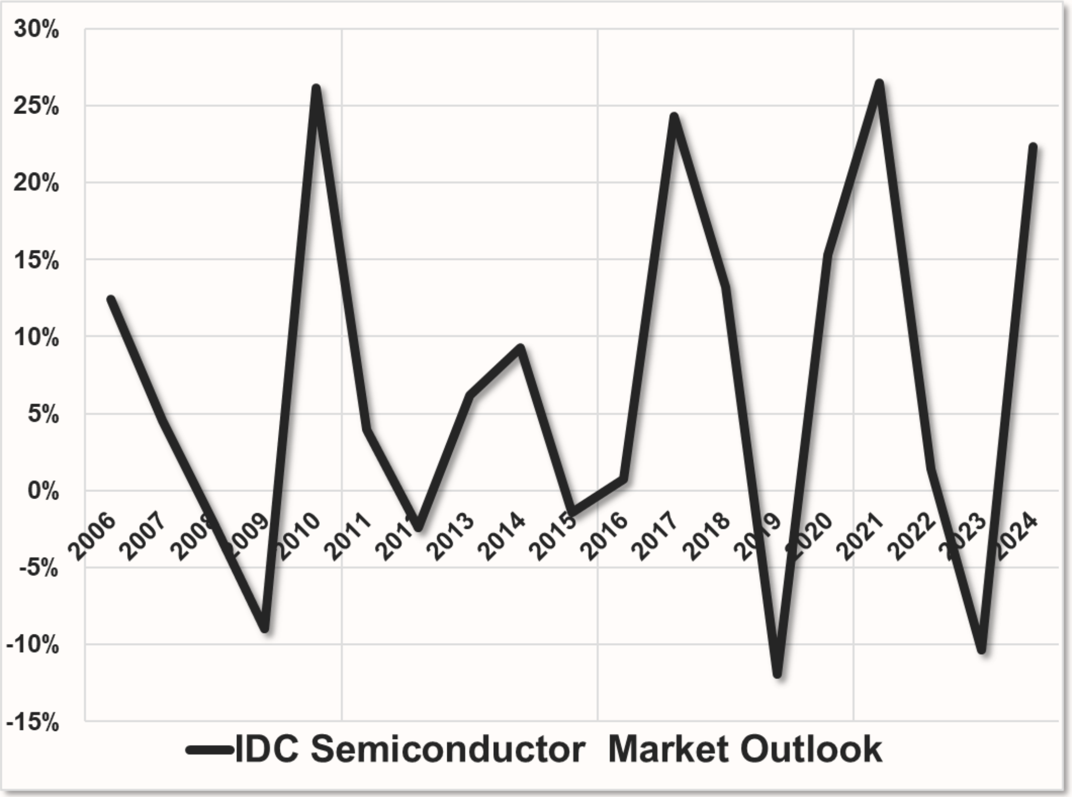
Semiconductor boom-and-bust cycles have been driven by a recurring set of structural and behavioral factors

- End-Market Demand Shocks
- Overinvestment in Capacity
- Inventory Build and Corrections
- Technology Transition Waves
- Competitive dynamics
- Macroeconomic Shocks
- Geopolitical and Policy Disruptions

Semiconductor cycles



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Demand > Supply: A structural constraint

"AI needs memory, and we're going to need a significant amount of memory semiconductors this year"
Jensen Huang, Nvidia CEO

"Sustained and strong industry demand, along with supply constraints, are contributing to tight market conditions and we expect these conditions to persist beyond calendar 2026."
Sanjay Mehrotra, Micron CEO

"we do continue to see market pricing for memory increasing significantly."
Tim Cook, Apple CEO

"In the coming quarters, the handset industry will be constrained by the availability and pricing of memory, particularly DRAM."
Cristiano Amon, Qualcomm CEO

"never witnessed costs escalating at the current pace,"
Jeff Clarke, Dell COO

"we're going to be limited by supplier output of chips. I think maybe memory is an even bigger limiter than AI logic."
Elon Musk

