

Agentic AI network management is essential

Evolve your AI transformation strategy with an autonomous networking model.



Key takeaways

- **The enterprise AI-network readiness gap**
In the Gartner AI Maturity and Organizational Mandates for 2026 Survey, 56% of respondents reported their organization had standardized AI engineering practices adopted throughout the enterprise, while only 3% characterized their AI engineering practices as advanced or industry-leading.²
- **The Verizon Business paradigm shift**
Verizon helps reduce multi-vendor complexity by integrating AI-native infrastructure intelligence and engineering expertise into a predictive, unified network operating model.

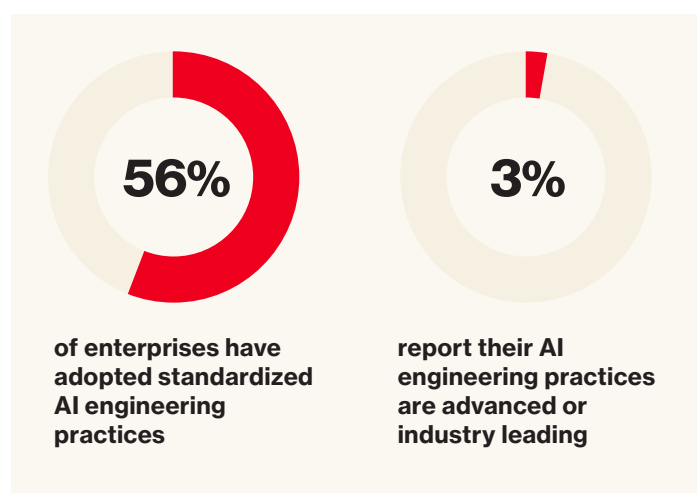
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The capabilities gap in enterprise AI adoption

The enterprise technology landscape has been fundamentally captured by the race toward agentic AI workflows—autonomous, highly contextual software sub-agents capable of executing multi-variable business processes with minimal human oversight. According to Gartner, by 2029, 70% of enterprises will deploy agentic AI as a part of IT infrastructure operations, compared to less than 5% in 2025.¹ Organizations are investing billions into sophisticated AI architectures and autonomous agents, yet they often systematically underestimate a foundational dependency: the underlying network strategy.

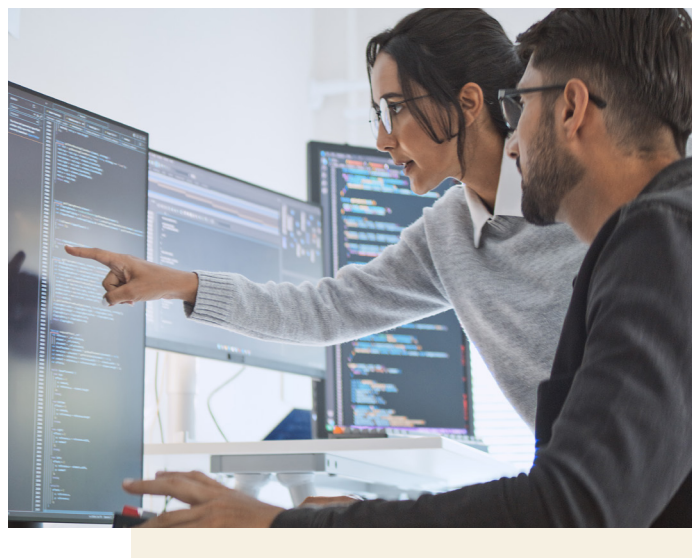
An AI transformation strategy is only as viable as the underlying network architecture supporting it. In the Gartner AI Maturity and Organizational Mandates for 2026 Survey, 56% of respondents reported their organization had standardized AI engineering practices adopted throughout the enterprise, while only 3% characterized their AI engineering practices as advanced or industry-leading.²



One of the primary operational challenges is no longer the complexity of the AI model itself, but rather the compounding operational friction of the network operating model underneath it. As networks scale to accommodate multi-cloud synchronization, edge-to-cloud computing, and real-time inference, traditional fragmented network infrastructure is outgrown.

Verizon Managed Network Services (MNS) helps streamline operational complexity, designed to provide enterprises with greater operational control as they scale AI initiatives.

