AI-Driven NetOps:
How Enterprises are Embracing Intelligent Network Management Solutions

January 2026 EMA Research Report
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Executive Summary

This market research explores how IT organizations plan to use artificial intelligence to optimize, accelerate, and automate network operations. Based on a survey of 458 IT professionals across North America and Europe, it explores current engagement with AI-driven network management solutions and efforts to develop homegrown AI tools. It also explores emerging best practice for AI-driven network management adoption.
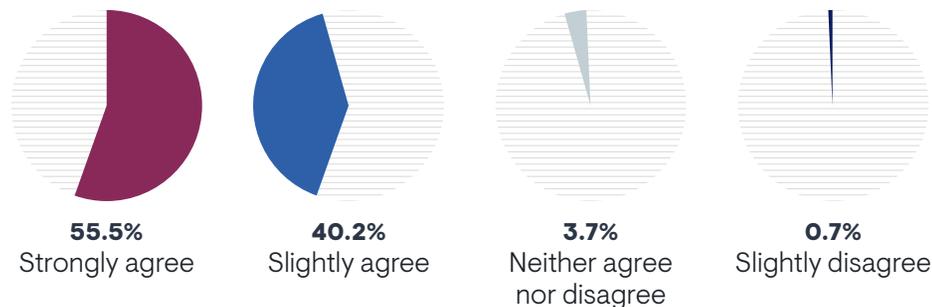
Introduction: From ML-Driven AIOps to Agentic Operations

Less than a decade ago, the term "AIOps" was coined to describe the application of advanced analytics and machine learning to IT management. Around that time, IT infrastructure vendors, IT management software vendors, and AIOps specialists introduced AIOps technologies that could automate processes like event correlation and anomaly detection. Some vendors also started leveraging natural language processing technology to develop virtual assistants or conversational interfaces with their management tools, which improved the overall usability of IT management solutions.

The Network Infrastructure and Operations practice at Enterprises Management Associates (EMA) followed these developments closely. For example, in 2023, EMA found that 84% of IT organizations made it a high priority to apply AIOps technology to IT management, and 50% strongly agreed that applying such technology to network management would lead to better business outcomes for their overall companies.[1] **Figure 1** reveals updated data to this latter question. The number of IT pros who strongly believe that AI-driven network management leads to better business outcomes increased from 50% to nearly 56%.

Figure 1. Do you agree or disagree with this statement? The application of AI technology to network data and network management can lead to better business outcomes for my overall enterprise.

55.5%
Strongly agree

40.2%
Slightly agree

3.7%
Neither agree nor disagree

0.7%
Slightly disagree

Sample Size = 426

Since that 2023 research, an AI revolution has occurred. Large language models (LLM) and AI agents have hit the mainstream, kicking off a gold rush of investment. In the IT industry, many vendors are doubling down on AI investment, moving beyond machine learning and leveraging LLMs and agents to develop sophisticated AI-driven IT operations capabilities that are moving the industry ever closer to autonomous operations. In the network infrastructure and operations world, leading vendors have identified AI technology as a key focus of innovation and differentiation. Moreover, EMA analysts have observed a shift in perspective among network engineers and architects. Whereas five years ago they were skeptical about the value of AI-driven network management, today, they expect AI solutions from their strategic vendors.

Research Goals

This research report explores how enterprises are engaging with AI-driven network management solutions. It identifies what AI technologies enterprises are adopting, how they are using AI, what challenges they are encountering, and what benefits they are experiencing.

The report also identifies several potential best practices for AI adoption. EMA's goal is to provide a snapshot of where IT organizations are with AI-driven network management and what they expect from the future.

[1] EMA, "AI-Driven Networks: Leveling Up Network Management," April 2023.

EMA

Research Methodology

In November 2025, EMA surveyed 458 IT professionals who are directly engaged with the tools that their enterprises use to manage their network infrastructure. **Figure 2** provides a demographic overview of survey respondents.

For additional context and insights into what the data revealed, EMA also conducted one-on-one interviews with five enterprise IT professionals who have strategic responsibility for their organization's network management tools. EMA will quote those interviewees anonymously throughout this report.

Figure 2. Demographic Overview

Job titles

34%	Admins/Engineers/Architects
6%	AI/Data engineer/Developers
4%	IT/Network tool architects
35%	IT middle management
22%	IT executives

Company size (total employees)

26%	Midsized companies (1,000 to 2,499)
54%	Enterprises (2,500 to 9,999)
20%	Large enterprises (10,000 or more)

Region

56%	North America
44%	Europe

Top industries

22%	Manufacturing
21%	Financial services
16%	Retail/Wholesale/Distribution
9%	Health care/Pharmaceuticals
8%	Professional services not related to IT
8%	Oil/Gas/Utilities

IT groups

31%	Network engineering
22%	IT executive suite
16%	AI/Data science/Analytics
13%	IT security/Cybersecurity
8%	IT architecture
6%	IT tool engineers
4%	Cloud operations

Sample Size = 250

Key Findings

Only 35% of enterprises are completely successful with applying AI to network management.

Only 39% are completely confident in their organizations' ability to evaluate AI-driven network management solutions.

Only 44% are completely confident that the quality of their network data can support AI-driven networking.

Only 31% completely trust the insights that their AI-driven network management solutions provide.

87% are establishing data lakes with IT and security data, and AI-driven IT operations was the main driver of 36% of those data lakes.

59% of companies are currently using AI features delivered by their network management vendors and 52% are training AI models with their IT and security data.

The top business benefits of AI-driven network management are:

1. Faster resolution of network trouble
2. Improved network performance
3. Reduced security risk
4. Cost optimization

The top barriers to success are:

1. Security/Compliance risk
2. Budget limitations
3. Data issues
4. Network complexity

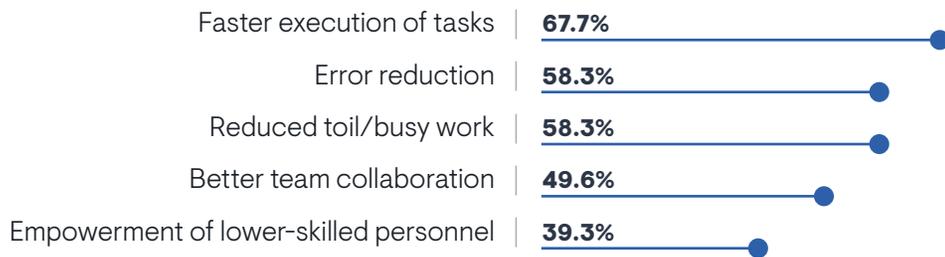# Outcomes for AI-Driven Network Management

Changing How Network Infrastructure and Operations Teams Work

AI's ability to find patterns, infer meaning, and summarize complex situations will undoubtedly change how network teams work daily. **Figure 3** reveals expectations for this change. Most IT pros expect that AI will enable faster execution of tasks, reduce errors, and eliminate busy work.

"Leveraging AI will take care of the smaller tasks so that you have more cycles to get where your company wants to be in the future," said a network tools director for a large university.

"I see an opportunity where you can have fewer human errors," said a network tools architect with a Fortune 500 media company. "Many times, people are looking at so much data that they overlook things. AI can pinpoint those issues easily."

Figure 3. In what ways do you believe AI can best improve the way network infrastructure and operations personnel work?

Faster execution of tasks	**67.7%**
Error reduction	**58.3%**
Reduced toil/busy work	**58.3%**
Better team collaboration	**49.6%**
Empowerment of lower-skilled personnel	**39.3%**

"The average network engineer is going to be expected to do more," said a network tools lead with a very large bank. "Having AI capabilities that can help them do things faster will be very important."

Better team collaboration is a secondary outcome, but research participants who reported the most success with AI-driven network management were more likely to select it. IT executives were also more likely to expect this outcome.

"Everyone wants the network team's attention," said a network tools architect with a Fortune 500 retailer. "Even just being present in a room makes people feel at ease, just blessing their decisions. AI will reduce demand for network engineers to be everywhere. AI will make the network more accessible and will democratize it."

> **"AI will make the network more accessible and will democratize it."**

Most respondents didn't see an opportunity to empower lower-skilled employees to take on more challenging responsibilities. However, larger enterprises (10,000 or more employees) anticipate this impact more. Members of IT tool engineering teams were also more likely to expect this impact.

"We are asking our NOC team to take more responsibility for responding to alerts," said a network tools architect with a Fortune 500 media company. "AI will definitely help with that."

Sample Size = 458

Business Impacts

Figure 4 reveals the business benefits that IT organizations have experienced with AI-driven network management. The greatest opportunities are faster resolution of network problems and improved network performance.

Figure 4. What are the biggest business benefits of applying AI to network management?

Benefit	Value
Faster resolution of network problems	54.1%
Improved network performance/experience	51.3%
Reduced security risk	48.7%
Cost optimization	47.8%
Proactive problem prevention	45.9%
More time available for strategic projects	41.9%
Responsiveness to change	37.8%
Mitigation of network team's skills/personnel gaps	33.0%

"I think AI is going to help us respond to incidents quicker," said a network infrastructure and operations manager with a Fortune 500 energy company. "It will help us diagnose yellow flags before they turn into red flags. And it will help us reduce our self-inflicted outages."
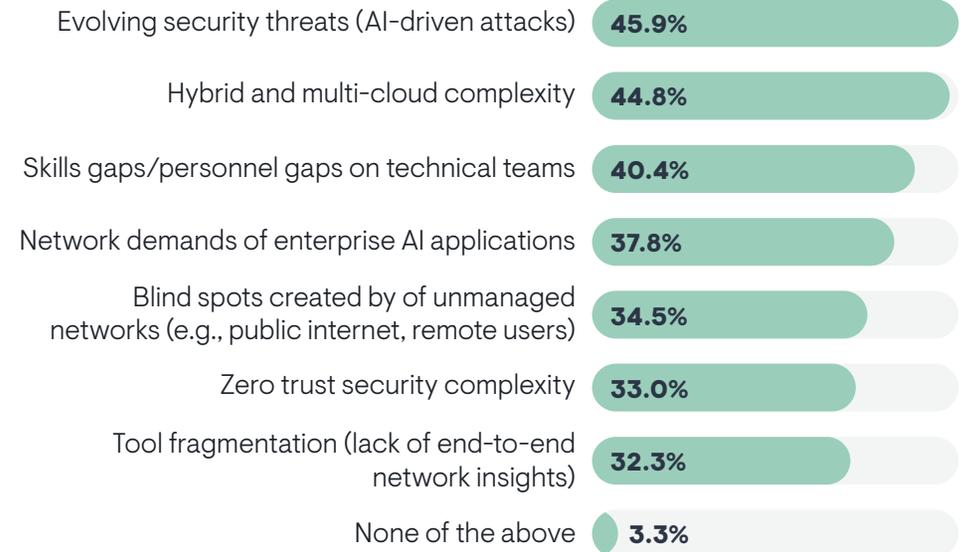
Midsized companies (1,000 to fewer than 2,500 employees) were the most likely to experience faster resolutions of network problems. They also reported proactive problem prevention more often than larger companies. Large enterprises (10,000 or more employees) experienced improved responsiveness to change more often than smaller companies. Europeans also saw a higher rate of this latter benefit. Members of cybersecurity teams were likely to report reduced security risk and cost optimization.

How AI Helps Network Teams Meet Business and Technical Priorities

Figure 5 examines the issues and trends that AI-driven network management has helped IT organizations address. The two biggest opportunities are coping with evolving security threats and hybrid, multi-cloud complexity.

Figure 5. Which of the following issues and trends is your organization hoping to address by applying AI technology to network data and network management tools?

| Issue/Trend	Value
Evolving security threats (AI-driven attacks)	45.9%
Hybrid and multi-cloud complexity	44.8%
Skills gaps/personnel gaps on technical teams	40.4%
Network demands of enterprise AI applications	37.8%
Blind spots created by of unmanaged networks (e.g., public internet, remote users)	34.5%
Zero trust security complexity	33.0%
Tool fragmentation (lack of end-to-end network insights)	32.3%
None of the above	3.3%

Secondarily, AI is helping IT organizations deal with skills gaps and the network demands of enterprise AI applications. IT executives selected evolving security threats, cloud complexity, and skills gaps more often than technical personnel.

Sample Size = 458

Sample Size = 458

AI Errors are Common

Forty-seven percent of research participants told EMA that their AI-driven network management solutions provide false or mistaken insights somewhat to very often, as revealed by **Figure 6**. Subject matter experts (engineers, architects) were more likely to perceive these mistakes than IT middle management and executives. Members of network engineering teams were especially aware of them.

Figure 6. In your experience, how often does the AI technology that you apply to network management provide false or mistaken insights and recommendations?

- 16.6% Very often
- 29.9% Somewhat often
- 28.6% Somewhat rarely
- 23.6% Very rarely
- 1.3% Don't know
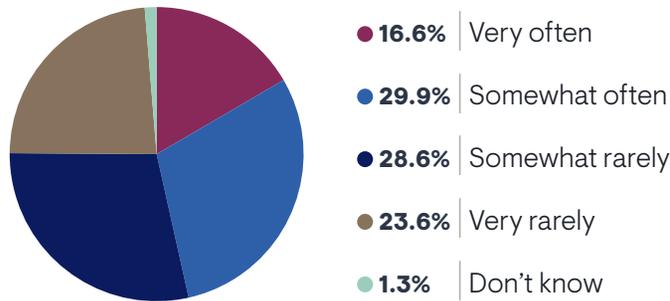
I use AI every single day and it is just constantly failing.

