

White paper

FUTURE-ENABLING CONNECTIVITY IN THE AGE OF AI

**Overcoming Legacy Forklift Challenges
and Unlocking the Potential of AI-Optimized Networks**

August 2026





Introduction:	The Connectivity Revolution is Here
1.	The Legacy Problem and Its Hidden Costs
2.	The AI Advantage in Modern Connectivity
3.	Building the Business Case for Transformation
4.	A 7-Step Roadmap to Intelligent Connectivity
5.	GTT: Your Partner for a Connected Future
Conclusion:	The Future is Now

Introduction

THE CONNECTIVITY REVOLUTION IS HERE

Your network is the central nervous system of your business. It connects your people to applications, your data to the cloud and your strategy to execution. For years, legacy infrastructure worked well enough. It was a sunk cost, a utility managed by IT teams tasked with keeping the lights on. That era is over. The rise of hybrid work, global operations and artificial intelligence requires strategic connectivity.

Legacy systems are no longer just inefficient; they are active business inhibitors. They introduce security vulnerabilities, create operational drag and prevent your organization from adapting at the speed of the market. Attempting to innovate on top of this brittle foundation is like building a skyscraper on sand. It is a losing proposition.

This ebook provides a clear path forward. We will dissect the hidden costs of legacy networks and reveal how AI-enabled connectivity drives tangible business outcomes like proactive security and scalable growth. This is not about chasing trends. This is about future-proofing your business. GTT is the strategic partner to guide you through this transformation, helping you connect, secure and simplify your global infrastructure.

1.

THE LEGACY PROBLEM AND ITS HIDDEN COSTS

Your legacy network is costing you more than you think. The expense is not just found in the line items for vendor contracts or hardware maintenance. The real damage is done by operational friction, security gaps and the inability to support modern business initiatives. Vendor sprawl is a primary source of this pain. Each new vendor adds a separate contract to negotiate, a different platform to manage and another point of potential failure.

This fragmented model creates significant operational drag. Your most skilled engineers spend their days wrestling with disparate systems, manually troubleshooting issues and coordinating between vendors who are quick to point fingers. This is not innovation; it is expensive, reactive maintenance. The time your team wastes on low-value tasks is time not spent on strategic projects that drive revenue.

From a security standpoint, complexity is the enemy. Each siloed tool and inconsistent policy across your global locations creates a blind spot. These are the exact vulnerabilities that threat actors seek to exploit. When an incident occurs, your security team is forced into a chaotic scramble trying to correlate alerts from disconnected systems to understand the scope of the attack. This slow response time dramatically increases your risk and potential for damage across the infrastructure. Your network instead of being a secure asset becomes your biggest liability.



2.

THE AI ADVANTAGE IN MODERN CONNECTIVITY

AI-enabled networking is the definitive answer to legacy complexity. This is not a futuristic concept; it is a practical solution that makes your network intelligent, predictive and automated. It moves your infrastructure from a manually managed system to a self-optimizing asset that anticipates and adapts to business needs.

True AI-enabled networking operates on three core principles:

- 1 Complete Visibility:** The system collects and unifies real-time data from every corner of your network. This includes traffic flows, application performance, device health and security events. You gain a single, coherent view of your entire infrastructure, eliminating the blind spots created by fragmented tools.
- 2 Actionable Insight:** Machine learning algorithms analyze this unified data to identify patterns and predict issues before they impact your business. The system can distinguish between a minor performance dip and a developing security threat, providing your team with the context needed to act decisively.
- 3 Automated Action:** Based on these insights, the network takes intelligent, automated action. It can reroute traffic to avoid congestion, isolate a compromised device to contain a threat, or dynamically allocate resources to a critical application. This automation frees your team from manual work and allows them to focus on high-value strategic work.

The outcome is a network that is not just connected but also aware. It delivers superior application performance, strengthens your security posture and provides the agility required to support your business goals.





3.

BUILDING THE BUSINESS CASE FOR TRANSFORMATION

Delaying network modernization is no longer a viable strategy. Competitors who have already embraced intelligent connectivity are operating more efficiently, securely and with greater agility. The risk of falling behind is real and grows daily. Your legacy network actively hinders your ability to launch new digital products, support a global hybrid workforce and protect your organization from sophisticated cyber threats.

Building the business case for transformation requires a focus on measurable ROI. Frame the investment in an AI-optimized network not as a technology expense but as a strategic business initiative. Connect the benefits directly to your organization's top-level objectives

Industry analysts validate this approach. Reports from leading firms confirm that enterprises adopting AI-enabled platforms see significant reductions in trouble tickets and faster threat containment times. Use these third-party insights to reinforce your case. The question is not whether you can afford to modernize your network; it is whether you can afford not to.

