eBook

The Secure Networking Journey

Modernize, Optimize, Transform Your Network for the Future

aryaka

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Executive Summary: A Blueprint for IT Leaders

The Secure Networking Journey is a roadmap designed to help organizations adapt to the rapidly changing demands of modern IT networks. It addresses the challenges of hybrid workforces, multi-cloud adoption, and the growing demand and risk from GenAI workloads. By following a phased approach—**Modernize, Optimize, and Transform**—businesses can achieve agility, scalability, and future-readiness.

Key Takeaways for IT Leaders

Modernize:

Replace rigid, expensive MPLS systems with cloud-first SD-WAN to build a scalable foundation.

Lower operational costs and support hybrid teams seamlessly.

Optimize:

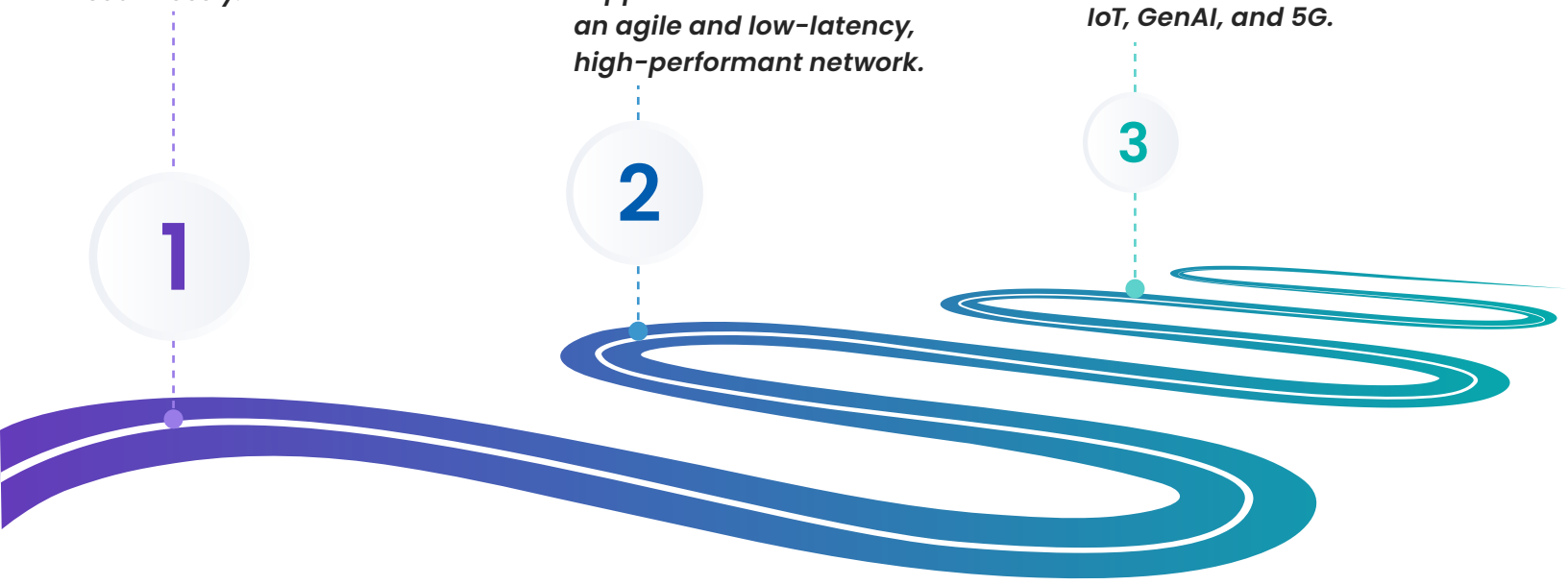
Ensure peak performance with tools like SaaS, multicloud, and AI acceleration, and advance QOS services.

Maximize productivity and support all workloads with an agile and low-latency, high-performant network.

Transform:

Consolidate networking and security with Unified SASE, enabling global scalability and centralized management.

Simplify operations and prepare for innovations like IoT, GenAI, and 5G.



Why It Matters

Organizations that embrace this journey don't just modernize their IT infrastructure—they create a platform for agility, business impact and innovation.