"I use AI every single day and it is just constantly failing," said a network tools architect with a Fortune 500 retailer. "I am patient enough to wait and send another prompt."

Notably, error-prone AI was not necessarily an indicator of failure. **Figure 7** shows that completely successful AI-driven network management projects were nearly as likely to see frequent errors as they were to see infrequent errors. Perhaps the most successful organizations are adept at detecting AI's mistakes and learning from them.

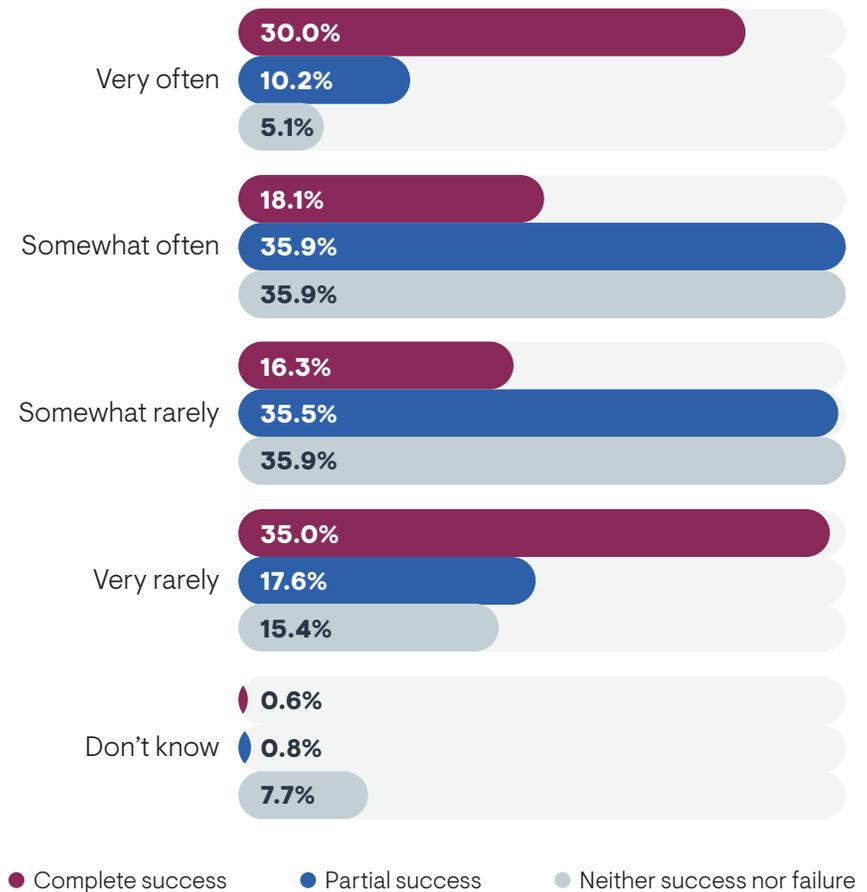**Figure 7. In your experience, how often does the AI technology that you apply to network management provide false or mistaken insights and recommendations? by How successful do you believe your organization has been so far with applying AI to network management?**

Very often
- 30.0%
- 10.2%
- 5.1%

Somewhat often
- 18.1%
- 35.9%
- 35.9%

Somewhat rarely
- 16.3%
- 35.5%
- 35.9%

Very rarely
- 35.0%
- 17.6%
- 15.4%

Don't know
- 0.6%
- 0.8%
- 7.7%

● Complete success ● Partial success ● Neither success nor failure

Sample Size = 458

Sample Size = 458

Barriers to AI Value

This section examines the challenges that organizations are encountering with AI for networking. EMA separated this area of investigation into business challenges and technical challenges.

Business Challenges

Security and compliance risk is the biggest business-related challenge to AI-driven network management, according to **Figure 8**. This challenge can manifest in a couple of ways. Many organizations will have concerns about their vendors using internal data for training purposes, or they may resist uploading their data to the cloud for inference and agentic access. Other organizations will worry that AI-driven operations may lead to mistakes that open up vulnerabilities.
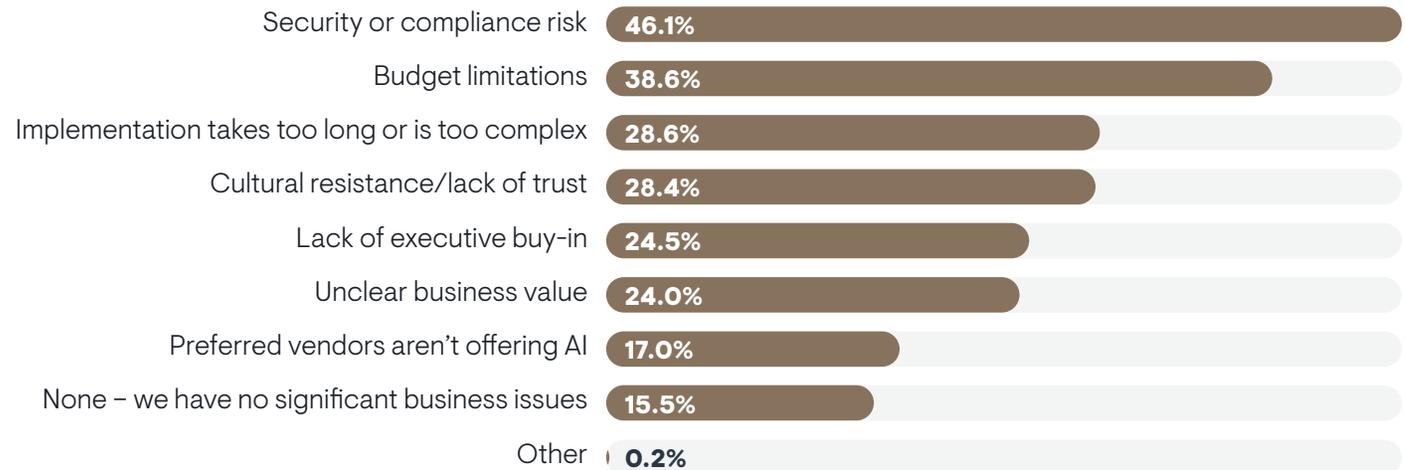
"Data security is a big issue," said a network tools lead with a very large bank. "Anything SaaS-based is an issue, especially today, with the number of bad actors on the internet. We are constantly seeing exposures and hacks."

Budget is the other leading business challenge. Organizations simply don't have enough of the financial resources needed to fully achieve their goals for AI-driven network management. Both security risk and budget issues were cited more often by less successful organizations, suggesting that these two challenges truly make or break AI efforts.

Among secondary challenges, enterprises (2,500 or more employees) were more likely than midsized companies to complain that their preferred vendors aren't offering AI solutions. Technical personnel (engineers and architects) also complained more often about this than middle management and executives.

A network tools architect with a Fortune 500 media company pointed to cultural resistance as a major issue. "Accepting that this is part of a new reality is going to be hard. If you're not using AI, you'll be left behind. I think user education and user comfort are big issues. A lot of traditional network engineers are used to using CLI to log into devices and find answers."

Figure 8. Which business issues challenged your organization's ability to benefit from AI-driven network management?

Challenge	Percentage
Security or compliance risk	46.1%
Budget limitations	38.6%
Implementation takes too long or is too complex	28.6%
Cultural resistance/lack of trust	28.4%
Lack of executive buy-in	24.5%
Unclear business value	24.0%
Preferred vendors aren't offering AI	17.0%
None – we have no significant business issues	15.5%
Other	0.2%

Sample Size = 458

Technical Challenges

Figure 9 reveals that data issues are the biggest technical barrier to success. This report will explore the issue of data as a foundation of AI-driven network management in a later chapter. Notably, respondents who reported less overall success with AI were more likely to cite data issues, as well as the second-biggest technical challenge: network complexity.
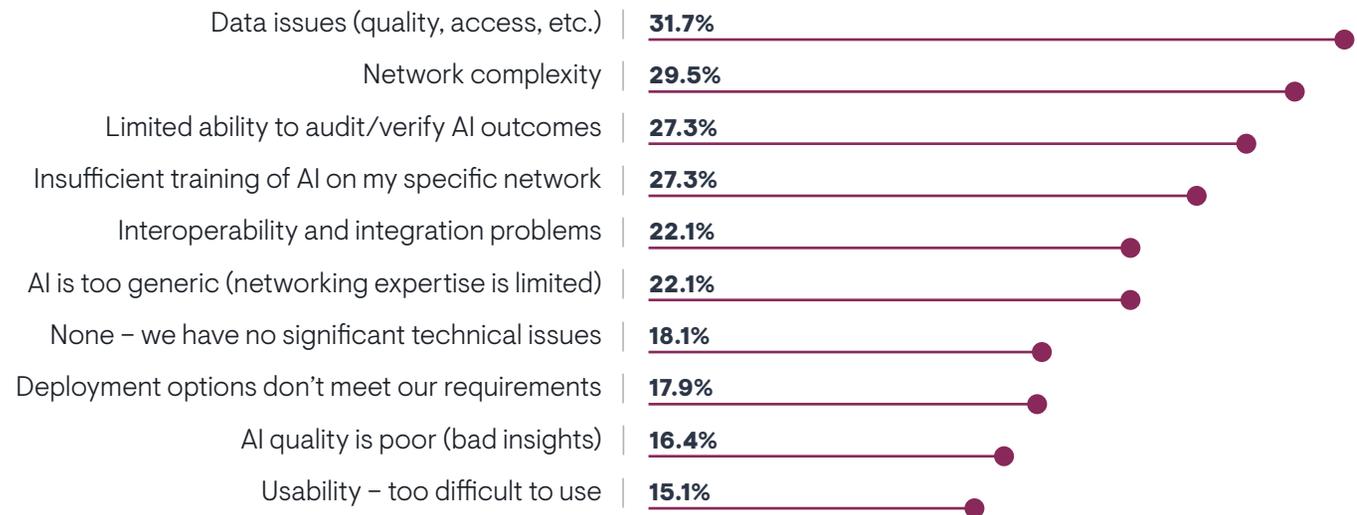
Among the secondary challenges, interoperability and integration problems were also cited more often by less successful organizations. Poor AI quality, which was a minor overall issue, was reported more often by technical personnel (network engineers and architects) and AI engineers and developers, suggesting it's a looming issue missed by upper management.

Respondents at larger enterprises (10,000 or more employees) were more concerned about four secondary issues:

- Interoperability and integration problems
- Poor AI quality
- Lack of deployment flexibility
- Limited ability to audit and verify AI results

One interviewee pointed to the complexity of his legacy network as a roadblock. "My network is so legacy that I don't think there is an AI model anyone could create that would be able to navigate it," said a network infrastructure and operations manager with a Fortune 500 energy company. "It would be like putting a Bentley in a country that has no paved roads."

Figure 9. Which technical issues have challenged your organization's ability to benefit from AI-driven network management?

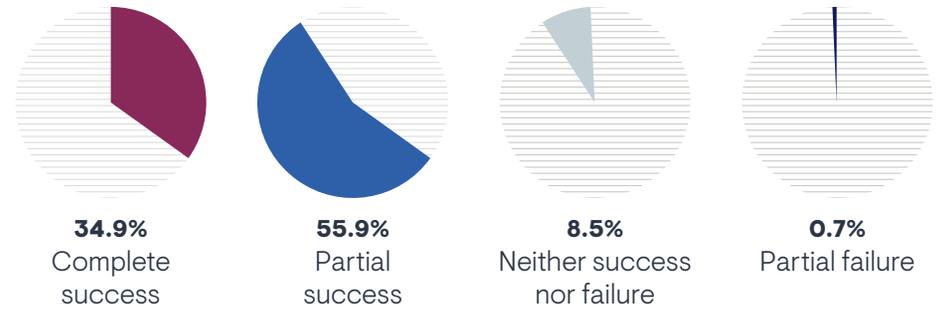|	
Data issues (quality, access, etc.)	**31.7%**
Network complexity	**29.5%**
Limited ability to audit/verify AI outcomes	**27.3%**
Insufficient training of AI on my specific network	**27.3%**
Interoperability and integration problems	**22.1%**
AI is too generic (networking expertise is limited)	**22.1%**
None – we have no significant technical issues	**18.1%**
Deployment options don't meet our requirements	**17.9%**
AI quality is poor (bad insights)	**16.4%**
Usability – too difficult to use	**15.1%**

Sample Size = 458

Overall Success with AI-Driven NetOps

Figure 10 reveals that only 35% of respondents believe their organizations have been completely successful with their efforts to apply AI to network management. Barely 1% go so far as to admit failure. Most simply see room for improvement.

Members of IT tool engineering teams and IT executive suites perceived more success than other groups. North Americans were more successful than Europeans. The largest companies in this research experienced the least success of all, suggesting that large and complex networks are more challenging to manage with AI.

Only 35% of respondents believe their organizations have been completely successful with their efforts to apply AI to network management.

Figure 10. How successful do you believe your organization has been so far with applying AI to network management?

| 34.9% | 55.9% | 8.5% | 0.7% |
| Complete success | Partial success | Neither success nor failure | Partial failure |

Sample Size = 458

# AI-Driven Network Management Adoption

Budget Allocation

Ninety-three percent of research respondents told EMA that their organizations have allocated budget specifically for AI technology that will be applied to network management.