"rising prices and tight availability for DRAM, NAND, and substrates could limit our revenue opportunity this year, particularly for the client market."
David Zinsner, Intel CFO

"There's no relief [from the memory-chip shortage] as far as I know."
Lip-Bu Tan, Intel CEO

"In terms of memory, we're going to control what we can control."
Chuck Robbins Cisco CEO

"The price is going very, very high, of course, and I think it's been unprecedented in terms of this rate driven by the AI demand."
Winston Cheng, Lenovo CFO

"Business models that depend on readily available inexpensive NAND are going to be under pressure."
David Goeckeler, Sandisk CEO

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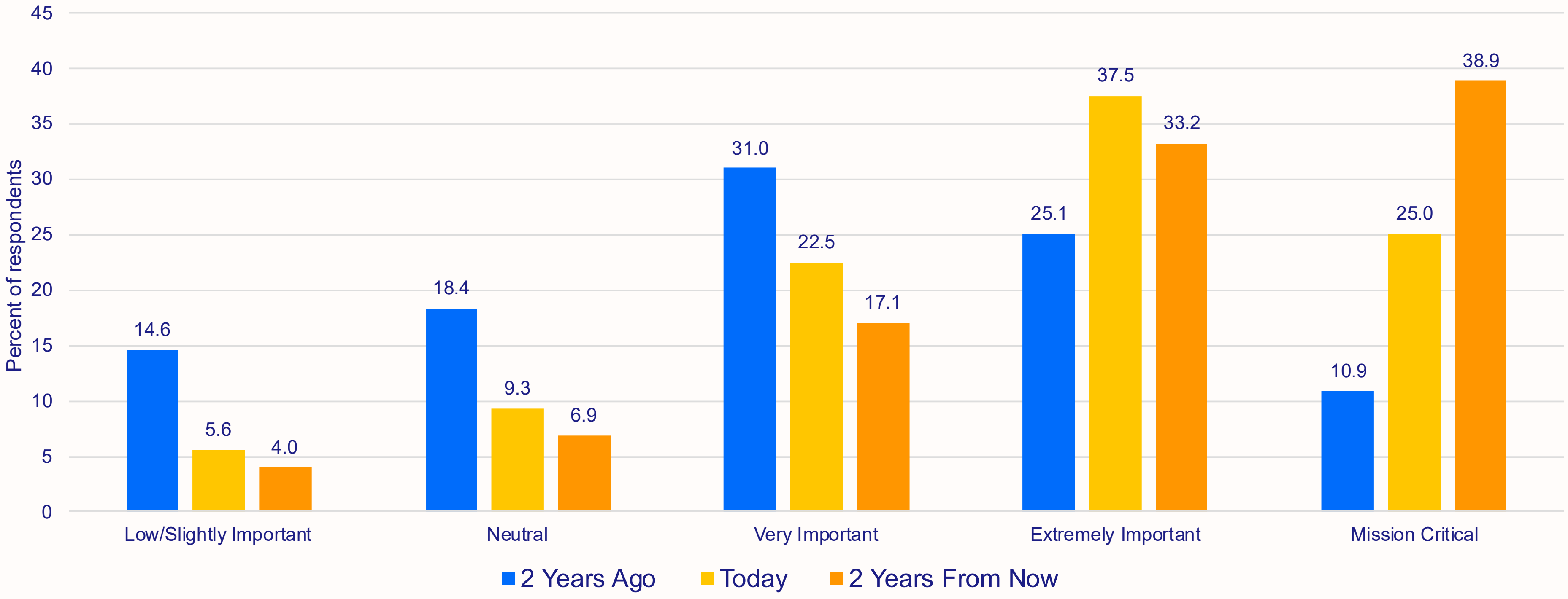
IDC Survey Spotlight

How has the strategic importance of connectivity changed in recent years and what is the future outlook?

Q. How would you rate the importance of your connectivity technology investment strategy to the success of your business in each of these time frames below?