Team Aryaka

Introduction: The Secure Networking Is a Business Imperative

In today's digital-first economy, IT leaders face unprecedented challenges. Hybrid workforces, multi-cloud adoption, GenAI workloads and cyber threats demand a more agile and secure network infrastructure. Traditional systems, orignally designed for static, office-bound environments, are no longer sufficient to meet these needs.

The Secure Networking Journey offers a **phased framework** to address these challenges and build a future-ready network. Each phase—**Modernize, Optimize, and Transform**—lays the groundwork for increased performance, scalability, and innovation.

- **Modernize:** Build a flexible and cost-efficient foundation by replacing legacy systems
- **Optimize:** Maximize efficiency and performance to support SaaS, AI, and cloud initiatives
- **Transform:** Enable innovation and security at scale with a Unified SASE approach

Reflection Questions:

- How well does your current infrastructure support hybrid work and multi-cloud adoption?
- Are you leveraging tools like ZTNA and AI-driven observability to address growing cyber threats?
- Is your network scalable enough to support emerging technologies like IoT and GenAI?

Modernize

Build Agility

Replace outdated systems with a flexible,cloud-first foundation to support hybrid work and multi-cloud and GenAI adoption.

Optimize

Enable Innovation

Integrate networking and security into a Unified SASE framework to enable global scability, innovation, and readness for IoT and GenAI.

Transform

Enhance Efficiency

Enhance network performance and simplify operation to boost productivity and efficiency.

Phase 1: Modernize

Building the Foundation for Agility

Why Modernization Matters

Many organizations still rely on outdated MPLS networks or first generation appliance based SDWANs, mulitple firewalls with incomplete coverage, and legacy VPNs. These systems struggle with scalability, flexibility, and security, making them ill-suited for modern needs. **Modernization focuses on building a flexible, cloud-first foundation** that supports distributed teams, SaaS applications, and future growth.

Key Actions in Modernization

- **Transition from MPLS to SD-WAN**

  MPLS networks are expensive, rigid, and poorly suited to dynamic application demands. Modern SD-WAN provides flexibility, cost efficiency, and optimized connectivity for hybrid and multi-cloud environments.

Best Practice: Implement SD-WAN alongside MPLS in a phased migration, minimizing disruption.

- **Consolidate and Upgrade Firewalls**

  Fragmented firewalls create operational inefficiencies and increase security risks. Upgrading to centralized Next-Generation Firewalls (NGFWs) ensures advanced threat detection and easier policy management.

- **Enable Secure Remote Access**

  Hybrid work demands scalable solutions like Cloud based secure remote access while preparing for ZTNA.

Case Study: Wabtec

Challenge:

Wabtec faced inefficiencies and frequent network downtime that hampered scalability and productivity.

Solution:

- Modernized with SD-WAN for improved connectivity
- Optimized workflows with single pane of glass visibility to the network
- Faster and more consistent performance worldwide for critical applications

Results:

- **Significant downtime reduction**, improving availability
- **Productivity gains** from enhanced performance

Read Case Study >>

Before - MPLS Network

Slow Setup Times

High time and cost required to deploy new locations with MPLS.

High Operational Costs

Inflated expenses from managing MPLS, hardware, and multiple vendors.

Inconsistent Performance

Unreliable application performance across global operations.

IT Management Burden

Overloaded IT teams managing complex infrastructure and vendors.

After - SD-WAN

Rapid Deployment

New sites spun up in days with Aryaka's ANAP devices, even during chip shortages.

Lower TCO

Significant cost savings with Aryaka's fully managed SD-WAN solution.

Consistent Global Performance

Faster, reliable application performance for critical workflows worldwide.

Simplified IT Operations

Reduced management burden with Aryaka handling end-to-end network operations.

Phase 2: Optimize

Elevating Network Performance

Why Optimization is Essential

Optimization ensures your modernized network operates at peak performance. It focuses on reducing latency, enhancing SaaS experiences, and intelligently allocating bandwidth to support advanced technologies like AI and GenAI.

Key Actions in Optimization

- **Accelerate SaaS and Multi-Cloud Applications**

  Optimized routing ensures applications like Salesforce and Microsoft 365 perform consistently across regions.

Best Practice: Use dedicated network paths to minimize latency for mission-critical SaaS.

- **Enable AI Acceleration**

  AI and GenAI workloads require ultra-low latency and dynamic resource allocation.