"Once vendors have a proven track record with AI, we will pay a premium," said a network infrastructure and operations manager with a Fortune 500 energy company. "Right now, I get contacted all the time from networking vendors about AI, and I have to tell them we're not spending anything yet."

Figure 11 reveals how this budget will be spent. Most companies are buying AI capabilities from network infrastructure and network management vendors. Most are also investing in general-use AI tools integrated into their tools and processes.

Figure 11. How will this budget for AI-driven network management be spent?

AI solutions that network infrastructure and/or network management vendors offer	83.1%
General-use AI tools integrated into network management tools and processes	74.6%
Internally-developed AI tools	43.2%
Not sure	0.2%
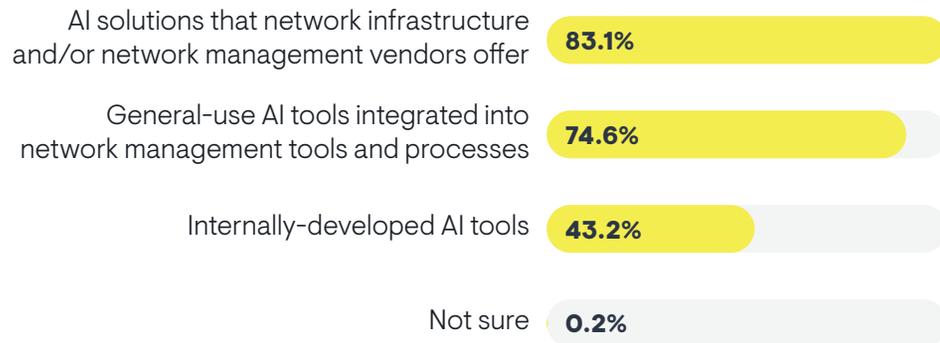
A minority are investing in homegrown tools with this budget. Members of IT tool engineering teams and the cloud operations group were more likely to perceive budget allocations for homegrown tools. Organizations that allocate budget to homegrown tools were more likely to report success with overall AI-driven network management.

Engagement with Vendor Solutions

Figure 12 reveals adoption of AI capabilities that network infrastructure and network management vendors offer. It shows that 59% have such tools in place today and use them. Another 29% are implementing them. Members of network engineering teams and the IT executive suite were especially likely to report current use of AI features.

Figure 12. What kind of engagement does your organization have with AI features and products that network infrastructure vendors or network management vendors offer?

We have adopted these solutions and use them for day-to-day operations	59.0%
We are implementing these solutions and will apply them to operations soon	29.0%
We are testing these solutions	8.3%
We are evaluating/researching these solutions for future adoption	3.7%

"We haven't implemented anything yet," said a network tools lead with a very large bank. "Our design team is looking at some of the features coming from our SD-WAN vendor. I've had a few meetings with monitoring vendors over the last month and a half."

"We've looked at AI chatbot features from a couple vendors," said a network tools architect with a Fortune 500 media company. "Their models need more fine-tuning to get better quality."

This high level of engagement is not surprising given that all major network infrastructure vendors now offer AI features in their management tools. Most leading network management tool vendors have also introduced AI features.

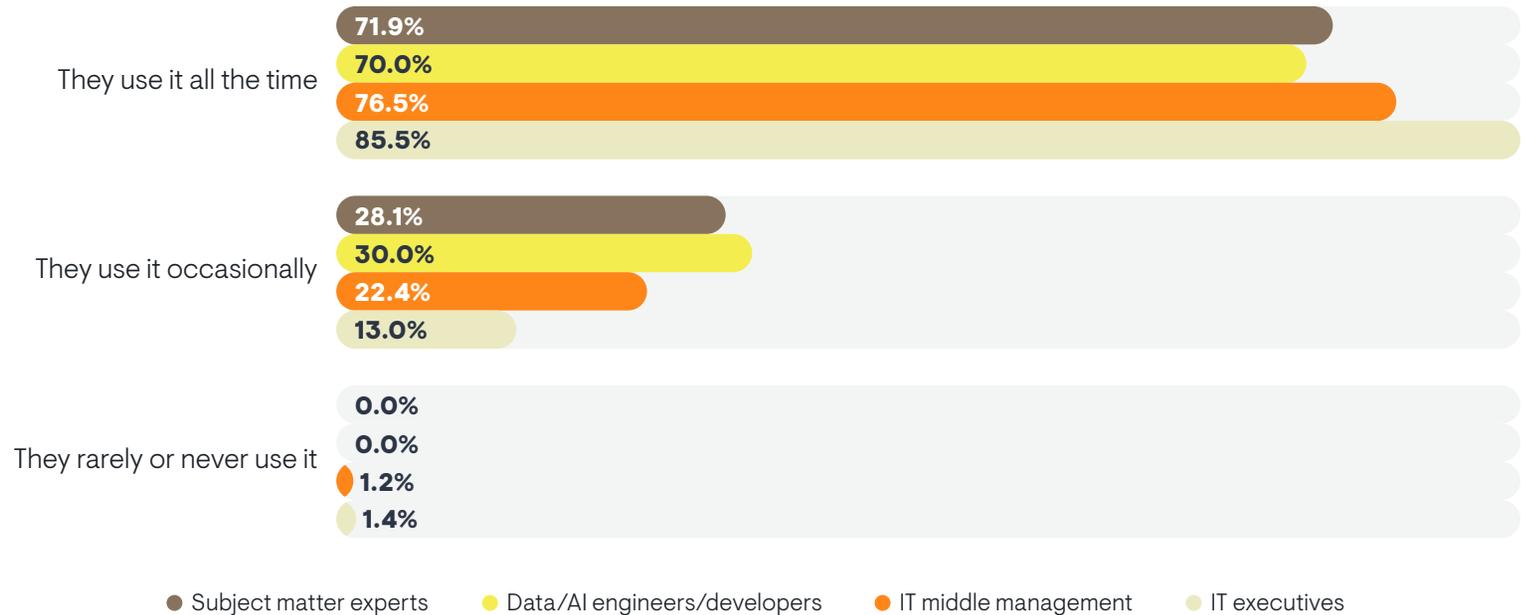Very large enterprises were more likely to spend on homegrown AI.

User Uptake is High

Seventy-seven percent of survey respondents who have adopted their vendors' AI-driven network management solutions said their network operations personnel are using the features extensively. This high level of user uptake demonstrates the value of AI.

However, there is a slight gap between IT executives' perceptions and the rest of the organization. **Figure 13** shows that IT executives have inflated views on how extensive uptake is. Subject matter experts (network engineers and architects) and AI engineers both perceive more modest user engagement.

Figure 13. To what extent do you think your network infrastructure and operations personnel are actually using the AI capabilities that your network vendors offer? by Job Title

They use it all the time
- 71.9%
- 70.0%
- 76.5%
- 85.5%

They use it occasionally
- 28.1%
- 30.0%
- 22.4%
- 13.0%

They rarely or never use it
- 0.0%
- 0.0%
- 1.2%
- 1.4%

● Subject matter experts ● Data/AI engineers/developers ● IT middle management ● IT executives

Sample Size = 270

AI Features Influence Vendor Selection

Network infrastructure and network management vendors must start investing in AI capabilities. More than 59% of research participants said AI is very influential on vendor selection today, as **Figure 14** reveals. Less than 2% said AI had no influence at all on their selection of infrastructure and tool vendors.

Figure 14. To what extent do AI features influence your organization's decision-making when selecting network infrastructure or network management products?

59.4%
Very
influential

38.6%
Somewhat
influential

1.7%
Not influential
at all

0.2%
Don't know
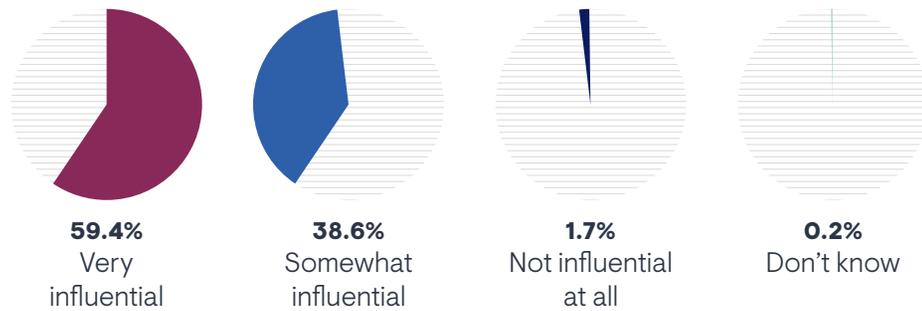
"AI was one of the biggest influences on our product selection," said a network tools architect at a Fortune 500 retailer. "We are moving from [one vendor to another] across 40,000 sites. [The new vendor's AI solution] was one of the biggest factors because it was superior."

"Once our network is more robust, mature, and stable, we will start using AI more. Then, it will be important [in vendor selection]. I don't think it's that important right now," said a network infrastructure and operations manager with a Fortune 500 energy company.

"AI alone is not enough to influence us," said a network tools architect with a Fortune 500 media company. "I see it as more nice-to-have. AI is more of a medium to low influence. It's relevant, but not a standard factor. I need to see more maturity before I'm ready to pay a premium."

IT executives were the most likely to say AI is very influential (78%). This trend is mostly playing out in North America, where 68% say AI is a strong factor in vendor selection. Only 49% of Europeans shared this sentiment. Notably, respondents who reported more success with AI-driven network management were also more likely to let AI influence vendor selection.

Training Their Own AI Models

Figure 15 reveals extensive homegrown efforts around AI in general, with 96% claiming to have plans to train an AI model on internal IT and security operations data. Nearly 52% are doing this today.

Figure 15. Is your IT organization planning to train an AI model with internal IT and security operations data?

51.7%
Yes, we do
this today

44.5%
Yes, we will do this
in the future

2.2%
No

1.5%
Don't know
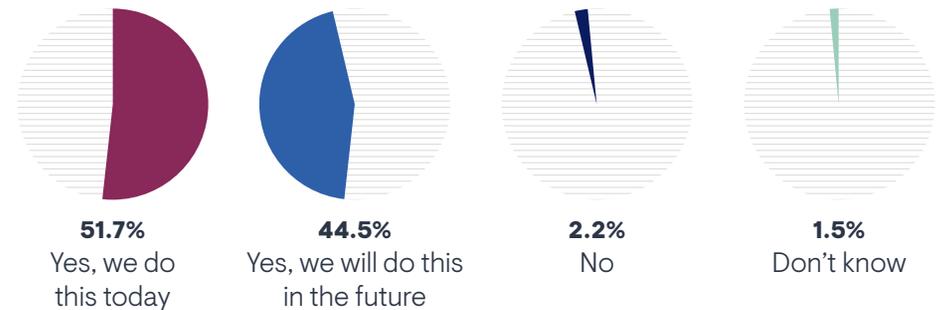
Organizations that report the most success with AI-driven network management were more likely to be executing on this already. It was also more common in larger enterprises.

"We're training on other things, but not the network," said a network tools architect with a Fortune 500 company. "We've created a workflow tool that's integrated with a variety of LLMs. When an alert comes in, it can ask ChatGPT if it's critical enough that we should open a ServiceNow ticket. If yes, it opens the ticket and conducts a variety of AI-driven automations. It's basically automating Tier 1 response. We are testing it and adding agents to it."
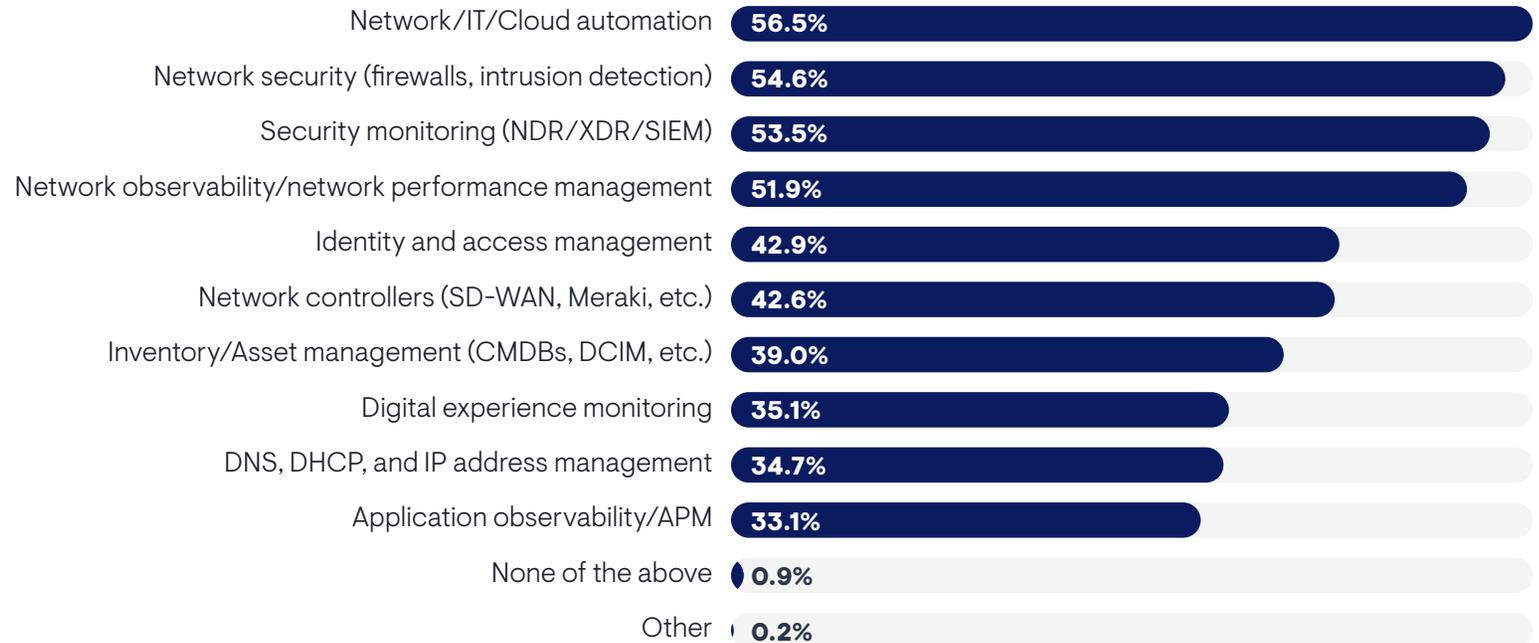
Sample Size = 458

Sample Size = 458

Figure 16 shows that IT organizations generally plan to integrate these trained AI models with four classes of tools:

- Orchestration tools
- Network security solutions
- Security monitoring systems
- Network observability tools

These integration priorities show that security is a major driver of interest in training AI on internal operational data.

