

20 COMPANY OF THE YEAR Driving impact across the customer value chain

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RECOGNIZED FOR BEST PRACTICES IN THE SINGAPORE MANAGED SD-WAN AND SASE SERVICE PROVIDER INDUSTRY

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Best Practices Criteria for World-class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Singtel excels in many of the criteria in the managed SD-WAN and SASE space.

RECOGNITION CRITERIA			
Visionary Innovation & Performance	Customer Impact		
Addressing Unmet Needs	Price/Performance Value		
Visionary Scenarios Through Megatrends	Customer Purchase Experience		
Leadership Focus	Customer Ownership Experience		
Best Practices Implementation	Customer Service Experience		
Financial Performance	Brand Equity		

Transformation of the Managed SD-WAN and SASE Service Provider Industry

Enterprise networks are undergoing structural changes as organizations shift to cloud-first operations, hybrid work models, and distributed infrastructures. Legacy architectures that rely on perimeter-based security and static routing fall short of current enterprise demands. Organizations now require agile, intelligent, and secure connectivity models that support application mobility, multicloud access, and real-time threat prevention. This is changing enterprise preferences in the network services market. Traditional services continue to face price compression and stagnant revenue, while next-generation offerings such as software-defined wide area networking (SD-WAN), integrated cybersecurity capabilities through secure access service edge (SASE), and managed security sustain consistent growth. Frost & Sullivan reports that global SD-WAN vendor revenue exceeded \$5.1 billion in 2023 and is expected to grow at a compound annual rate of 22.3% through 2028. Meanwhile, the global SASE market is projected to grow from \$2.9 billion in 2024 to \$7.4 billion by 2029, supported by cloud adoption, compliance mandates, and requirements for secure hybrid work environments.

As enterprises deploy cloud-native applications, expand multicloud footprints, and operate under stringent data protection regulations, the convergence of networking and security has emerged as a priority. With more than 80% of organizations supporting hybrid or remote work, unified policy-driven solutions are replacing fragmented architectures to improve performance and protection.⁴

¹ Top 10 Growth Opportunities in Network Services 2025 (Frost & Sullivan, May 2025)

² Global SD-WAN Infrastructure Industry, 2024 (Frost & Sullivan, May 2024)

³ Frost Radar™: Secure Access Service Edge, 2025 (Frost & Sullivan, July 2025)

⁴ Ibid.

Despite this progress, complexity remains a challenge. Enterprises must integrate multiple access types, address evolving security threats, and manage applications across on-premises, cloud, and edge environments. These demands increase reliance on managed services, particularly in SD-WAN and SASE. The preference for as-a-service models, combined with rising expectations for automation, observability, and self-service functionality, has made managed SD-WAN and SASE essential to enterprise digital transformation strategies.⁵

"CUBS simplifies operations with a single pane of glass for performance monitoring, policy enforcement, and service provisioning. It supports dynamic service chaining through VNFs and allows enterprises to activate services on demand. Customers can manage Singtel and third-party vendor services directly through the platform."

Kenny YeoDirector, ICT Practice

In addition, technologies such as zero trust network access (ZTNA), cloud access security broker (CASB), and firewall-as-a-service (FWaaS) are becoming important elements of SASE. Enterprises pursue pragmatic, risk-balanced approaches, often starting with SD-WAN and adding SASE capabilities in phases. modular model This supports incremental transformation, particularly in the mid-market and regulated sectors. Network-as-a-service (NaaS) is also changing networking expectations. NaaS delivers cloud-like experiences through orchestration, on-demand service activation, and

integrated cost control. With greater network observability, service providers offer end-to-end visibility, proactive remediation, and improved alignment with enterprise objectives.

As organizations advance their network and security infrastructure, demands for streamlined operations and simplified management will grow. Providers offering integrated SD-WAN and SASE with consistent policy enforcement and operational visibility are well-positioned to meet these requirements.

Enables Enterprise Network Transformation Through Integrated Solutions

As enterprise demands evolve, static network models are insufficient for organizations operating in distributed geographies, managing complex multi-vendor environments, and scaling with dynamic workloads. Singapore Telecommunications Limited (Singtel) addresses these challenges through its integrated managed SD-WAN and SASE offerings that support greater agility, visibility, and security in enterprise networks. The company's services align with organizations at various stages of digital maturity, allowing progression at a suitable pace. Instead of full infrastructure replacement, Singtel supports a phased transformation, from IP virtual private network (IP VPN) and SD-WAN to full SASE adoption, based on operational priorities, digital readiness, and security needs.