Example Technology: AI-driven solutions like Aryaka AI>Perform dynamically adjust resources to support GenAI-powered applications

Case Study: Cathay Pacific

Challenge:

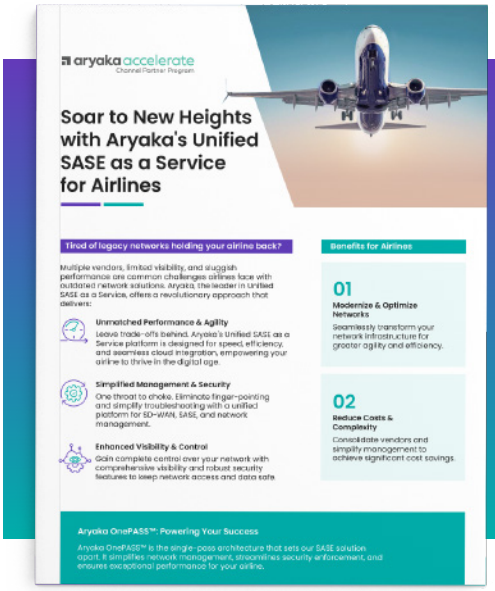
Cathay Pacific needed to enhance SaaS performance while scaling operations globally, and prepare to transform with Unified SASE for global security and management.

Solution:

- Switched to global SD-WAN connectivity
- Deployed SaaS acceleration for latency reduction
- Used QoS policies to prioritize bandwidth for critical workflows

Results:

- **Significant reduced latency** for key applications, boosting employee productivity
- Optimized bandwidth usage **reduced operational costs**



Read Case Study >>

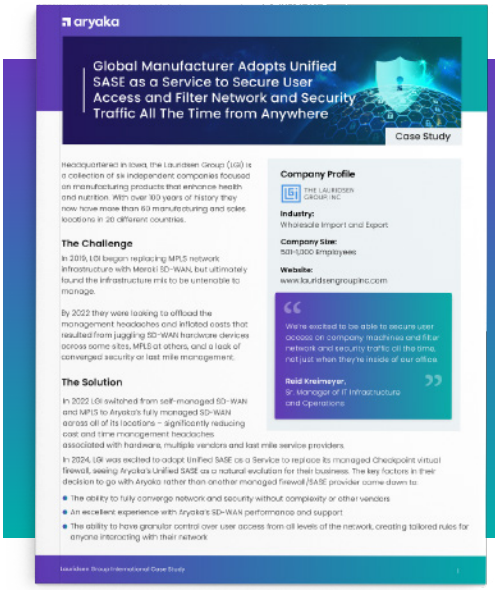
Before	Category	After
MPLS network lacked flexibility, slowing global expansion.	Infrastructure	Managed SD-WAN enabled faster, more flexible, and scalable connectivity.
Setting up new locations was time-consuming and costly.	Scalability	New sites were deployed in days using Aryaka's ANAP devices.
Inconsistent performance for critical applications globally.	Application Performance	Faster and more reliable performance for key applications worldwide.
Internal IT teams were burdened with managing complex infrastructure.	Operational Efficiency	Reduced IT workload with Aryaka's fully managed solution.
High total cost of ownership (TCO) due to MPLS inefficiencies.	Cost Optimization	Lower TCO with Aryaka's cost-efficient solution.

Phase 3: Transform

Empowering the Future with Unified SASE

Why Transformation Matters

The transformation phase integrates networking and security into a Unified SASE framework, simplifying operations and enabling innovation. Unified SASE combines SD-WAN, NGFW, SWG, and CASB into a single, scalable solution.



Read Case Study >>

Challenge:

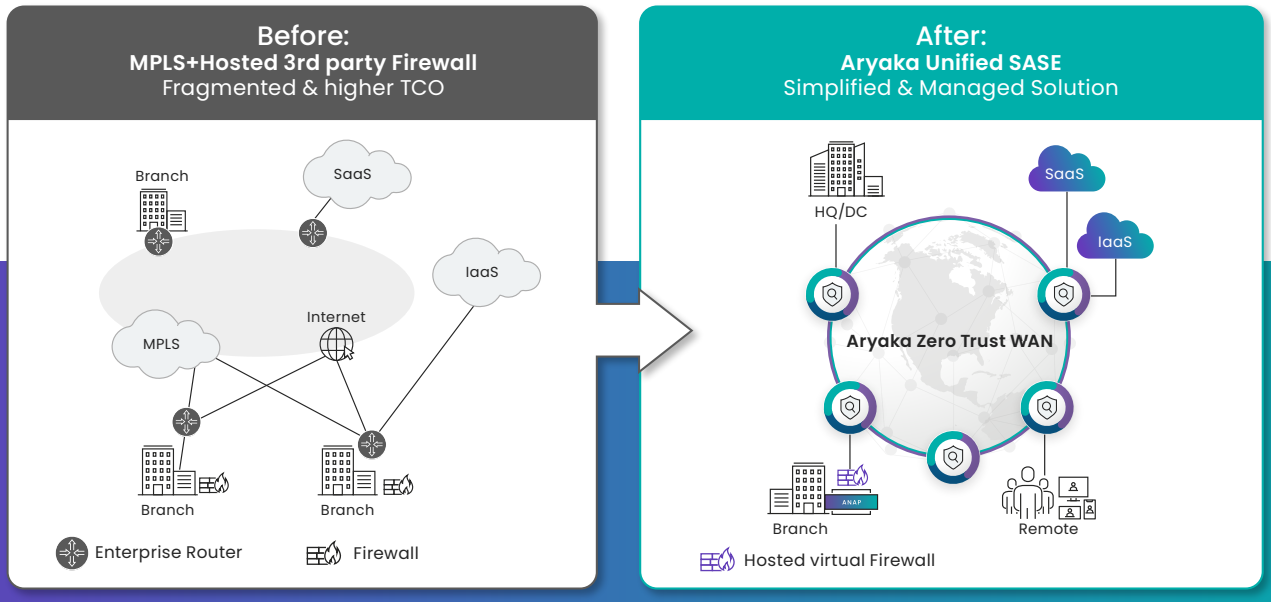
The Lauridsen Group needed to replace their inflexible MPLS network while addressing security and cost challenges for a growing remote workforce.

Solution:

- Transitioned from MPLS to SD-WAN for better scalability and cost efficiency
- Centralized firewall management with NGFWs for simplified security.
- Implemented ZTNA to provide secure, seamless remote access

Results:

- Substantial cost savings from bandwidth reductions and operational efficiencies
- Improved performance for remote teams, enabling productivity gains
- Enhanced compliance with unified firewall and zero trust policies