Source: Future Enterprise Connectivity Infrastructure and Services Survey, IDC, August, 2025; N=758
Notes: Data Weighted by IT Spending by country;

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AI is driving a structural shift in the semiconductor market

	Historical (Pre-AI) Semiconductor Cycle	Emerging AI-Driven Structural Shift	Why It Matters for 2026+
Primary Demand Driver	Consumer electronics (PCs, smartphones)	AI training & inference (data centers, edge, AI PCs)	Demand is less seasonal and more investment-driven, increasing durability of cycles
Compute Model	General-purpose CPUs	Accelerators (GPUs, AI ASICs)	Raises silicon content per system and shifts value toward high-performance devices
Memory Intensity	DRAM & NAND sized for cost optimization	HBM, high-density DRAM, performance-optimized NAND	Memory becomes a strategic constraint, not a commodity
Packaging Importance	Mostly conventional packaging	Advanced packaging (CoWoS, chiplets, 2.5D/3D)	Packaging becomes a value-creation layer
Capital Spending Pattern	Cyclical, demand-led	Strategic, long-term, AI-roadmap-driven	Sustains higher baseline capex and longer investment horizons
Technology Transitions	Predictable node shrinks	Slower node cadence, more architectural innovation	Value shifts from pure scaling to system-level optimization

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Networking for AI

Core network concerns - security, scale, management – are major factors in delayed pilot-to-production movement.

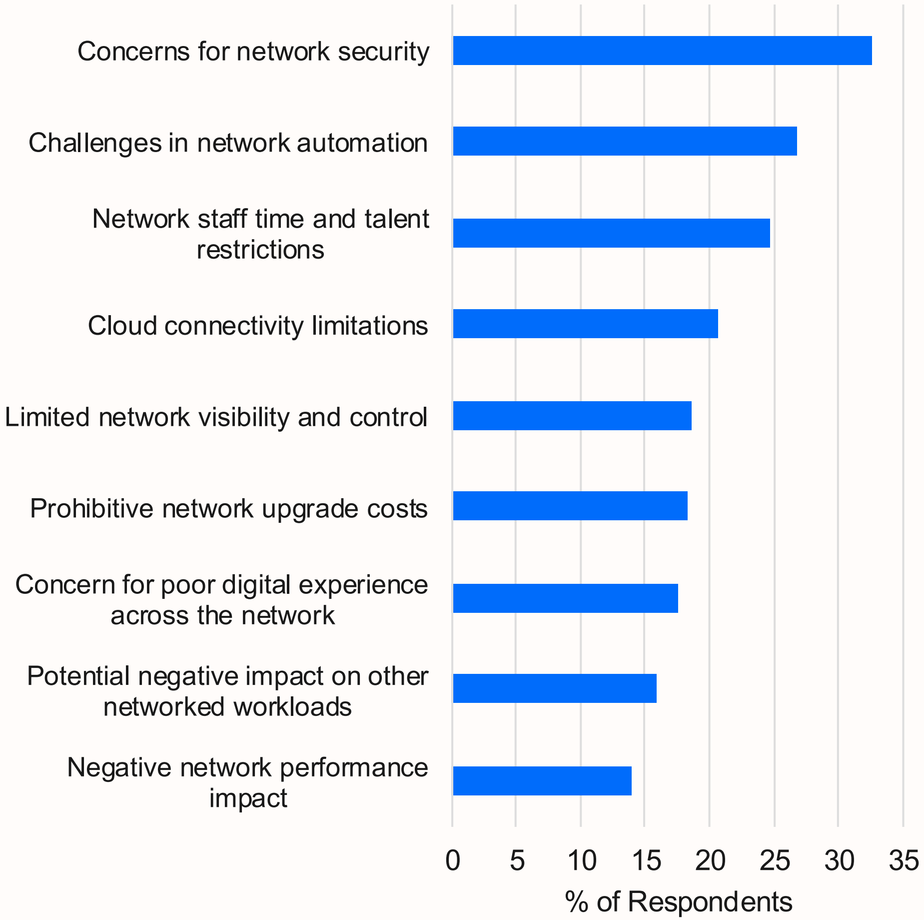
Innovative and dedicated best-in-class outweigh perceived simplicity and integration advantages of platforms.