Enterprises are deploying interconnected autonomous software agents capable of executing complex business processes—ranging from programmatic financial trading to dynamic supply chain orchestration. However, as these automated workflows scale, they behave in ways legacy corporate networks were never architected to handle. Many enterprise agentic AI workflows can require high data throughput, continuous bidirectional synchronization between edge nodes and cloud data centers, and deterministic latency profiles to allow near-real-time decision making.



Enterprise teams are being squeezed from two sides. On one end, they must deliver immediate infrastructure performance to uphold strict business Service Level Agreements (SLAs). On the other, they are severely constrained by macroeconomic pressures, vendor fragmentation, and directives to simplify operations. Rather than managing an optimized system, IT leaders find themselves weighed down by a multi-vendor, multi-cloud environment that lacks unified visibility.

Market data highlights that network budgets are expanding rapidly to cope with this reality. Approximately 27% of enterprise organizations are growing their network infrastructure budgets “much more” than in previous cycles, rendering network modernization the second-fastest-growing technology allocation area, trailing only AI itself (39%).³

Yet, despite capital allocation, the core obstacle remains operational complexity: 80% of enterprise organizations cite severe architectural complexity and a critical lack of centralized visibility as their primary network concerns, prompting 54% of forward-looking enterprises to actively embark on vendor consolidation initiatives.



Navigating the sea of sameness

To capture this expanding enterprise market spend, the global managed services landscape has become saturated with positioning jargon and abstract messaging—a phenomenon recognized as the competitive “sea of sameness.” Some tech vendors utilize AI in a generic capacity to claim market relevance, without altering their foundational delivery capabilities. Global enterprise buyers often face a highly fragmented ecosystem where traditional choices are frequently divided into 3 macro-approaches:

The enterprise buyer's dilemma

Traditional carrier	System integrators	DIY approach
Some hardware-centric approaches may emphasize capacity over operational orchestration.	Some integrator-led models may add software layers without direct control over the network.	DIY models may require coordination of multiple vendors and tools leading to operational fragmentation and telemetry overload.

The Verizon Business paradigm

Verizon Business reframes the global enterprise conversation. Verizon focuses squarely on tackling the actual operational complexity that enterprise AI generates. The strategic positioning recommendation is direct: Verizon Business acts as a strategic partner that helps streamline network management, designed to help your AI transformation strategy to move forward with fewer operational seams and maximized administrative control.

Instead of forcing enterprise IT teams to orchestrate multiple disparate technology providers, Verizon integrates service delivery, native infrastructure-level intelligence, and deep network engineering expertise into a singular, unified operating model. As your managed service partner, Verizon helps free your IT team to focus on high-value business innovation and strategic enterprise projects.

Our approach represents an intentional evolutionary paradigm shift in network operations:

The evolution of network operations

Pre-2023: siloed

- Disparate tools
- Manual Processes
- High alarm noise

2024 - 2025: reactive

- Heavy automation
- Data lake abstraction
- Insight to action

2026 predictive

- Native AIOps foresight
- Autonomous sentinels
- Closed loop pipelines

3 foundational pillars of enhanced operations

This structural evolution is delivered through 3 foundational pillars designed to help reduce operational friction.



Pillar 1: Intelligence for what's next— An authentically AI-ready network

Natively engineered AIOps Insights built on operational telemetry from Verizon's global infrastructure.



Pillar 2: From alert to action— Resolving challenges at network speed

Automated change management workflows designed to accelerate execution.



Pillar 3: Built into how you work— Open by design

Direct API-driven integrations with supported ServiceNow and ITSM environments.

Pillar 1: Intelligence for what's next— An authentically AI-ready network

An intelligence engine is only as competent as the data upon which it is built. Many market solutions utilize third-party licensed AIOps tools trained on synthetic data or isolated lab software environments. Verizon Managed Network Services features AIOps Insights, a natively engineered, Verizon-developed intellectual asset—not a licensed third-party application layer. This system utilizes advanced Machine Learning (ML) models trained on operational telemetry from Verizon's global infrastructure.