The Value Journey: Realizing Benefits at Every Stage

Modernize

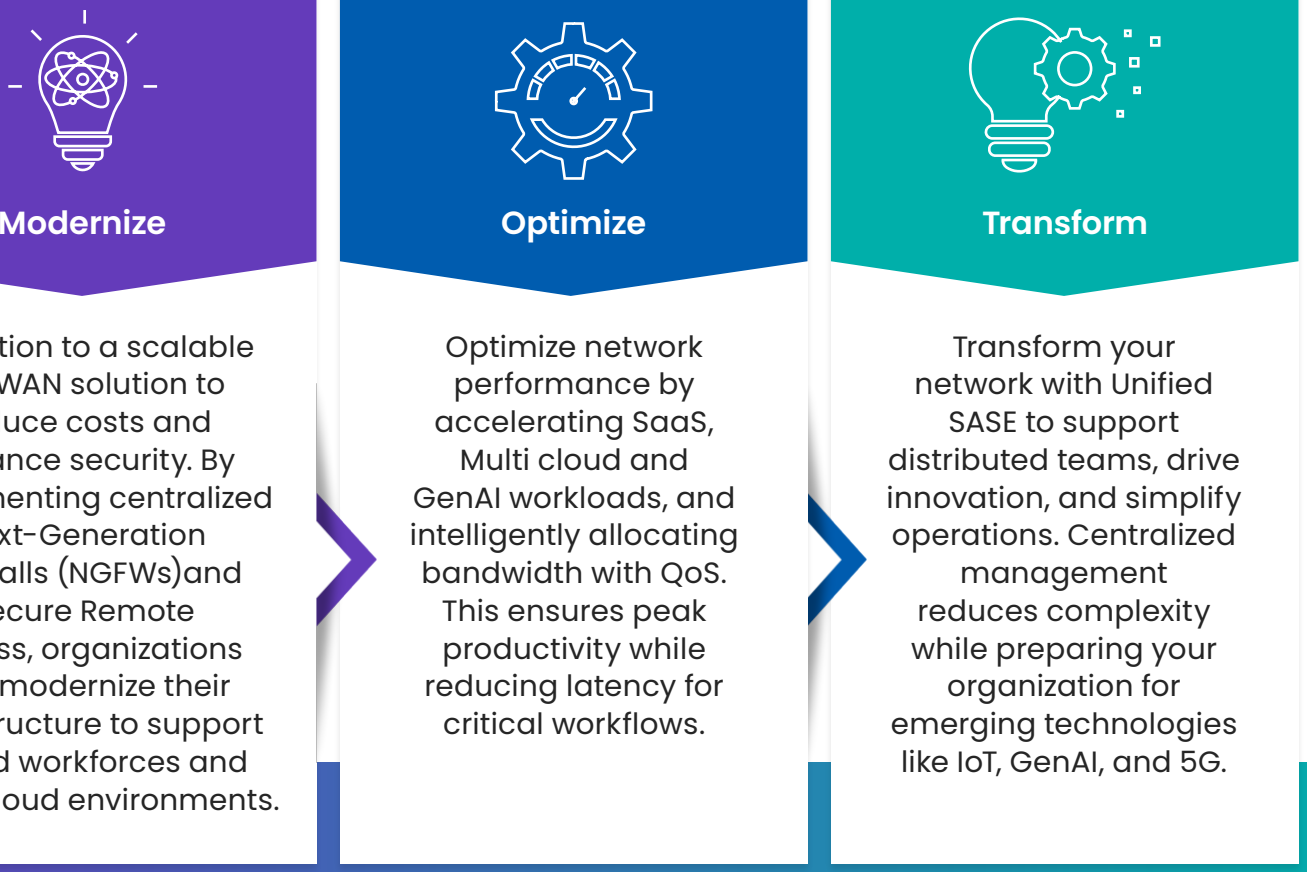
- **Cost Reduction:** Transition to cost-efficient, scalable modern SD-WAN
- **Stronger Security:** Implement centralized NGFWs and Secure Remote Access

Optimize

- **Productivity Gains:** Maximize SaaS multi-cloud and GenAI performance
- **Resource Efficiency:** Use QoS to allocate bandwidth intelligently
- **Agility:** Deploy new sites and onboard new users faster and more efficiently

Transform

- **Global Scalability:** Unified SASE supports distributed teams and innovation
- **Simplified Operations:** Centralized management complexity and overhead



Actionable Insights and Next Steps

The journey to a secure, agile, and scalable network starts with assessing your current network and security infrastructure, identifying opportunities for modernization, optimization, and transformation. Continuous evaluation and adaptation ensure readiness for future business needs.

Assess Your Current Network and Security Infrastructure

- **Network Performance:** Evaluate the performance of your current network, including latency, bandwidth, and reliability
- **Security Measures:** Review your current security measures, including firewalls, web gateways, and cloud access security
- **Operational Efficiency:** Assess the efficiency of your network and security operations, including management overhead and user experience

Identify Areas for Modernization, Optimization and Transformation

- **Outdated Technologies:** Identify any outdated technologies that need to be replaced or upgraded
- **Security Gaps:** Pinpoint any security gaps that need to be addressed
- **Operational Bottlenecks:** Identify any operational bottlenecks that hinder performance and efficiency

Continuous Evaluation and Adaptation

- **Regular assessments:** Regularly review network and security performance and adapt to new technologies and business needs
- **Adapt New Technologies:** Stay informed about new technologies and trends in network and security
- **Align with Business Goals:** Ensure your network and security strategy align with your evolving business goals and objectives

Conclusion: Your Next Steps

Aryaka's secure networking journey is a strategic investment in future readiness. Each phase builds upon the last to create a secure, scalable network designed for continuous growth and innovation. This flexible framework enables organizations to meet current demands while staying prepared for future opportunities.

Start your journey today by exploring Aryaka solutions tailored to your specific needs.

Learn more about how your organization can evolve by scheduling a free consultation with our solution architects >>

About Aryaka

Aryaka is the leader in delivering Unified SASE as a Service, a fully integrated solution combining networking, security, and observability. Built for the demands of Generative AI as well as today's multi-cloud hybrid world, Aryaka enables enterprises to transform their secure networking to deliver uncompromised performance, agility, simplicity, and security. Aryaka's flexible delivery options empower businesses to choose their preferred approach for implementation and management. Hundreds of global enterprises, including several in the Fortune 100, depend on Aryaka for their secure networking solutions. For more on Aryaka, please visit www.aryaka.com.