The service model reflects enterprise diversity by accommodating various sizes, geographic footprints, and information technology (IT) maturities while maintaining visibility and performance throughout the transition. While some providers enforce rigid service bundles that require immediate cloud migration, Singtel integrates legacy and modern architecture into a unified operational model aligned with enterprise goals. For example, businesses that remain on IP VPN can initiate transformation by layering Sintel's SD-

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⁵ Top 10 Growth Opportunities in Network Services 2025 (Frost & Sullivan, May 2025)

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WAN capabilities without disrupting existing infrastructure. This approach simplifies transition and aligns deployment with actual needs.

Singtel extends policy enforcement and governance to mobile and IoT environments, enabling consistent control across users and endpoints without complex overlays or additional software. It also enables mobile convergence for a wide range of enterprise endpoints, including laptops, tablets, smartphones, and guest or contractor devices, where traditional client agents may not be achievable. SIM-based authentication options allow consistent access and security policies in mobile and field environments, supporting industries such as insurance, logistics, and retail.

Enterprises face shifting demands driven by seasonal activity, market changes, and unexpected disruptions. Singtel addresses these fluctuations with a NaaS model that enables on-demand service activation. While many providers impose rigid service plans and lengthy change procedures, Singtel offers a flexible service structure and orchestration tools that align network resources with operational needs, minimizing delays and cost inefficiencies.

The company delivers service-level agreement (SLA)-backed connectivity to major cloud providers, hybrid environments, and multicloud architectures through its unified suite of connectivity services – Singtel CUBΣ. Organizations gain deterministic routing, real-time visibility, and dynamic orchestration to accelerate time-to-market and maintain consistent performance.

Singtel further strengthens this model through its universal customer premises equipment (uCPE) and virtual network functions as a service (VNFaaS). The vendor-agnostic architecture enables modular service delivery, supporting functions such as firewalls and other network services that businesses can dynamically provision and manage at the edge with cloud-like agility. Additionally, it supports bring-yourown VNF (BYO-VNF), allowing certified third-party functions to integrate seamlessly into the platform.

The company's unified digital platform and integrated security capabilities support consistent performance and simplified control in complex multi-domain networks. Its modular delivery, dynamic orchestration, and vendor-agnostic infrastructure enable enterprises to respond effectively to evolving requirements while maintaining agility and visibility.

Frost & Sullivan acknowledges Singtel as a leading provider of software-defined networking at the enterprise scale.

Unifies Network and Security Operations Through a Centralized Cloud-native Platform

Enterprises operating across regions often face challenges in unifying networking and security functions due to fragmented providers, devices, and protocols. Singtel addresses this complexity through Singtel CUB Σ , a cloud-native orchestration hub that centralizes control over fixed and mobile networks, cloud workloads, IoT devices, and endpoints.

CUB Σ simplifies operations with a single pane of glass for performance monitoring, policy enforcement, and service provisioning. It supports dynamic service chaining through VNFs and allows enterprises to activate services on demand. Customers can manage Singtel and third-party vendor services directly through the platform.

The company demonstrates its strength through an integrated security ecosystem with global key cybersecurity providers. While many competitors require custom integration, Singtel offers pretested templatized configurations through CUBΣ. Enterprises can select a preferred security profile, and the system provisions it instantly. This approach reduces delays, errors, and policy inconsistencies.

The platform delivers a suite of cloud-native security services, including firewalls, secure web gateways (SWG), CASB, and ZTNA. These are embedded into the network fabric and enforced consistently across geographies and user groups, supporting global policy compliance and regional data sovereignty requirements.

Through its Managed SSE offering, Singtel provides comprehensive use cases tailored to enterprise needs:

- Secure Internet Access: Secures Internet access for remote users and branch locations with enterprise-grade FWaaS, intrusion prevention, web filtering, and SWG with deep Secure Sockets Layer (SSL) inspection capabilities.
- **Secure Private Access**: Replaces VPNs with identity-based ZTNA for granular, role-specific application access.
- **IoT Security**: Protects IoT environments with 360-degree risk posture management. 24/7 monitoring of IoT assets with visibility and verification of connected devices to protect IoT systems against cloud and web attacks.

These capabilities operate through a unified dashboard and include Security Operations Center (SOC) support for threat detection and incident response. Customers also receive integrated consulting and configuration services to support optimal deployment and alignment with enterprise risk management.

"Singtel strengthens its managed SD-WAN and SASE offerings by integrating artificial intelligence and machine learning (AI/ML) capabilities into its operational infrastructure. These enhancements allow customers to implement predictive, data-driven network performance management."

Ain Sarah AishahBest Practices Research Analyst

Frost & Sullivan commends Singtel for unifying networking and cybersecurity into a single managed service that simplifies operations, strengthens security, and scales with business demands. This integrated approach eliminates complexity in the network lifecycle and enables faster policy enforcement, risk mitigation, and service activation. Enterprises gain a consistent operating environment that aligns technology with evolving risk, compliance, and performance requirements.