- **Proprietary telemetry at scale:** The architecture continuously ingests, analyzes and learns from near-real-time operational telemetry generated across more than 500,000+ active managed enterprise devices worldwide.
- **Comprehensive architectural span:** Unlike siloed software-defined overlays, Verizon's native intelligence spans seamlessly across enterprise wireline and wireless networks, and private LTE/5G Fixed Wireless Access (FWA).
- **The orchestrator:** Driven by advanced Generative AI, this orchestration is designed to assist enterprise administrators by diagnosing issues, evaluating near-real-time dependencies, and helping to reduce the Mean Time to Resolution (MTTR) through automated Root Cause Analysis (RCA) and earlier identification of anomalies.

Pillar 2: From alert to action— Designed to resolve challenges at network speed

In an environment run by agentic workflows, an infrastructure failure cannot afford to wait in an administrative queue. When a network incident occurs in an SI-managed or multi-vendor environment, resolution is often delayed by lack of vendor accountability and fragmented visibility and tooling. Because Verizon owns and operates the underlying global infrastructure, it provides clearer operational accountability, subject to applicable service terms and customer configurations.

- **Automated change management:** Traditional, manual enterprise change management protocols can consume intensive engineering man-hours. Verizon has automated end-to-end standard change management from hours to minutes.
- **Deterministic ticket processing:** Automated algorithmic ticket validation and processing has achieved a verified baseline execution speed from minutes to seconds, rapidly purging manual processing errors out of the operational cycle.⁴
- **Automation scaling:** Verizon has deployed 50+ sophisticated operational core automations live, and plans to scale toward 150+ production network automations natively embedded across the enterprise service architecture.
- **Global linguistic optimization:** To seamlessly support multinational operations, Verizon supports bidirectional translation across six languages for technical operations workflows.

Pillar 3: Built into how you work—Open by design

Requiring an enterprise to log into a parallel vendor portal or adopt a rigid middleware layer creates unnecessary administrative overhead. Verizon's design philosophy is strictly Open by Design. Enterprises retain control over their operational stack. Verizon's managed network features are delivered directly through the software tools, dashboards and workflows already built and deployed by enterprise teams.

- **ServiceExchange integration:** Verizon leverages ServiceExchange technology to provide a direct, API-driven integration straight into an organization's existing instance of ServiceNow. Supported integrations can enable onboarding in minutes.
- **Standardized TM forum APIs:** For organizations executing operations on alternative IT Service Management (ITSM) software, Verizon supports integration with many ITSM environments through standardized TM Forum APIs.
- **Bi-directional nomenclature synchronization:** To prevent translation errors during critical incidents, the ServiceExchange system automatically synchronizes and converts technical data utilizing the customer's own internalized naming conventions and asset tags. This helps reduce configuration errors and speeds up resolution.



Agentic AI managed network services ecosystem

As enterprise operations advance through 2026, Verizon Business has moved past basic anomaly detection into the active deployment of an autonomous, goal-oriented agentic managed network services operating layer. This highly contextual software cognitive system can understand complex network environments, reasons through multi-variable anomalies, executes automated actions, and continuously learns from near-real-time environmental telemetry designed to deliver dynamic, self-healing infrastructure outcomes.

Verizon's agentic managed network services operating layer is designed with security and governance controls aligned to industry-standard frameworks.

The specialized managed network services sub-agent ecosystem

The agentic managed network services architecture orchestrates specialized agent-to-agent collaboration embedded across the entire service lifecycle to help automate, optimize and support more secure operations:

The sentinel agent orchestrates these units by helping apply governance policies, supporting human-in-the-loop review and oversight, and enabling automated invoice reconciliation workflows.

Sentinel agent

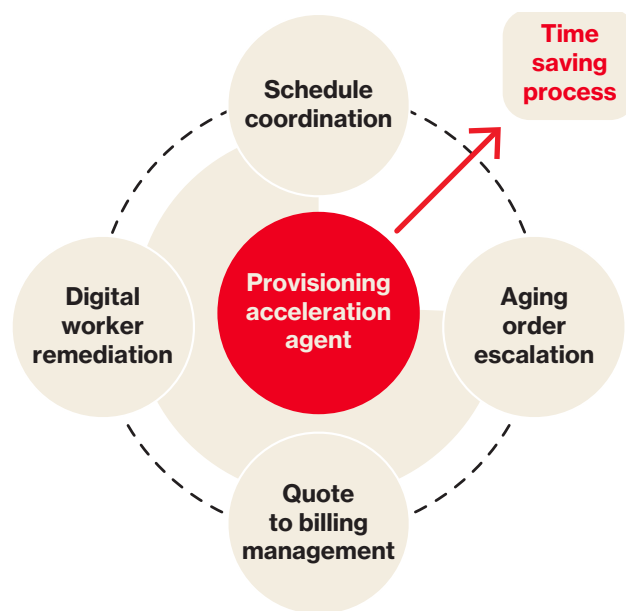
Managed network services orchestrator:

- Enhances and orchestrates the order lifecycle, network status and problem resolution.
- Identifies, alerts and follows up with reconciliation functions, such as helping resolve unassigned tasks via the gateway and configuration sub-agents, to support timely resolution.