New datacenter standards, scale-X networking techniques, and data gravity are contributing to a maturing environment.

Interconnection requirements are increasing as applications increase in complexity, and AI applications come online.

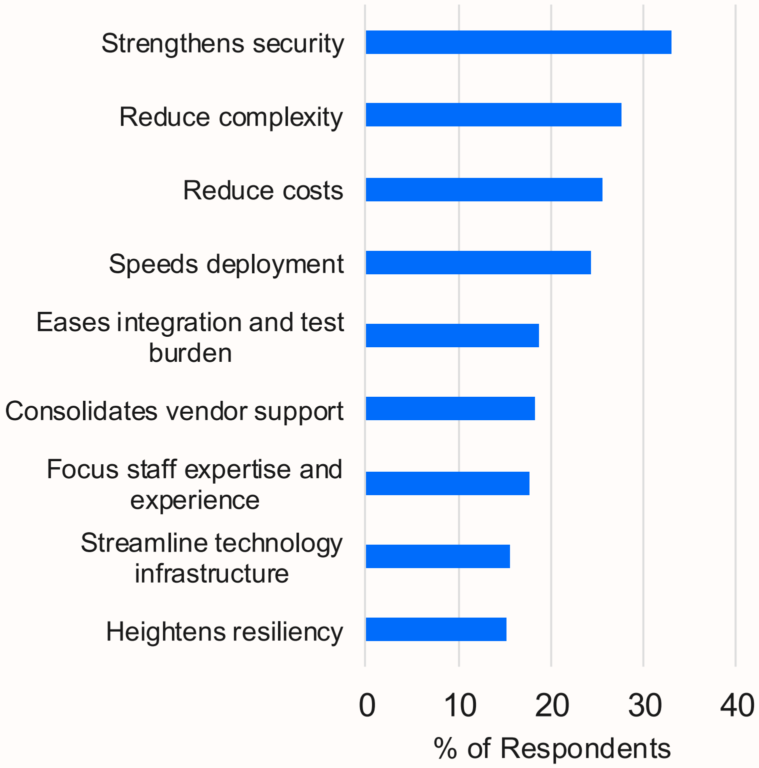
Edge AI adoption is nascent, but expected to triple in use in two years, driven by speed, security, and savings.

Network-related Drivers of AI Project Delays or Abandonment



AI Solution Approach	2024	2025
Platform Preference	64%	45%
Best-in-Class Preference	36%	55%

Main Reasons for a Platform Preference for AI Workloads



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Source: Worldwide AI in Networking Special Report, IDC, 2026; N=518, Reasons N=231

AI for networking

There is overwhelming support for applying AI-powered networking to many fronts–business to IT to network.

