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Network Observability

AI

Taking Advantage of the Opportunity

September 2025

The AI Hype – Why and What Business Value

- Expectations
  How AI impacts performance and observability outcomes
- Enhanced User Experience
  Smoother application performance, reduced disruptions, higher satisfaction
- Transparency & Trust
  Explainable AI decisions build confidence
- Demonstrated ROI
  Metrics-driven proof: reduced MTTR, improved uptime, cost savings
- Future-Readiness
  Assures scalability for IoT, and cloud-native digital transformation

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AI - Taking Advantage of the Opportunity

1. Proactive Monitoring
- Predict issues before they impact performance
- Reduce downtime through early anomaly detection

2. Faster Root Cause Analysis
- Correlate data across devices, layers, and logs
- Identify patterns humans may miss

3. Scalability & Efficiency
- Handle massive data volumes beyond manual capacity
- Automate repetitive troubleshooting tasks

4. Optimized Performance & Cost
- Improve resource utilization
- Reduce operational overhead

5. Future-Proofing the Network
- Enable self-healing and self-optimizing networks

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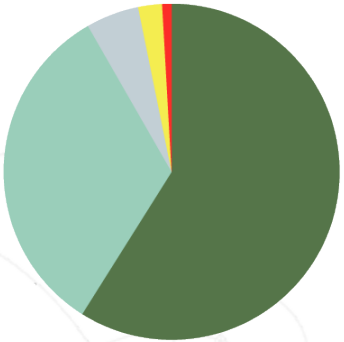
What to Expect from AI

How important is it for your network observability tools to offer AI features that optimize and automate network management?



- **59.0%** Very important
- **32.8%** Somewhat important
- **5.1%** Neither important nor unimportant
- **2.3%** Somewhat unimportant
- **0.9%** Very unimportant

Expected benefits:

- **58%** Operational efficiency
- **54%** Proactive problem prevention
- **54%** Network optimization
- **46%** Improved user experience
- **44%** Cost optimization

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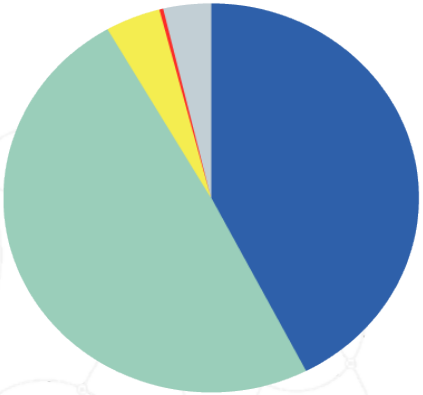
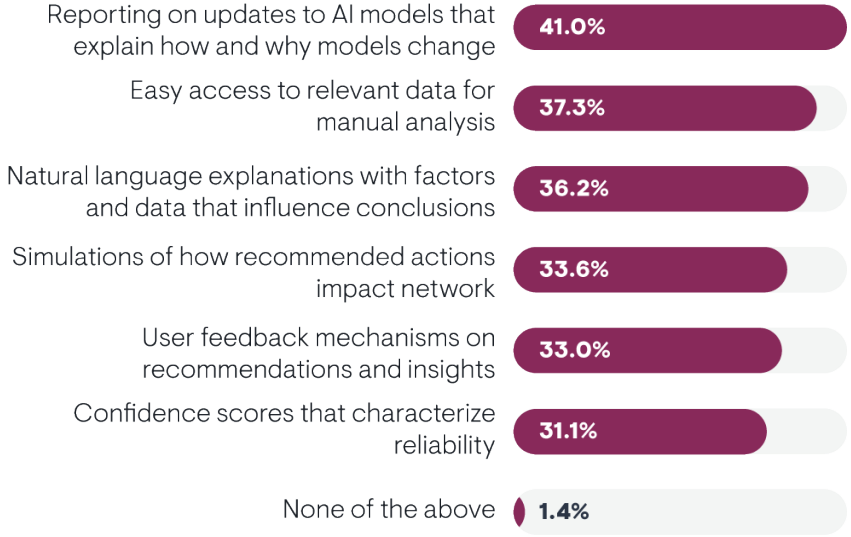
Trust in AI Must be Earned

To what extent do you trust the AI/ML-generated recommendations and insights your network observability tools offer?