Provisioning agent

On-demand provisioning:

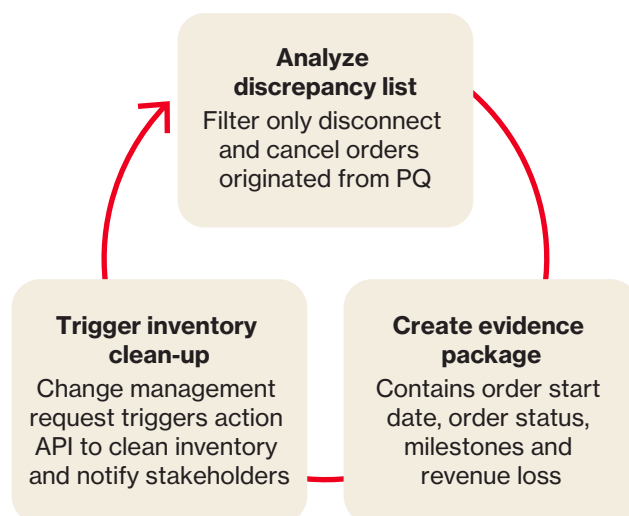
- Works autonomously behind the scenes to provision services, seamlessly handling system anomalies.
- Automated agentic capabilities proactively detect order fallouts, leveraging predictive network learning and historical pattern recognition to autonomously resolve exceptions and backfill missing data.



Inventory agent

Cross-system inventory validation:

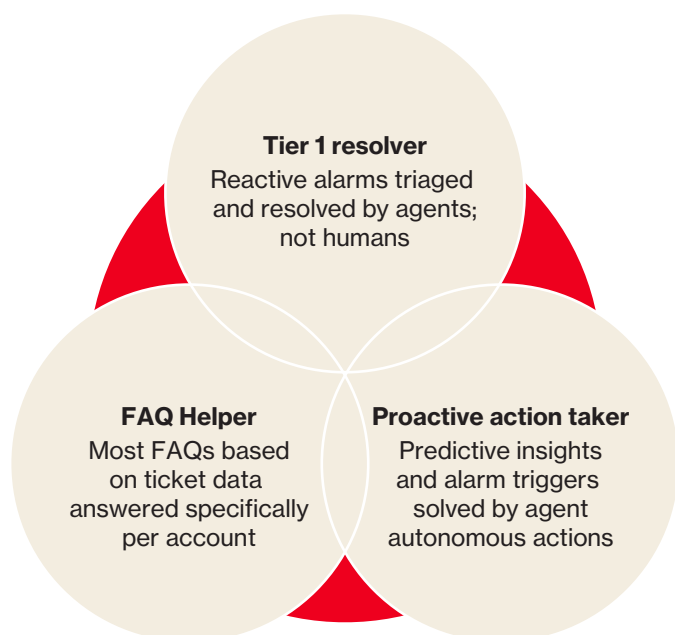
- Monitors the live network inventory while supporting the automated recovery of physical equipment and software licenses upon order cancellation or disconnection.
- Utilizes integrated action APIs to continuously synchronize network assets and autonomously reconcile inactive inventory records.



Assurance agent

Autonomous incident triage:

- Directs autonomous, runbook-driven repairs and proactive telemetry diagnostics.
- Acts as a Tier-1 NOC resolver, designed to triage alarms quickly to help protect live service streams before they impact users.



Note: Following use cases are illustrative examples of the Verizon Managed Network Services agentic AI framework

Use case A: Retail—Edge video analytics and shrinkage prevention

Modern retail environments require deep synchronization between physical storefronts and software-defined networks. Verizon can integrate edge visibility directly into its secure-by-design managed network services portfolio. Rather than routing raw video streams across expensive links, on-camera applications process computer vision workloads directly at the edge to run footfall counts and inventory shrinkage prevention. If application performance drops or network congestion occurs, the “assurance agent” can help reallocate link capacity to support critical operational data integrity.