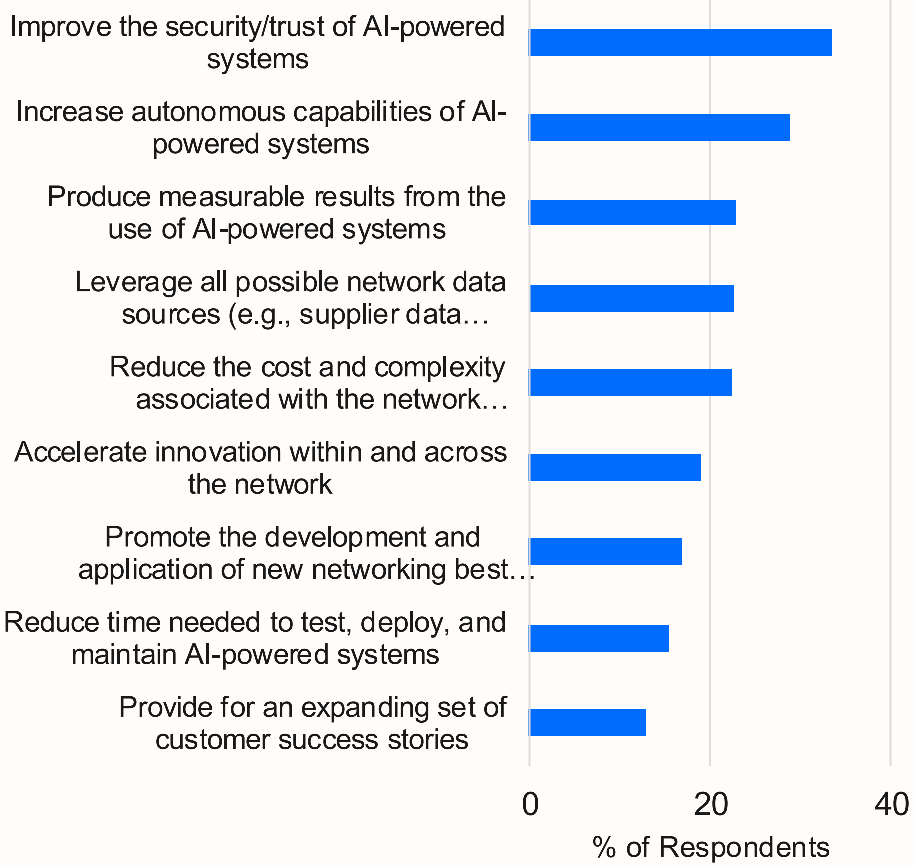
Higher cost of AI-powered networking solutions is being countered by potential benefits, mounting pressures.

Datacenter/cloud significantly lagging AI-powered automation of tasks compared to campus/branch/edge.

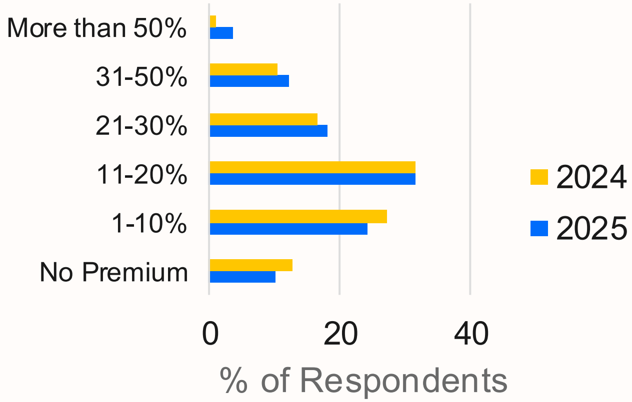
Top roadmap priorities are aspirational – trust and autonomy. Next are more practical – ROI, data use, and simplicity.

Agentic AI is exploding! Focus: Network optimization, security and visualization Concerns: Security, complexity, integrtn

Roadmap Priorities for AI-powered Networking Solutions



Expected Price Premium for AI-powered Networking



Management Tasks Augmented by AI

Network Domain	2024	2025	2026 Plan	2027 Plan
Campus/Branch	20%	31%	25%	54%
Datacenter/Cloud	20%	23%	27%	29%

2025 Report Results

Source: Worldwide AI in Networking Special Report, IDC, 2026; N=518

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Executive summary

1

Semiconductors Have Become the Core Infrastructure of the Global Economy

Chips are no longer just industry inputs — they are foundational infrastructure, comparable to energy, telecom, or transportation.

Guidance: Cycles still exist, but they are more durable and more strategic than in the past. Prioritize investments and align product roadmaps with emerging AI infrastructure and device needs.

2

AI Is Driving a Shift to Infrastructure Investment and System-Level Differentiation

Strategic demand is shifting from traditional consumer segments to AI-driven infrastructure, accelerating the semiconductor industry's entry into the $1T supercycle and creating multi-year demand tailwind beyond traditional cycles.

Guidance: Differentiation increasingly comes from architecture, advanced packaging, power efficiency, software, and ecosystem optimization.

3

Strategic Risks Require Active Management

Geopolitical, macroeconomic, and supply chain uncertainties demand proactive risk management and agile investment strategies.

Guidance: Significant opportunities exist. Strengthen supply chain resilience, diversify sourcing, and monitor end market as well as global policy developments to mitigate potential disruptions.

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