Cost Savings

Demonstrate the direct financial benefits of eliminating redundant tools, consolidating contracts and reducing unplanned downtime.

Risk Mitigation

Show how unified security and AI-driven threat detection reduce your attack surface and ensure compliance excellence.

Operational Efficiency

Calculate the hours your engineering team will reclaim through automation and vendor consolidation. Redirecting this talent to innovation creates immense value..



4.

A 7-STEP ROADMAP TO INTELLIGENT CONNECTIVITY

Transitioning from a legacy environment to an AI-optimized network requires a deliberate, strategic plan. A “rip and replace” approach is disruptive and risky. Instead, follow this phased roadmap to ensure a smooth, successful transformation with minimal business interruption.

- 1. Audit Your Current Infrastructure**
Begin with a comprehensive inventory of your entire network. Document every vendor, contract, hardware appliance and software license. This audit will immediately expose redundancies and reveal the true cost of your current setup.
- 2. Align Network Goals with Business Objectives**
Define what success looks like. Your network modernization must directly support specific business outcomes, whether that is enabling global expansion, improving customer experience or strengthening your compliance posture.
- 3. Consolidate Vendors and Simplify Operations**
The fastest path to efficiency is consolidation. Identify a strategic partner who can provide unified network connectivity and security services on a single platform. This step alone will drastically reduce administrative overhead and create clear accountability.
- 4. Integrate AI-Driven Intelligence**
Select a platform with true AI and machine learning capabilities. You need a system that offers predictive analytics and proactive automation to create a self-healing network that resolves issues before they impact users.
- 5. Secure the Modern Perimeter**
Implement a unified security framework such as SASE (Secure Access Service Edge). This ensures consistent policy enforcement across all users, locations and devices, eliminating the security gaps inherent in fragmented architectures.
- 6. Deploy in Phases**
Start your migration with a pilot program at a few low-risk sites. Use this initial deployment to validate performance and refine your configurations. This methodical approach allows your team to gain expertise and ensures a seamless global rollout.
- 7. Measure and Optimize for Continuous Improvement**
Your transformation does not end at deployment. Use the unified visibility from your new platform to continuously monitor performance, track ROI and optimize your network to meet evolving business needs.

5.

GTT: YOUR PARTNER FOR A CONNECTED FUTURE

Transformation requires more than just technology; it requires the right partner. GTT is uniquely positioned to guide your enterprise through the shift to AI-enabled connectivity. Our expertise is built on three foundational pillars that differentiate us in the market.

First, we own and operate a top-ranked global Tier 1 IP backbone. This world-class infrastructure provides the resilient high-performance foundation your business demands. Most of your traffic stays on our network giving you unparalleled control and security.

Second, our solutions are delivered through GTT Envision, our unified platform that delivers the visibility, insight and automated control necessary to drive operational excellence.

Finally, we deliver end-to-end managed solutions. From initial design and deployment to ongoing management and optimization, our team of experts becomes an extension of yours. We provide the professional, managed and technical services to support you whenever and however you need it, ensuring your network remains a strategic asset that powers your business forward. This positions us as your partner in achieving long-term success.

THE FUTURE IS NOW

The era of the static, manually managed network is over. To compete and win in the age of AI, your organization needs an infrastructure that is intelligent, secure and adaptable. Continuing to operate on legacy systems is an active choice to accept higher costs, greater risk and slower growth.

The path to modernization is clear. By auditing your current state, aligning your strategy with business goals and following a phased deployment plan you can transform your network from a complex liability into a powerful strategic asset. This journey delivers immediate operational efficiencies and positions your organization for sustained innovation.

GTT is a leading networking and security as a service provider for multinational organizations, simply and securely connecting people and machines to data and applications — anywhere in the world. We serve thousands of organizations, bringing together the right people, partners and technology to reduce the burden on IT teams and solve the most pressing networking and security challenges. Built on our top-ranked global Tier 1 network, GTT Envision is a single global technology platform to connect, orchestrate, virtualize and automate enterprise networks, enabling customers with consumable solutions to achieve business missions and meet ongoing demand when, where and how needed. Our portfolio includes SASE, SD-WAN, security, internet, voice and other connectivity options, complemented by a suite of professional services and exceptional sales and support teams in local markets around the globe. We partner with our customers to deliver Greater Technology Together. For more information, visit gtt.net