Use case B: Manufacturing—Industrial networks and industry 5.0 platforms

Harsh manufacturing environments cannot tolerate unpredictable downtime. Verizon's Managed Industrial Network Services establish a resilient platform for automated production systems by natively routing and monitoring mission-critical Operational Technology (OT) protocols—including PROFINET and Modbus.

Verizon can help reduce manufacturing cyber risk by supporting specialized firewalls and micro-segmentation between OT production lines and corporate IT networks. The network acts as the primary data pipeline for near-real-time Digital Twins, allowing the “sentinel agent” to dynamically enhance machine bandwidth and proactively solve port and resource scarcity.

Use case C: Healthcare—Protecting patient outcomes

Healthcare networks often require highly reliable connectivity to support clinical applications, and Verizon Managed Health Network Services are designed to help maintain resilient data flows, subject to applicable service terms, customer configurations, and SLAs.

The “assurance agent” monitors network performance and protocol-related telemetry. If a fault is predicted, the sentinel agent can help adjust network or bandwidth parameters to help maintain availability of clinical data streams and consistent with applicable service objectives.

Measurable business value

Ultimately, the transition to autonomous networking is not simply an exercise in adopting cutting-edge technical features; it is a fundamental financial and operational imperative that can help preserve business agility. While alternative approaches may create fragmented architectures, Verizon's integrated network services model delivers measurable business outcomes, backed by 20 years of operational heritage running complex infrastructures for some of the world's largest enterprises—including 96% of the global Fortune 500 across 185+ countries.

Measureable business outcome defined

Manual tasks and complex cross-signal events can trigger constant after-hours escalations for understaffed network teams. Gartner⁵ has outlined quantifiable business outcomes to target for initial pilots including:

40 – 60%

Mean time to repair (MTTR) reduction for at least 20% of user impacting incidents chosen for pilot runs, driven by explainable plans and faster approvals

15 – 25%

Reduction in manual tickets in selected workflow areas (for example, wireless access triage, drift remediation) by routing event-initiated, well-scoped tasks through supervised agents

Enterprise AI transformation demands an agile, high-performance network that operates as a competitive accelerator rather than an operational bottleneck. As agentic AI workflows continue to reshape the global corporate landscape, the defining AI-related differentiators between business success and stagnation will likely not be the isolated sophistication of an AI application. Instead, it will likely be the operational agility of the network infrastructure supporting it. Verizon Managed Network Services provides the unified intelligence, operational speed and open architecture to help reduce complexity—giving your enterprise the control to translate AI innovation into sustained business momentum.

Take the next step with Verizon Business

Aligning your underlying network strategy with your enterprise AI initiatives is strengthened by working with a partner with proven global scale, proprietary intellectual tools and operational accountability. Verizon Business stands ready to evaluate your current network landscape and design an operating model with security and automation capabilities tailored to your specific transformation goals.

To explore how Managed Network Services can streamline your operational complexity and identify opportunities that may help lower your total cost of ownership, contact your dedicated Verizon Account Executive today or visit our online enterprise portal to schedule an architectural consultation with our global engineering practice.

To discover how Managed Network Services can help identify opportunities to streamline your operational complexity and lower your total cost of ownership:

Schedule a consultation >

Explore our solutions >

¹ Source: Gartner: Predicts 2026: AI Agents Will Transform IT Infrastructure and Operations, December 2025.

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² Source: Gartner: Innovation Insight for AI Engineering, September 2025. GARTNER is a trademark of Gartner, Inc. and/or its affiliates.

³ Source: Enterprise Strategy Group (now Omdia) Research Report, Modernizing IT Operations in the Agentic AI Era, May 2026.

GARTNER is a trademark of Gartner, Inc. and/or its affiliates.

⁴ Source: Verizon 2026: Verified with customer pilot and dependent on ServiceExchange or where standardized APIs are implemented.

⁵ Source: Gartner, Innovation Insight: Agentic NetOps Software Redefines Networking, Mike Leibovitz, Jonathan Forest, 18 February 2026.

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