Integration with orchestration tools and network observability tools suggests interest in advancing toward event-driven AI operations, where AI insights can interpret observed conditions and push changes to infrastructure in response to those interpretations.

Figure 16. What kinds of systems does your organization plan to integrate with the AI model that it is training?

System	Percentage
Network/IT/Cloud automation	56.5%
Network security (firewalls, intrusion detection)	54.6%
Security monitoring (NDR/XDR/SIEM)	53.5%
Network observability/network performance management	51.9%
Identity and access management	42.9%
Network controllers (SD-WAN, Meraki, etc.)	42.6%
Inventory/Asset management (CMDBs, DCIM, etc.)	39.0%
Digital experience monitoring	35.1%
DNS, DHCP, and IP address management	34.7%
Application observability/APM	33.1%
None of the above	0.9%
Other	0.2%

Sample Size = 441
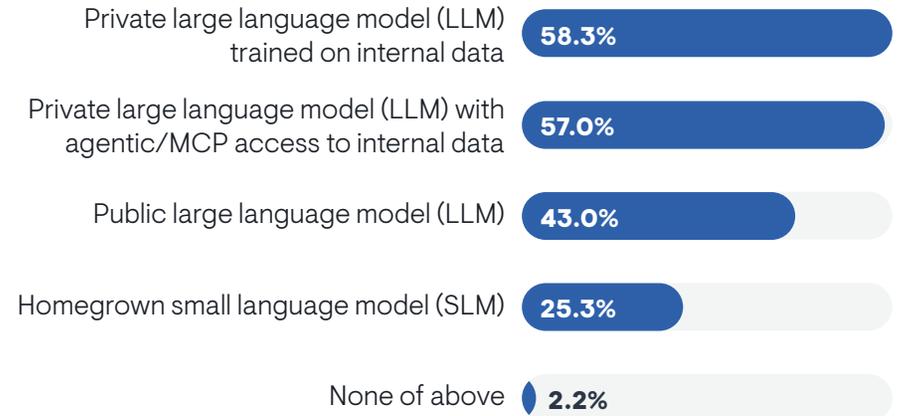
AI Models Applied to Network Management

Figure 17 reveals the kinds of AI models IT organizations are applying specifically to network management. Most are involving private LLMs that are trained on their data and agentic access to data for visibility into ongoing operations. Larger enterprises are more likely to train a private LLM on internal data.

A smaller number of companies is applying public LLMs to network management. Homegrown small language models are rare for network management.

"We're looking at creating a homegrown LLM that facilitates the coding process for our homegrown IT tools," said a network tools director for a large university. "Right now, we use Claude or ChatGPT to improve our code, but that gets expensive with larger teams. We're trying to acquire some hardware to run it on, but it's slow. It's hard to get GPUs right now."

> We're looking at creating a homegrown LLM that facilitates the coding process for our homegrown IT tools.

Figure 17. Is your organization applying or planning to apply any the following types of AI models to network management?

Category	Value
Private large language model (LLM) trained on internal data	58.3%
Private large language model (LLM) with agentic/MCP access to internal data	57.0%
Public large language model (LLM)	43.0%
Homegrown small language model (SLM)	25.3%
None of above	2.2%

Sample Size = 458

Network Data: The Foundation of AI Value

Data determines the efficacy and value of AI-driven network management solutions. It is essential to training AI models and access to data from a production network enables AI to understand it. This section explores how network data can make or break AI solutions for network management.

> Only 44% of respondents were very confident that the quality of their network data can support AI-driven network management.
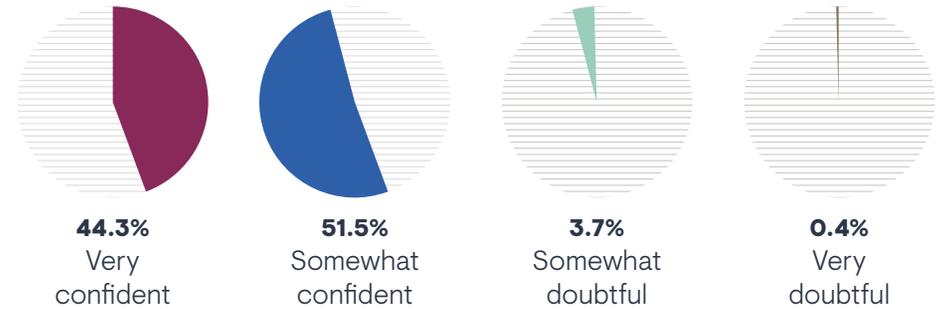
Confidence in Network Data Quality

Only 44% of respondents were very confident that the quality of their network data can support AI-driven network management, according to **Figure 18**. Respondents who were confident in their data quality were more likely to report success with AI-driven network management. Lower confidence in data quality correlated with:

- Lower uptake of AI-driven network management solutions by IT personnel
- Reduced trust in AI insights and recommendations
- Reduced likelihood that AI can enable network management tool consolidation
- Lower interest in allowing AI to enable closed-loop network operations

"That's one of the things we are struggling with. We don't have good inventory data," said a network tools architect with a Fortune 500 retailer. "It's not easy to know what should be online or not online. Another problem is that we have more than 200,000 duplicate IP addresses."

"We're dealing with a data quality problem now," said a network infrastructure and operations manager with a Fortune 500 energy company. "I feel like before we can use AI, we need to hire some kind of AI solution to sort out our data before we apply AI to the network."

Figure 18. Are you confident or doubtful that the quality of your organization's network data can support AI-driven network management in general?

| 44.3% Very confident | 51.5% Somewhat confident | 3.7% Somewhat doubtful | 0.4% Very doubtful |

Respondents who identified packets and configuration information as important data for AI were less confident in data quality. This suggests that organizations need to improve how they gather and manage this data.

Lower confidence in data quality correlated with the following overall challenges to AI-driven network management, suggesting that they have some impact on data quality:

- Budget limitations
- Unclear business value of AI
- Slow time to value
- Interoperability and integration issues between tools
- Insufficient training on the network

Data quality appears to slow down AI projects. It also harms overall confidence in the value that AI can bring to network management. Poor data also creates the perception that AI is poorly trained on an organization's production network.

Sample Size = 458

EMA recommendations

- The correlation with budget limitations suggests that IT organizations must dedicate budget to the process of evaluating and cleaning up network data before embarking on an AI-driven network management project. EMA also found that data quality was higher among organizations that have specifically allocated budget for AI-driven network management.

- The correlation with interoperability and integration issues shows that data silos between proprietary tools may be undermining AI projects. IT organizations must demand more openness from their vendors and better APIs and integration support.

- Effective evaluation of AI solutions is essential. Respondents who believe their organizations are very effective at evaluating AI technology for network management reported more confidence in data quality. This suggests that evaluations of AI technology should begin with validation of existing network data stores.
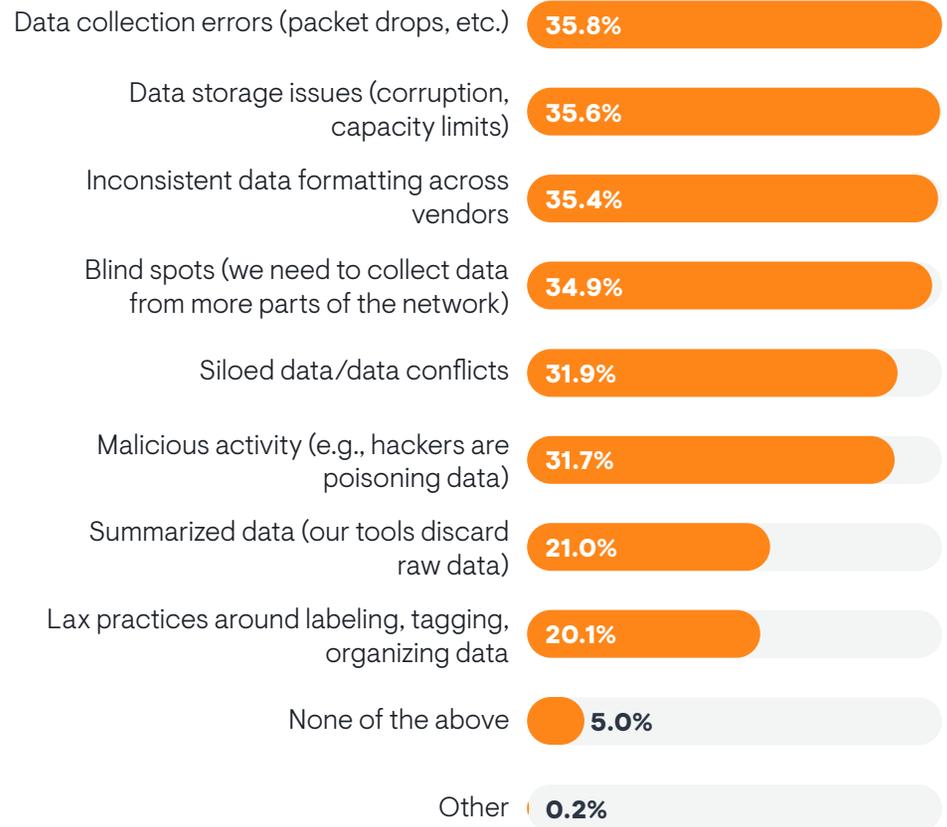
Top Data Quality Issues

Figure 19 identifies the data quality issues that are undermining AI success. There are four top challenges:

1. Collection errors
2. Storage issues
3. Inconsistent formatting across vendors
4. Blind spots on the network

"In the networking world, there isn't data consistency across vendors," said a network tools lead with a very large bank. "We have a couple different tools that onboard devices through APIs. The vendors don't necessarily pull consistent data through them."

Data silos and malicious activity are the secondary challenges. Data collection errors and data silos strongly correlated with a lack of overall AI-driven network management success. This suggests that IT organizations must be especially vigilant against these two problems when evaluating their data readiness.

Figure 19. Which data quality challenges are impacting the effectiveness of AI-driven network management in your organization?

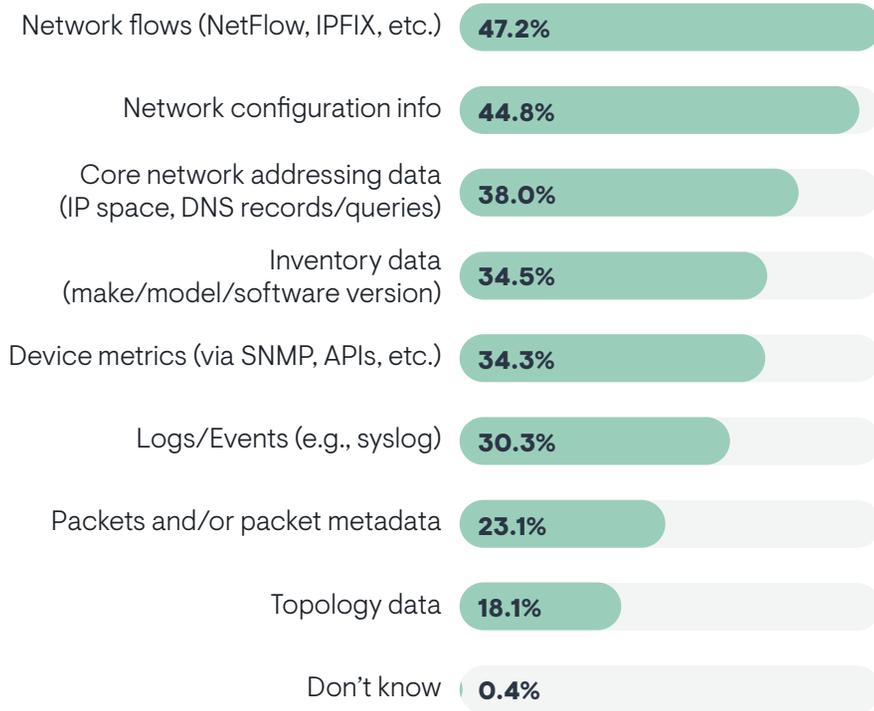| Challenge	%
Data collection errors (packet drops, etc.)	35.8%
Data storage issues (corruption, capacity limits)	35.6%
Inconsistent data formatting across vendors	35.4%
Blind spots (we need to collect data from more parts of the network)	34.9%
Siloed data/data conflicts	31.9%
Malicious activity (e.g., hackers are poisoning data)	31.7%
Summarized data (our tools discard raw data)	21.0%
Lax practices around labeling, tagging, organizing data	20.1%
None of the above	5.0%
Other	0.2%

Sample Size = 458

Data Essential to AI-Driven NetOps

IT organizations collect and maintain a wide variety of data about their networks. EMA believes all of it has a role to play in enabling AI-driven network management. **Figure 20** reveals that enterprises perceive network flows and configuration information as the two most important classes of network data that AI needs to access. Core network addressing data, inventory data, and device metrics are also quite important.