- **42.5%** Fully trust
- **49.3%** Partly trust
- **4.3%** Partly distrust
- **0.3%** Fully distrust
- **3.7%** Not applicable – not currently using AI/ML features

Which of the following is most helpful for building trust in AI/ML capabilities in network observability tools?



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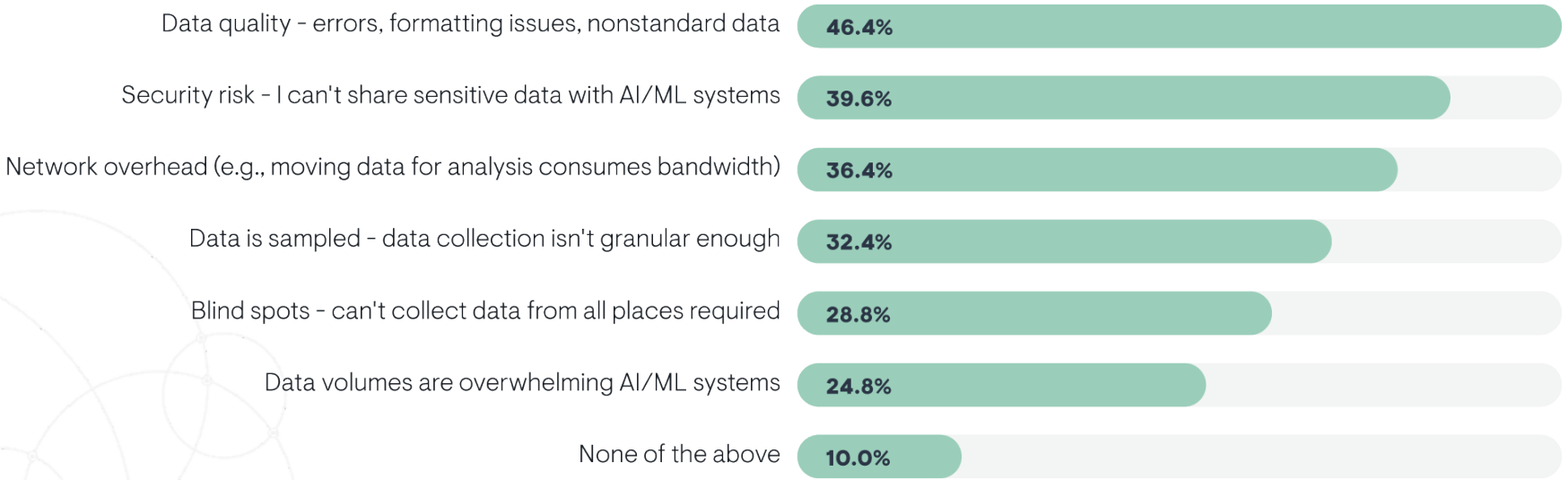
Network Observability Data Must Provide a Foundation for AI

Data-related challenges encountered when applying AI to network management



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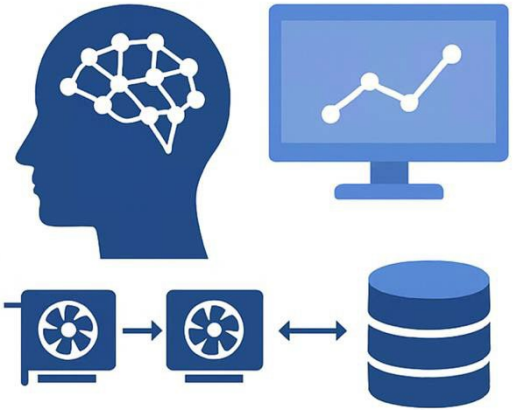
AI - Demands Perfection