Schedule a Free Network Consultation with an Aryaka Expert

See How It Works Live →

Experience Aryaka's Unified SASE as a Service

View Interactive Demo →

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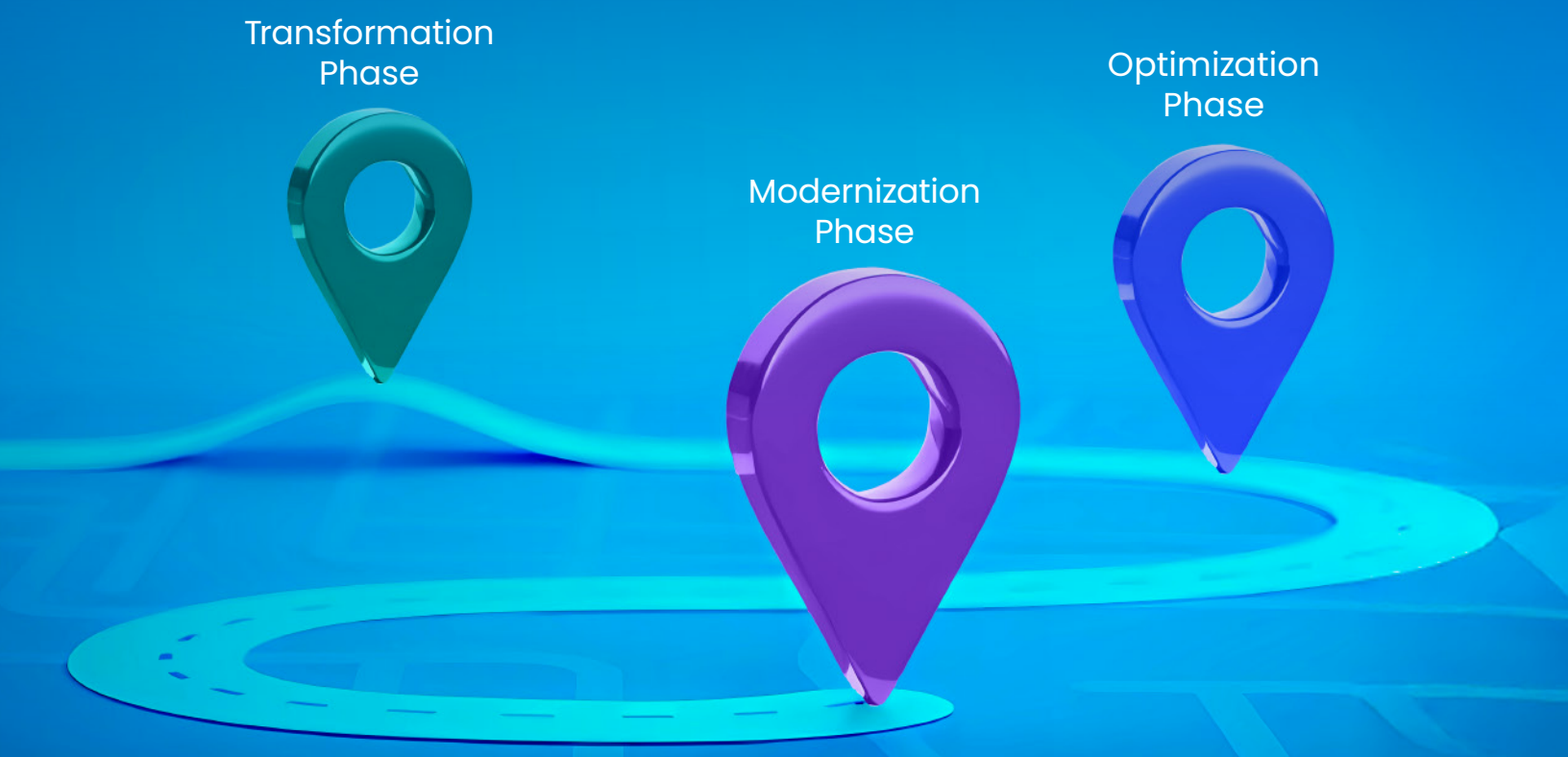

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