Figure 20. For AI technology that is applied to network management, what types of network data does this AI most need for training or agentic AI access purposes?

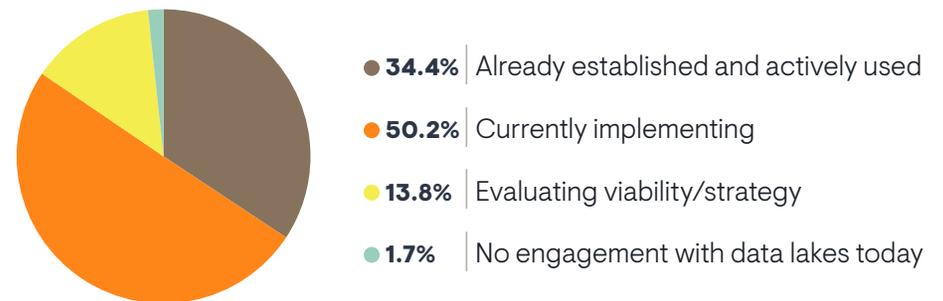|	
Network flows (NetFlow, IPFIX, etc.)	47.2%
Network configuration info	44.8%
Core network addressing data (IP space, DNS records/queries)	38.0%
Inventory data (make/model/software version)	34.5%
Device metrics (via SNMP, APIs, etc.)	34.3%
Logs/Events (e.g., syslog)	30.3%
Packets and/or packet metadata	23.1%
Topology data	18.1%
Don't know	0.4%

Sample Size = 458

Packets and packet metadata were top of mind for nearly one-quarter of research participants. Members of IT architecture teams made packet data one of their top priorities. Topology data was the lowest priority for respondents, but its importance was recognized more often in larger enterprises (10,000 or more employees).

Data Lakes and AI-Driven IT Operations

Most of the enterprises represented in this research are engaged with the concept of a data lake for IT and security data. Data lakes are repositories of raw data captured from diverse sources and stored in their native format. Data lakes offer analytical flexibility because structure isn't imposed at the time of ingestion. Instead, data lake architects apply structure at the time of analysis. This makes the data available for different types of use cases.

Figure 21 reveals that 35% of respondents have established data lakes for IT and security data. Another 50% are implementing data lakes. Organizations that are experiencing the most success with AI-driven network management are more likely to have a data lake fully implemented today.

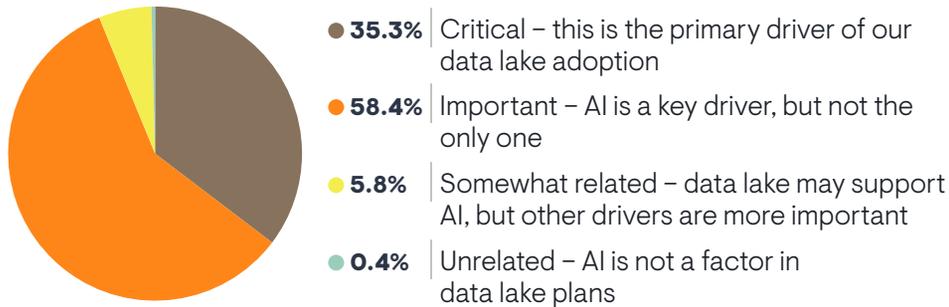**Figure 21. Is your organization establishing or planning to establish a centralized data lake for IT operations and cybersecurity data?**

- **34.4%** | Already established and actively used
- **50.2%** | Currently implementing
- **13.8%** | Evaluating viability/strategy
- **1.7%** | No engagement with data lakes today

Sample Size = 458

Figure 22 reveals that AI plays a role in the adoption of most IT data lakes. Thirty-five percent of respondents said the application of AI to IT and security data is the primary driver of their data lake implementations. Another 58% said AI was one of several motivators.

Figure 22. To what extent is the creation of IT/security data lakes motivated by your organization's plans to apply AI to this data?

- **35.3%** Critical – this is the primary driver of our data lake adoption
- **58.4%** Important – AI is a key driver, but not the only one
- **5.8%** Somewhat related – data lake may support AI, but other drivers are more important
- **0.4%** Unrelated – AI is not a factor in data lake plans

Sample Size = 450

Respondents who reported more success with AI-driven network operations were more likely to identify AI as the primary driver of IT data lake adoption, suggesting that data lakes purpose-built for AI-driven IT operations set organizations up for success. Members of the IT tool engineering team and the IT executive suite were the most likely to report that AI was the primary driver of data lake implementations. Network engineering teams, AI teams, and cybersecurity teams all saw AI as one of several drivers.

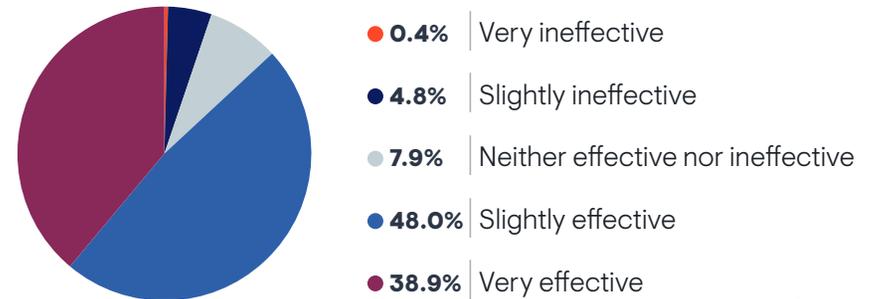▌ AI plays a role in the adoption of most IT data lakes.

How to Evaluate AI Solutions

Most IT Organizations Must Improve

Figure 23 reveals only 39% of IT organizations are completely effective at evaluating AI technology for network management.
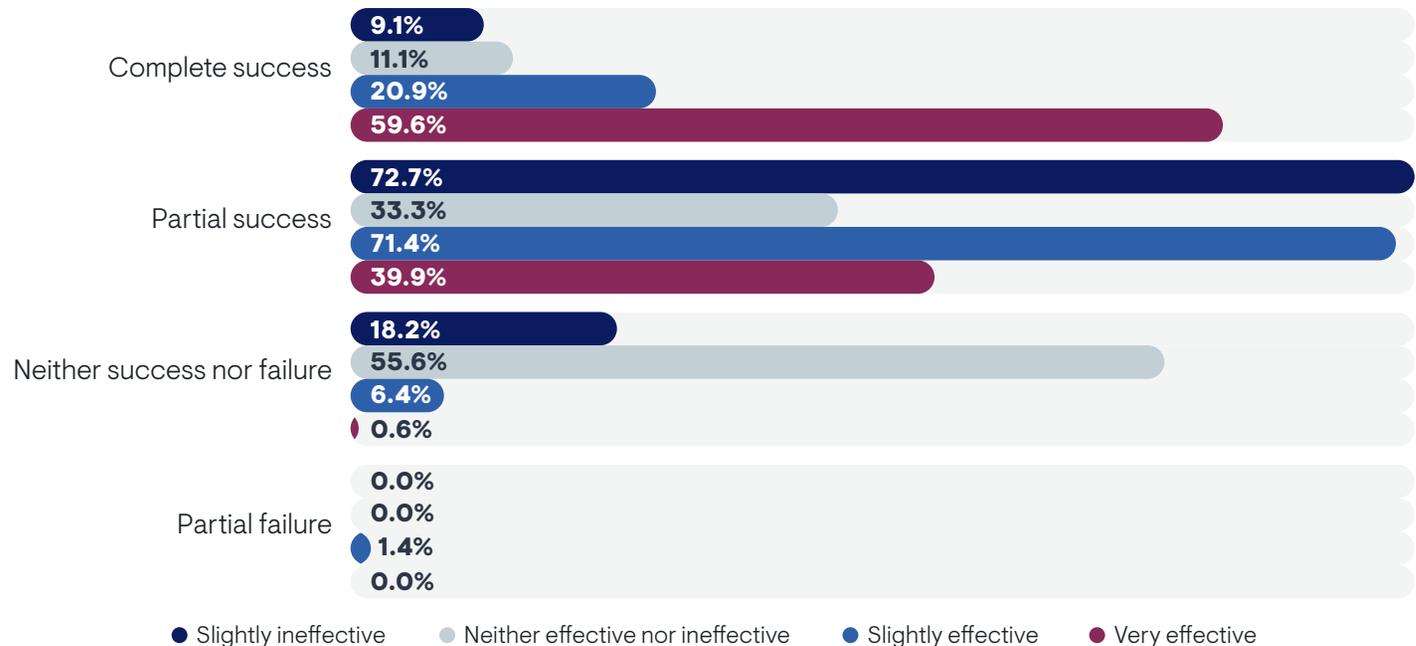
It is essential for IT organizations to develop effective strategies for evaluating AI-driven network management solutions. **Figure 24** shows that AI success strongly correlates with effective AI evaluation.

Figure 23. How would you characterize your organization's ability to evaluate the efficacy of AI technology that you are applying to network management?

- **0.4%** Very ineffective
- **4.8%** Slightly ineffective
- **7.9%** Neither effective nor ineffective
- **48.0%** Slightly effective
- **38.9%** Very effective

Sample Size = 458

Figure 24. How successful do you believe your organization has been so far with applying AI to network management? by How would you characterize your organization's ability to evaluate the efficacy of AI technology that you are applying to network management?

Complete success
- 9.1%
- 11.1%
- 20.9%
- 59.6%

Partial success
- 72.7%
- 33.3%
- 71.4%
- 39.9%

Neither success nor failure
- 18.2%
- 55.6%
- 6.4%
- 0.6%

Partial failure
- 0.0%
- 0.0%
- 1.4%
- 0.0%

● Slightly ineffective   ● Neither effective nor ineffective   ● Slightly effective   ● Very effective
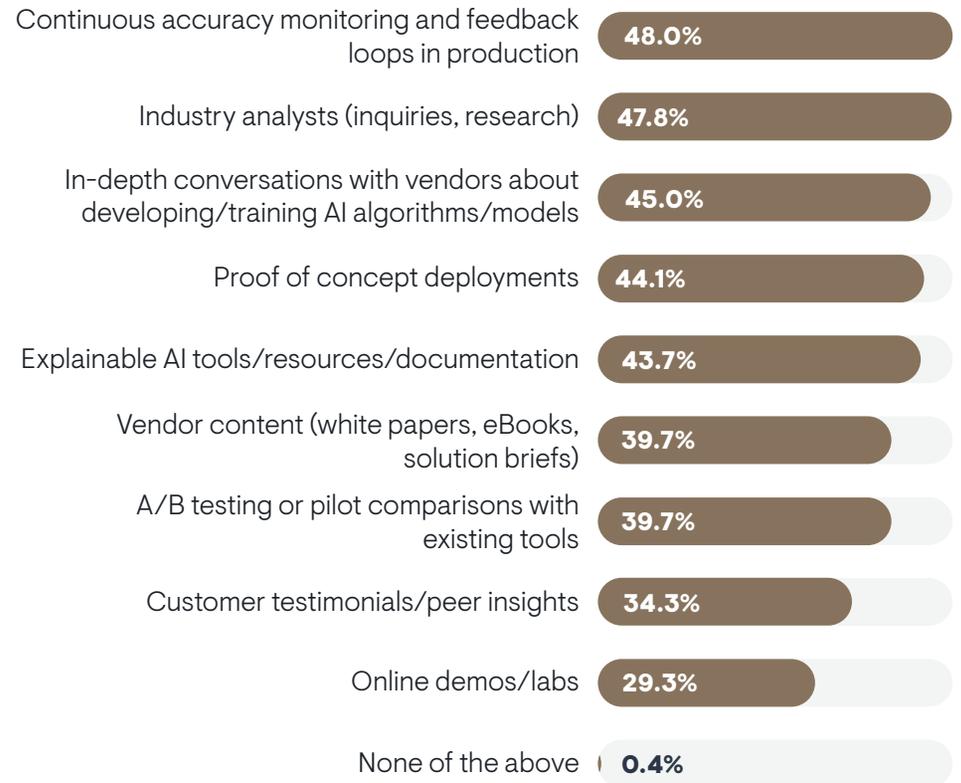
Sample Size = 458

Evaluation Techniques

Figure 25 reveals how IT organizations are evaluating these AI solutions. The most popular approach is to put these tools into production and monitor their accuracy continuously while providing feedback on efficacy. Many are also looking for guidance from industry analysts.

Best practices: The following are evaluation techniques favored by organizations that report an effective approach to evaluation and overall success with AI:

- In-depth conversations with vendors about how they build and train their AI
- Vendor content
- Explainable AI resources and documentation
- Industry analyst inquiries and research
- Continuous accuracy monitoring and feedback loops in production

Figure 25. When evaluating AI-driven network management capabilities for potential adoption, how does your organization determine the efficacy of that AI technology?