Data Quality

- AI outcomes depend on clean, accurate, and unbiased data
- Poor data quality leads to flawed models and unreliable results

Infrastructure Reliability

- Networks must deliver consistent low-latency, high-bandwidth performance
- Packet loss or jitter can derail training and inference accuracy

Model Precision

- AI requires exact computations to achieve reliable predictions
- Minor inaccuracies compound during large-scale training

Operational Consistency

- AI pipelines must be automated and repeatable
- Any inconsistency impacts trust and adoption

Monitoring & Governance

- Continuous observability ensures AI systems perform as expected
- Ethical, explainable AI demands robust oversight

From Network Observability Maturity to AI-Readiness

Manual
Hyper-reactive
50% LAN Coverage—Limited network stack monitoring (such as Pingdom, Whatsup Gold, custom cron, flooding, traceroute)

1

Traditional
Reactive
100% LAN Coverage—Full network visibility across inventory, alarms, events, fault, performance, flows, logs, and configurations for traditional networks

2

Modern
Proactive
LAN and WAN Coverage—Full network visibility across inventory, alarms, events, fault, performance, flows, logs, and configurations for traditional and software-defined networks

3

Next-Gen
Predictive
Analysis Engine—Unified, in-context monitoring of full network paths across traditional and software-defined networks

4

Future
Automated
Automation Platform—AI-driven intelligent insights with enhanced automatic alerting and automated remediation

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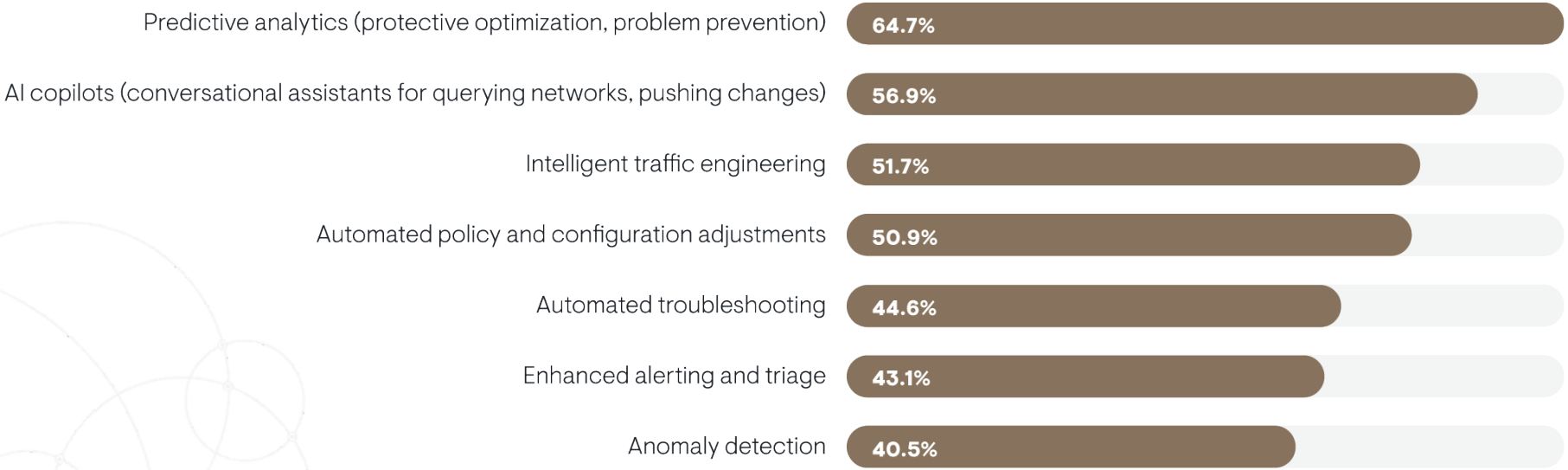
99% Believe AI-Driven Network Observability will Enhance Management of AI Networks

What kinds of AI-driven capabilities are you interested in using to improve management of networking for AI?



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Questions & Thank You