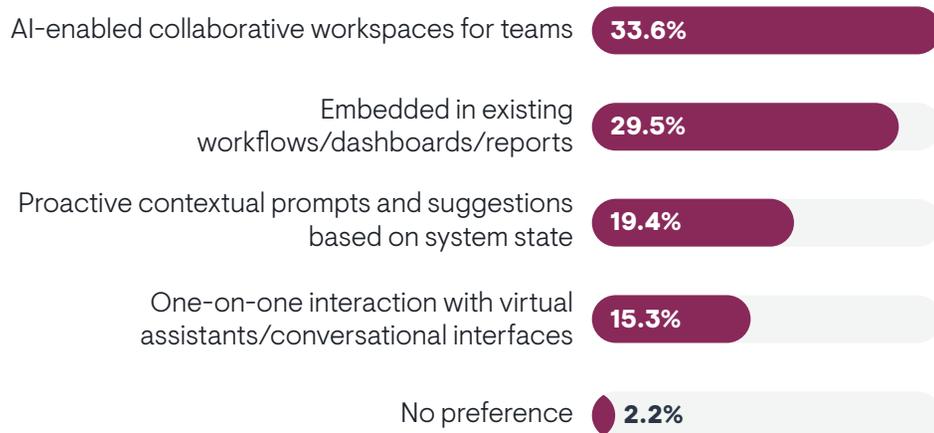| Category	Percentage
Continuous accuracy monitoring and feedback loops in production	48.0%
Industry analysts (inquiries, research)	47.8%
In-depth conversations with vendors about developing/training AI algorithms/models	45.0%
Proof of concept deployments	44.1%
Explainable AI tools/resources/documentation	43.7%
Vendor content (white papers, eBooks, solution briefs)	39.7%
A/B testing or pilot comparisons with existing tools	39.7%
Customer testimonials/peer insights	34.3%
Online demos/labs	29.3%
None of the above	0.4%

Sample Size = 458

AI-Driven NetOps in Action

This section explores how IT organizations interact with and use AI-driven network management solutions. It looks at UX considerations, trust in AI, and use cases.

Preferences for Interacting with AI

There are a variety of ways that networking personnel can interact with AI tools. Most people now have experience with chatbots, where they enter a query and receive an output. Adding chatbots or virtual assistants to a network management interface has become a popular feature enhancement for many network management solutions. However, **Figure 26** shows that users want other ways to interact with AI.

Figure 26. How do you prefer to interact with AI-powered network management capabilities?

AI-enabled collaborative workspaces for teams **33.6%**

Embedded in existing workflows/dashboards/reports **29.5%**

Proactive contextual prompts and suggestions based on system state **19.4%**

One-on-one interaction with virtual assistants/conversational interfaces **15.3%**

No preference **2.2%**

Sample Size = 458

The most popular approach is an AI-enabled collaborative workspace where teams can come together. A simple example might be via integration with popular collaboration tools, like Slack or Microsoft teams. Many network management tools now offer environments where many individuals can come together and interact with AI as a team, querying the tool, reviewing and commenting on results together, and digging deeper into the insights.

The other most popular approach to interaction is simple. They want AI insights embedded in the workflows, dashboards, and reports that they already use for day-to-day operations. Respondents who preferred this interaction were more likely to report that AI…

- …reduces overall toil and busy work
- …leads to faster execution of tasks

> There may be no best way to interact with AI tools for network management.

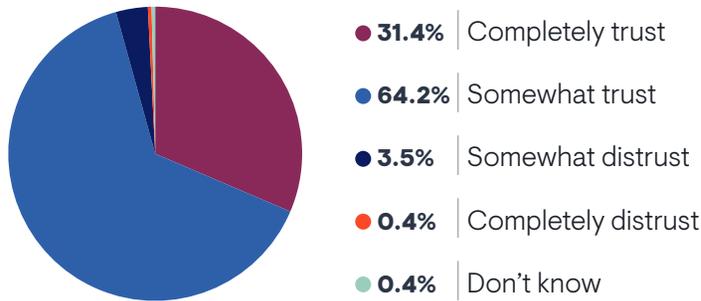## What's the Best Way to Interact with AI?

EMA believes that everyone's workstyles will be different. There may be no best way to interact with AI tools for network management. However, we observed these two patterns.

- Organizations that experienced the most success with AI preferred:
  - AI-enabled collaborative workspaces for teams
  - Proactive contextual prompts and suggestions on system state
- Organizations that experienced the least success preferred:
  - AI embedded in existing workflows, dashboards, and reports
  - One-on-one interact with virtual assistants

Building Trust in AI

Figure 27 shows that only 31% of respondents completely trust the insights and information AI-driven network management solutions provide. Most respondents indicated that they somewhat trust AI and very few outright distrusted it. Members of network engineering and IT tool engineering teams were more likely to trust AI than members of IT architecture and cybersecurity groups.

Figure 27. To what extent do you trust the insights and information provided by the AI capabilities that your organization applies to network management?

- **31.4%** | Completely trust
- **64.2%** | Somewhat trust
- **3.5%** | Somewhat distrust
- **0.4%** | Completely distrust
- **0.4%** | Don't know

"I have a lot of faith in AI," said a network tools director for a large university. "There is always a chance of it not being perfect, but human error is always a higher risk than automation."

EMA observed the following in organizations where trust in AI is high:
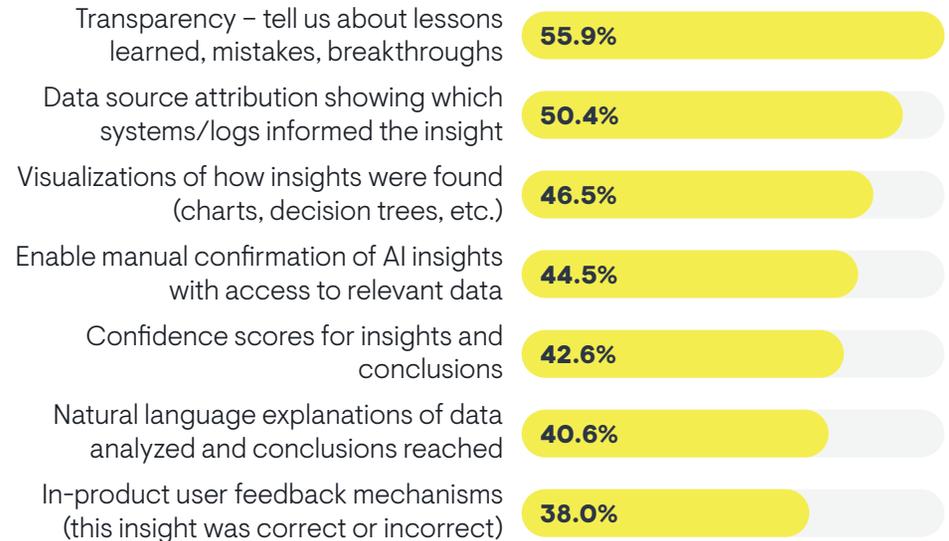
- IT personnel use it more often on a day-to-day basis
- The organization is better equipped to evaluate AI
- The organization's overall use of AI-driven network management is more successful

Sample Size = 458

How to Build Trust in AI

Figure 28 reveals how vendors earn the trust of customers in their AI capabilities. First, IT teams want transparency from vendors, who should tell customers about the mistakes they've made as they build AI solutions and how they've learned from those mistakes.

Figure 28. In what ways can your vendors best earn trust in the AI capabilities that they provide for network management?

Category	Percent
Transparency – tell us about lessons learned, mistakes, breakthroughs	55.9%
Data source attribution showing which systems/logs informed the insight	50.4%
Visualizations of how insights were found (charts, decision trees, etc.)	46.5%
Enable manual confirmation of AI insights with access to relevant data	44.5%
Confidence scores for insights and conclusions	42.6%
Natural language explanations of data analyzed and conclusions reached	40.6%
In-product user feedback mechanisms (this insight was correct or incorrect)	38.0%

Beyond those conversations, IT pros also want clear data source attribution. Visualizations of how insights were found and manual confirmation via access to relevant data are also important. Visualizations were cited more often by respondents who trust AI and report the most success with AI.

Sample Size = 458

Using General-Purpose AI for NetOps

Earlier in this report, EMA noted that 75% of organizations with budget for AI-driven network management are spending some of those funds on general-purpose tools, like ChatGPT. We asked some of our one-on-one interview subjects to describe who is using these tools."

"Our network engineers are using ChatGPT to create documentation, write Python scripts," said a network tools architect with a Fortune 500 retailer. "They are using it as a knowledge base. And when something is wrong, they will put an error log in ChatGPT to troubleshoot."

"We use Copilot and ChatGPT very extensively," said a network infrastructure and operations manager with a Fortune 500 energy company. "We use it to summarize meetings and create PowerPoints. We haven't used it for technical operations, but the idea has been tossed around. It makes us nervous because a lot of the info we would use in prompts is regulated."

"We're using ChatGPT, Gemini, and Microsoft Copilot," said a network tools director for a large university. "We're trying to use it for help desk things. Like students could tell it that wireless isn't working well. We can use APIs to take a look at what MAC address users have and what AP they are connected to. And the AI can just collect all the information and put it into a ticket."

"We are often comparing configs before and after changes," said a network tools architect with a Fortune 500 media company. "We send those to ChatGPT and ask it to summarize differences. IT can make sense of things more quickly."
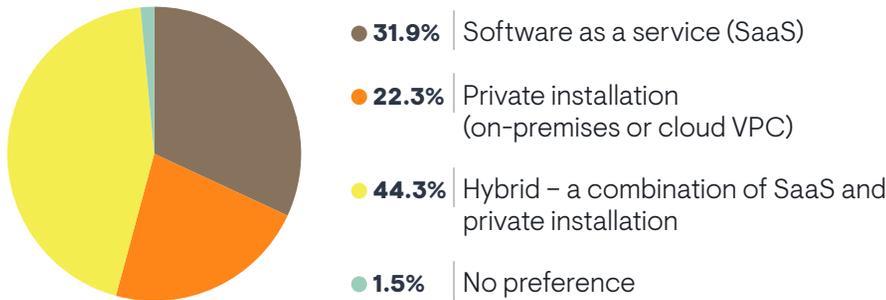
AI Requirements for NetOps

Deployment Model Preferences

Over the years, many network engineers have told EMA analysts that they are wary of AI-driven network management because they assume these capabilities must be delivered as SaaS offerings, given AI's reputation for being computationally intensive. They tell EMA that they can't allow their data to go into the cloud. However, many vendors are introducing hybrid deployment models in which much data processing occurs on-premises and only summarized metadata is uploaded to the cloud. This hybrid approach has softened objections, as **Figure 29** reveals. Only 22% require a strict private installation of AI capabilities. Nearly 32% are comfortable with a pure SaaS implementation, but 44% want a hybrid deployment.

Figure 29. What is your preferred deployment model for AI technology applied to network management?

- **31.9%** Software as a service (SaaS)
- **22.3%** Private installation (on-premises or cloud VPC)
- **44.3%** Hybrid – a combination of SaaS and private installation
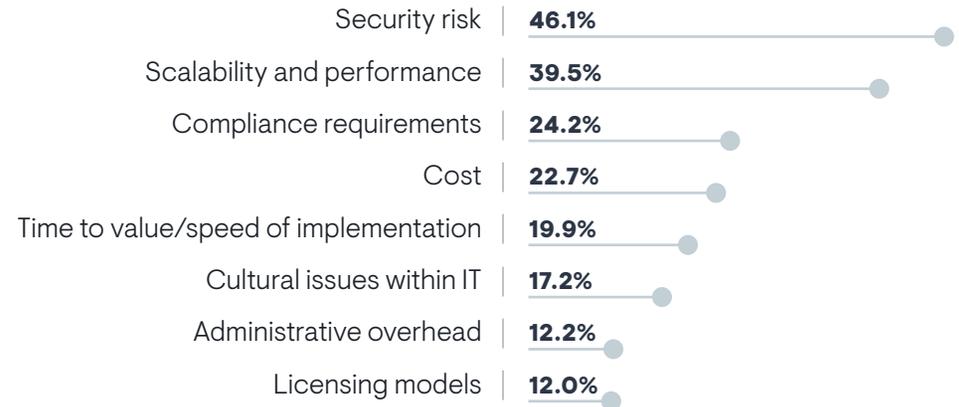- **1.5%** No preference

Respondents who required a private installation tended to be ineffective at evaluating AI capabilities and they reported less success with AI-driven network management, suggesting that this strict requirement will undermine the efficacy of AI. IT middle managers and IT executives were especially likely to seek a hybrid deployment for AI-driven network management solutions.

Sample Size = 458

Drivers of Deployment Preferences

Deployment preferences are largely a question of how comfortable organizations are with their data living in the cloud. **Figure 30** shows that the single biggest driver of preference is security risk. Compliance requirements is also a significant factor. Notably, European respondents were more likely to select compliance requirements, which is unsurprising given that they face more stringent regulatory environments than North Americans. North Americans, on the other hand, were more likely to be motivated by time to value.

Figure 30. Which factors determine your deployment preferences for AI-enabled network management tools?

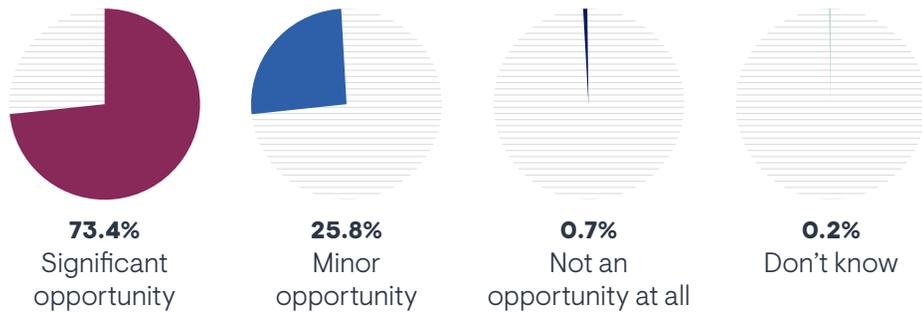|	
Security risk	**46.1%**
Scalability and performance	**39.5%**
Compliance requirements	**24.2%**
Cost	**22.7%**
Time to value/speed of implementation	**19.9%**
Cultural issues within IT	**17.2%**
Administrative overhead	**12.2%**
Licensing models	**12.0%**

Sample Size = 458

The concept of AI scalability and performance is the number two driver of deployment preference. IT pros recognize that AI computational requirements may require a platform architecture that leverages cloud-scale infrastructure, at least to some extent. In fact, organizations that are very effective at evaluating AI-driven network management solutions were the most likely to select scalability and performance as top factors.

Members of network engineering teams stood out as having very specific drivers of deployment preference. They were more likely than other groups to cite license models, cost, and administrative overhead.

Tool Consolidation

EMA research repeatedly finds that tool sprawl plagues network infrastructure and operations teams. The typical IT organization uses three or four tools to monitor and troubleshoot their networks. They often use three or four others to manage network provisioning, configuration, and change management, particularly in multi-vendor networks. In EMA's ongoing conversations with IT professionals, we find that they expect AI to correlate insights and drive automation across multiple network management tools. **Figure 31** quantifies this expectation.
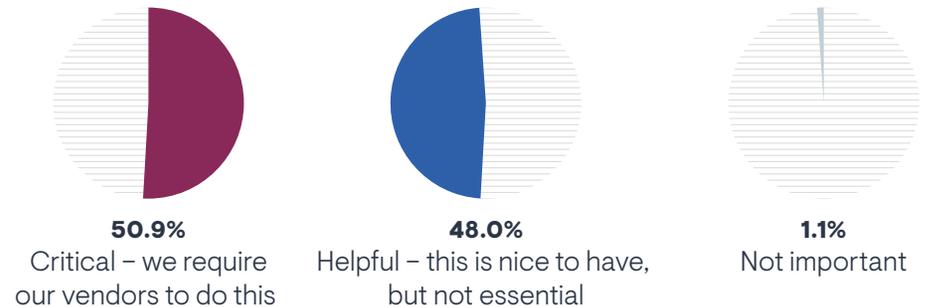
Nearly three-quarters of IT professionals see a significant opportunity to consolidate tools with AI. This expectation is even higher among respondents who reported that their efforts with AI-driven network management are a complete success (84%). However, much of this enthusiasm is coming from IT executives, rather than subject matter experts and IT middle managers, a possible sign of inflated expectations.

> Nearly three-quarters of IT professionals see a significant opportunity to consolidate tools with AI.

Breaking Down Tool Silos

To achieve this tool consolidation, network management vendors may need to look beyond their own proprietary technology. **Figure 32** reveals that 51% of IT professionals will require that their vendors incorporate data from third-party systems into their AI inferences and AI-driven analytics. Another 49% believe this would at least be helpful.

Figure 31. To what extent do you believe that applying AI to network data will allow your organization to consolidate the number of tools it uses to manage and secure its network?

73.4%	25.8%	0.7%	0.2%
Significant opportunity	Minor opportunity	Not an opportunity at all	Don't know

Sample Size = 458

Figure 32. To what extent would you like your network management vendors to incorporate data from third-party tools and systems into the inferences and analyses their AI technology performs?

50.9%	48.0%	1.1%
Critical – we require our vendors to do this	Helpful – this is nice to have, but not essential	Not important

Sample Size = 458

Use Case Requirements

EMA asked research respondents to identify the types of tasks and processes that they most want to enhance with AI-driven network management capabilities. This section explores interest in applying AI to performance and fault management tasks, network engineering (Day 0 and Day 1) tasks, and security tasks.

Enhancing Performance and Fault Management

Figure 33 shows that IT pros want to enhance problem detection, alert management, and problem remediation with AI. IT organizations have been using AIOps technology to enhance the first two of these tasks for several years now via anomaly detection and event correlation algorithms.

"We'd like to leverage AI to proactively figure out what's going on with the network, to notice trends and anomalies and go out and fix issues like switch misconfigurations," said a network tools director for a large university. "We want to get to the point where AI is telling us that there is something wrong that we should look at. We'd also like it to suggest playbooks that it can run to fix those issues."
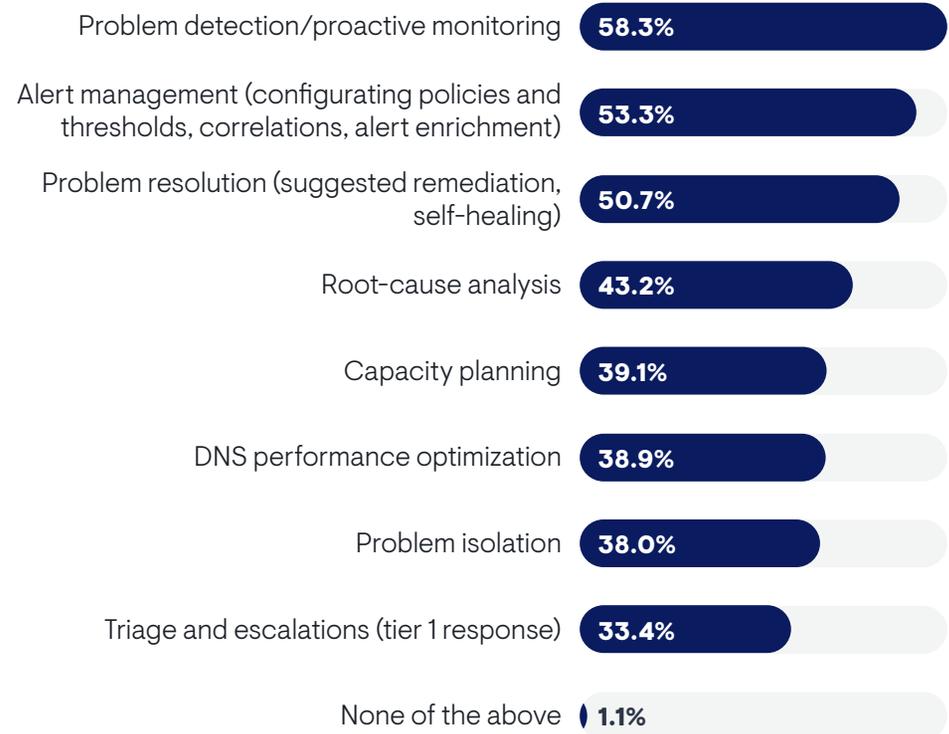
Problem resolution is a more difficult task for AI technology to address, and most AI solutions are still maturing how they tackle it. However, the data shows that interest in this capability is strong.

"Troubleshooting is a good use case," said a network tools architect at a Fortune 500 retailer. "I like using AI to summarize logs because there is so much gibberish in them that is hard to process."

"I like the idea of using it to improve troubleshooting and do some of the things that have traditionally required a lot of experience," said a network tools lead with a very large bank. "Packet analysis is kind of a lost art. Having AI that can get into the complexity of that would be good."

Larger enterprises were more likely to have interest in problem resolution, as well as triage and escalations. North Americans expressed more interest than Europeans in alert management.

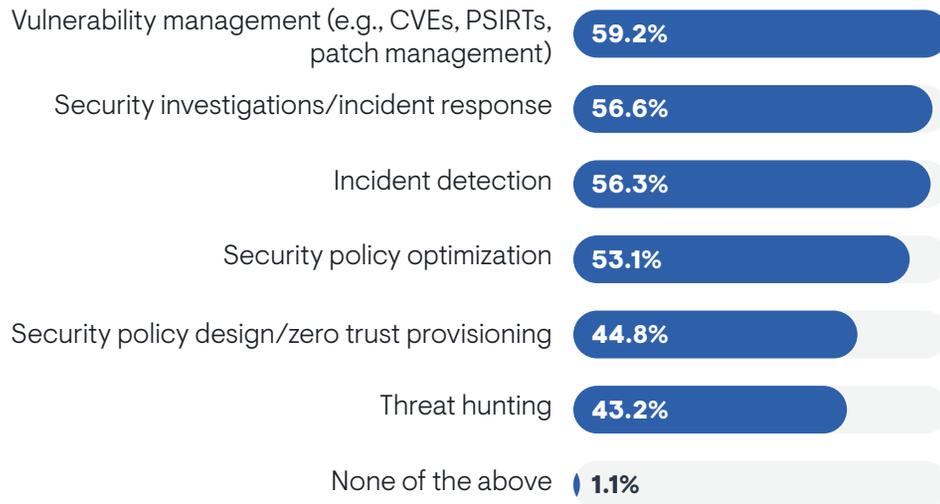**Figure 33. Which performance management and fault management tasks and processes do you most want to enhance with AI?**

Task	%
Problem detection/proactive monitoring	58.3%
Alert management (configuring policies and thresholds, correlations, alert enrichment)	53.3%
Problem resolution (suggested remediation, self-healing)	50.7%
Root-cause analysis	43.2%
Capacity planning	39.1%
DNS performance optimization	38.9%
Problem isolation	38.0%
Triage and escalations (tier 1 response)	33.4%
None of the above	1.1%

Sample Size = 458

Enhancing Security

Figure 34 identifies the network security tasks and processes that people want to enhance with AI. It shows that most respondents want to apply AI to four areas:

- Vulnerability management
- Security investigations
- Incident detection
- Security policy optimization

Figure 34. Which kinds of network security tasks and processes do you most want to enhance with AI?

Vulnerability management (e.g., CVEs, PSIRTs, patch management) **59.2%**

Security investigations/incident response **56.6%**

Incident detection **56.3%**

Security policy optimization **53.1%**

Security policy design/zero trust provisioning **44.8%**

Threat hunting **43.2%**

None of the above **1.1%**

Larger enterprises were more likely to select incident detection. North Americans were more likely than Europeans to select security investigations and threat hunting. Notably, respondents who reported the most success with applying AI to network management were the least interested in applying AI to threat hunting.

Sample Size = 458

Enhancing Network Engineering

Figure 35 explores the general administrative and engineering tasks that respondents want to enhance with AI. The highest priority is resource optimization, such as tuning quality of service and traffic prioritization settings. Many also expressed interest in optimizing network deployments.

Figure 35. Which kinds of network administration and engineering tasks do you most want to enhance with AI?

Resource optimization (quality of service, prioritization) **50.4%**

Network deployments (provisioning network infrastructure and services) **48.0%**

Asset management (software updates, predictive maintenance, etc.) **44.3%**

Traffic engineering (optimizing paths, traffic distribution) **42.6%**

Discover/document/model networks (IP space, inventory, configs) **39.7%**

Cost management (billing, licenses, etc.) **39.1%**

Training (learning new network platforms, tools) **38.2%**

Change and configuration management **36.7%**

Reporting/Auditing **35.2%**

None of the above **0.4%**

Sample Size = 458

The third priority is asset management, and respondents who reported the most success with AI were more likely to select this one.

Discovery and documentation of the network were middling priorities, but North American respondents selected it more often than Europeans.

Overall, AI-driven change and configuration management was not a priority. A network tools architect with a Fortune 500 retailer said applying AI to this process was too risky. "Config changs are a big no-no. I would not ask AI to decide on a config change. Bu pre- and -post change verification checks are a good option for AI."

> "Config changs are a big no-no. I would not ask AI to decide on a config change. Bu pre- and –post change verification checks are a good option for AI."

"People are skeptical of AI-driven automation," said a network tools lead with a very large bank. "We are more comfortable around recommendations and analysis."

A network tools architect with a Fortune 500 media company saw the value of using AI to train on and learn new platforms and tools. "Our network observability tool is quite powerful, and we have core users who use it a lot and understand it well. For other users who are in and out of the tool, understanding its data is difficult. I think we can reduce the learning curve by allowing them to ask an AI chatbot questions."
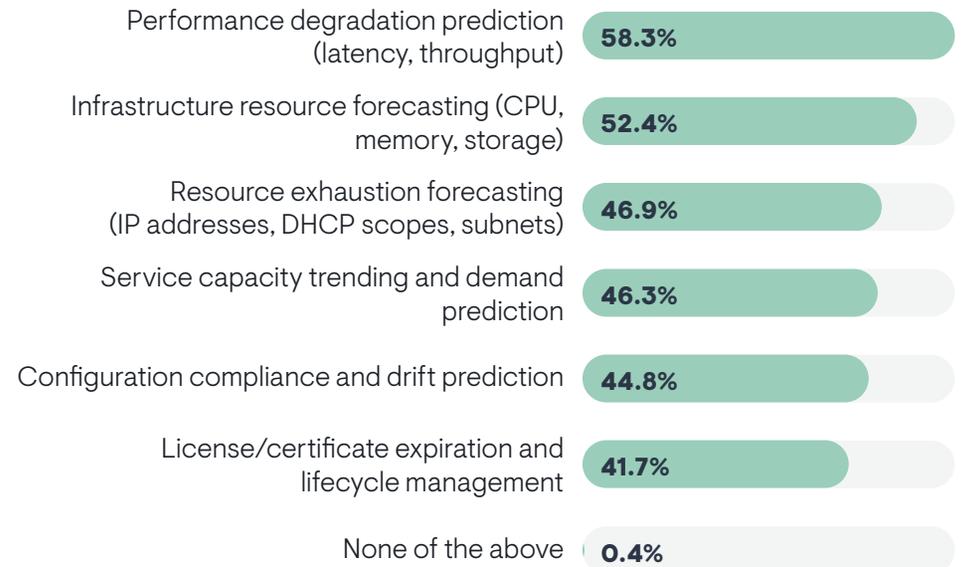
Predictive AI Needs

One area of emerging opportunity with AI is the development of predictive capabilities that can anticipate and help network operations teams avoid adverse conditions. **Figure 36** shows what kind of predictive capabilities IT organizations hope to use to prevent network service disruptions.

Respondents were especially interested in AI that could predict performance degradation, such as spikes in latency. Many were also interested in forecasting infrastructure resource utilization.

Secondarily, organizations are looking for help with forecasting of resource exhaustion around core services like IP addresses and DHCP scopes, as well as service capacity trending and configuration compliance.

Figure 36. Which of the following AI-driven predictive capabilities would be most valuable for preventing network service disruptions in your organization?
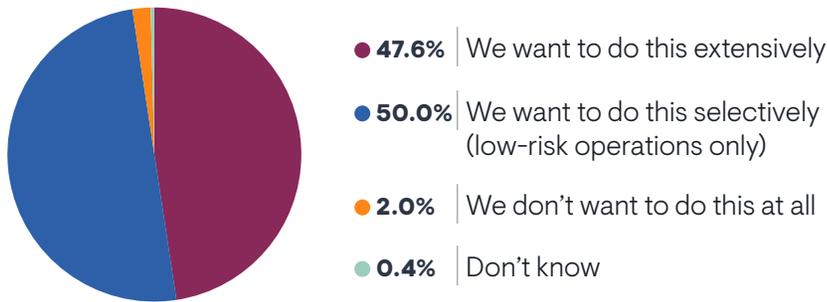
Performance degradation prediction (latency, throughput)	58.3%
Infrastructure resource forecasting (CPU, memory, storage)	52.4%
Resource exhaustion forecasting (IP addresses, DHCP scopes, subnets)	46.9%
Service capacity trending and demand prediction	46.3%
Configuration compliance and drift prediction	44.8%
License/certificate expiration and lifecycle management	41.7%
None of the above	0.4%

Sample Size = 458

AI-Driven Closed Loop Operations

The promise of self-operating networks remains intriguing to most organizations. **Figure 37** reveals that 98% of IT pros are interested in letting AI take automated actions on the network without human intervention. However, only 48% are interested in doing this extensively. Members of network engineering teams are more open to this than members of cybersecurity teams.

Figure 37. To what extent is your organization ready to allow its existing AI-driven network management solutions to take automated actions on your network without human involvement (e.g., closed-loop operations)?

- **47.6%** | We want to do this extensively
- **50.0%** | We want to do this selectively (low-risk operations only)
- **2.0%** | We don't want to do this at all
- **0.4%** | Don't know

"I feel like [closed loop] can work," said a network tools architect with a Fortune 500 company. "We have 40,000 sites. If every one of them was identical and you had a pretty good RAG for use cases and good prompts and everything is figured out, then it could be a good candidate for full automation. Unfortunately, that is not the case. Even though all our sites are supposed to be identical, it's not easy for us to maintain that uniformity. People make changes with cabling or add unauthorized hardware. Site managers don't follow standards."

"I'm about 50/50 on autonomous networking," said a network infrastructure and operations manager with a Fortune 500 energy company. "On the one hand, 100% of our network outages are due to human error. So, I would like to see that portion of network management replaced with AI. On the other hand, we had an outage when an engineer in a test environment made a new firewall rule that had a landmine in it that brought down our network. I don't know how AI could have avoided it. It took collaboration between multiple people to solve it. We need people."

"I definitely want AI to tell me what's wrong and what the potential solution is," said a network tools architect with a Fortune 500 media company. "I'm not ready for AI to go loose and fix the problem. I want it mostly supervised. I see it more as a productivity gain than a system for closed-loop repair."

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Trust in AI-driven network management solutions correlates very strongly with this interest. For example, 69% of respondents who completely trust AI are interested in applying AI-driven closed-loop operations extensively, and 59% of respondents who only somewhat trust AI are say they will do this selectively.

Sample Size = 458

EMA Perspective

IT organizations are highly engaged with the application of AI to network management. Most are adopting AI solutions from their network infrastructure and network management vendors, and they are applying general-purpose AI tools (e.g., ChatGPT) to network management tasks. Many are also training their own AI models with their data.

Despite this high engagement, only 35% believe their use of AI-driven network management has been completely successful. AI isn't a magical technology that will simply work out of the box. IT organizations have work to do.

> Many excelled with AI even while reporting frequent AI errors. The key to success is continuous improvement.

Based on our findings, EMA recommends that IT organizations do the following to ensure AI-driven network management success:

- Ensure your network data is ready to enable AI. Confidence in network data quality correlates directly to AI success. IT organizations must evaluate their data from a quality perspective and an access perspective. Are there vendors in your environment that cannot stream data to your AI tools? Are there vendors whose proprietary data are incompatible with your AI strategy?

- Allocate budget. AI isn't free. Whether you are using solutions from their trusted vendors or training your own AI models, this technology will require budget allocation.

- Develop capacity for AI evaluation. Organizations that are confident in their ability to evaluate AI solutions for network management were best in class. The IT teams that were most effective at evaluating AI used the following strategies:
  - Hold in-depth conversations with vendors about how they build and train their AI
  - Consume vendor content (white papers, blogs, webinars, etc.)
  - Leverage explainable AI resources and documentation
  - Consult with industry analysts
  - Leverage continuous accuracy monitoring and feedback loops in production

- Learn from mistakes. Many research respondents told EMA that their AI tools often make mistakes, but there was not strict correlation in our research between frequent mistakes and failure. Many excelled with AI even while reporting frequent AI errors. The key to success is continuous improvement. Identify these errors, work with your vendors and your internal AI resources to understand them, and leverage this understanding to improve your AI tools.

Appendix: Demographics

EMA

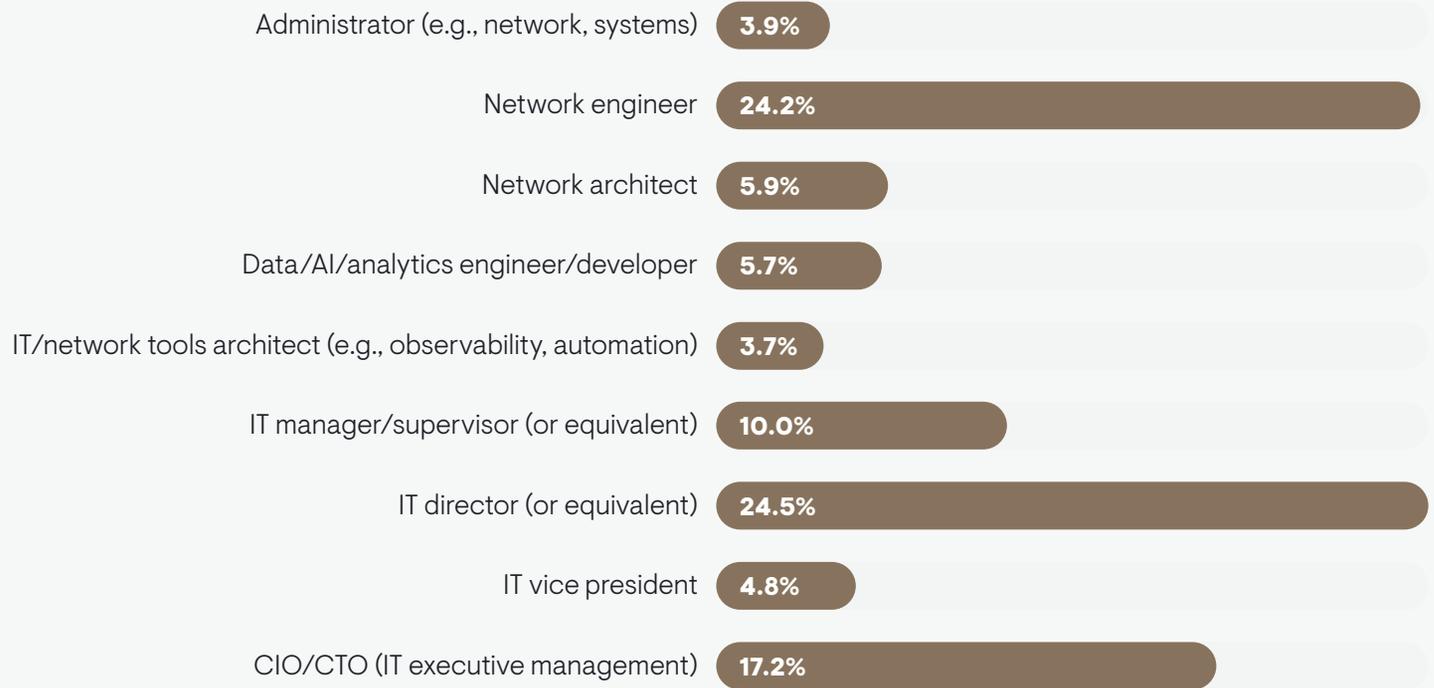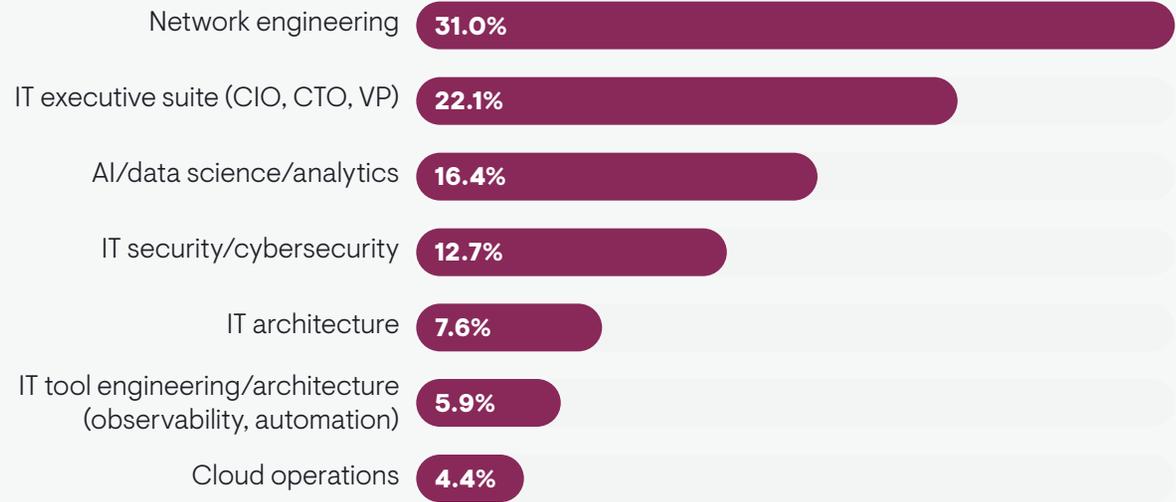**Figure 38. Which of the following best describes your role in the IT organization?**

Administrator (e.g., network, systems) **3.9%**

Network engineer **24.2%**

Network architect **5.9%**

Data/AI/analytics engineer/developer **5.7%**

IT/network tools architect (e.g., observability, automation) **3.7%**

IT manager/supervisor (or equivalent) **10.0%**

IT director (or equivalent) **24.5%**

IT vice president **4.8%**

CIO/CTO (IT executive management) **17.2%**

Sample Size = 458

Figure 39. Which of the following best describes your group within IT?

Network engineering	**31.0%**
IT executive suite (CIO, CTO, VP)	**22.1%**
AI/data science/analytics	**16.4%**
IT security/cybersecurity	**12.7%**
IT architecture	**7.6%**
IT tool engineering/architecture (observability, automation)	**5.9%**
Cloud operations	**4.4%**

Sample Size = 458

Figure 40. How many employees are in your company worldwide?

- **25.5%** 1,000 to 2,499
- **28.6%** 2,500 to 4,999
- **25.8%** 5,000 to 9,999
- **10.9%** 10,000 to 19,999
- **9.2%** 20000 or more

Sample Size = 458

Figure 41. Which of the following best describes your company's primary industry?

Industry	Percentage
Manufacturing	21.8%
Banking/Finance/Insurance	21.2%
Retail/Wholesale/Distribution	15.9%
Health care/Pharmaceutical/Hospitals	8.5%
Professional services not related to IT (e.g., legal, accounting)	7.9%
Oil/Gas/Utilities	7.6%
Transportation/Logistics	5.0%
Aerospace/Defense	4.1%
Education/Research	3.7%
Government (national, regional, municipal)	2.4%
Hospitality/Recreation/Events	1.7%

Sample Size = 458

Figure 42. In which region are you located

55.7%
North America

44.3%
Europe–Middle East–Africa
(EMEA)

Sample Size = 458