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Enhances SD-WAN and SASE with Predictive, Data-driven Network Intelligence

As enterprise networks become more complex, effective management requires more than just dashboards. Singtel strengthens its managed SD-WAN and SASE offerings by integrating artificial intelligence and machine learning (AI/ML) capabilities into its operational infrastructure. These enhancements allow customers to implement predictive, data-driven network performance management.

With $CUB\Sigma$'s integrated observability layer, Singtel provides real-time telemetry, traffic analytics, and assurance tools that cover the entire edge-to-cloud environment. Customers gain visibility into WAN

performance, endpoint status, and policy enforcement through a unified portal. This capability helps detect anomalies, optimize bandwidth, and enforce policies with greater accuracy.

To overcome the Internet's inherent unpredictability, Singtel Algo Routing uses dynamic smart routing to analyze network conditions in real time. This ensures consistent service levels by selecting the fastest, most reliable paths and optimizing for availability, latency, and packet loss. This has been shown to deliver over 30% improvement in internet performance,⁶ even during peak demand. Singtel supports smart building initiatives that include LAN fiber refreshes, WiFi 7 integration, IoT sensors (e.g., air quality, humidity, temperature), with integrated monitoring and management capability.

Singtel's integration of Al-driven insights and automation advances the network from a static utility to a dynamic enabler of operational efficiency and business responsiveness. These capabilities deliver real-time intelligence and predictive control, allowing enterprises to align network performance with application demands, cost targets, and user experience expectations.

Drives Enterprise Outcomes Through Secure, Scalable Connectivity Solutions

Customer deployments demonstrate Singtel's ability to deliver at scale with precision, agility, and consistency. Companies across industries and regions have relied on Singtel's managed networking solutions to simplify complex environments, improve performance, and meet operational and regulatory requirements. Through secure SD-WAN and integrated services, Singtel provides high availability, policy compliance, and seamless cloud connectivity in regional and global deployments.

One example involves a global network transformation for more than 3000 end-devices. The initiative replaced fragmented legacy infrastructure with a unified, cloud-centric SD-WAN architecture. Singtel delivered consistent connectivity and centralized visibility at various site types, including manufacturing plants, distribution centers, offices, R&D centers, retail outlets, and pop-up stores. This network transformation enables the customer to advance digital operations and strengthen asset management.

Another case involves a global manufacturer with over 500 sites to consolidate operations from multiple service providers into a single Singtel-managed environment. Singtel deployed uCPE with SD-WAN and virtualized WAN optimization across locations. This implementation enabled integrated fault management, network performance monitoring, and coordinated support. The device consolidation improved network manageability and contributed to reducing the carbon footprint.

Additionally, a regional personal care brand with over 200 endpoints in Asia, including China, partnered with Singtel to optimize multicloud connectivity and implement secure SD-WAN services. Service provisioning lead-time through the Singtel orchestration reduced from days to under 30 minutes, while cloud access latency reached below 100 milliseconds (ms) for global gateways and under 5 ms for Cloud Connect links. This outcome enhanced application performance and user experience across distributed locations.

These deployments highlight Singtel's ability to deliver unified, secure, and intelligent networks in various demanding settings. Whether supporting distributed retail and manufacturing operations or enabling multicloud connectivity across regions, Singtel shows operational strength, agility, and reliability. With a

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⁶ https://www.singtel.com/business/products-services/connectivity/singtel-algorithm-routing

strong execution track record, Singtel remains a trusted partner for enterprises pursuing secure and agile network transformation in local and global markets.

Conclusion

Singtel's approach to managed SD-WAN and SASE aligns with enterprise demands for flexibility, integration, and operational simplicity. By combining phased adoption models with unified platforms, integrated security, and service orchestration, the company removes barriers that often hinder transformation. Al, automation, and observability further strengthen its ability to maintain consistent performance and manage risks proactively across distributed environments. Additionally, the company's modular, vendor-agnostic approach reflects a clear understanding of enterprise diversity and operational requirements. With deployments proven across industries, Singtel ensures secure, scalable, and future-ready network solutions, setting the benchmark for managed networking excellence in Singapore.

With its strong overall performance, Singtel earns Frost & Sullivan's 2025 Singapore Company of the Year Recognition in the managed SD-WAN and SASE service provider industry.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Recognition is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Recognition Analysis

For the Company of the Year Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed to create growth opportunities across the entire value chain

Visionary Scenarios Through Megatrends:

Long-range scenarios are incorporated into the innovation strategy by leveraging mega trends and cutting-edge technologies, thereby accelerating the transformational growth journey

Leadership Focus: The company focuses on building a leadership position in core markets to create stiff barriers to entry for new competitors and enhance its future growth potential

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate consistent, repeatable, and scalable success

Financial Performance: Strong overall business performance is achieved by striking the optimal balance between investing in revenue growth and maximizing operating margin

Customer Impact

Price/Performance Value: Products or services offer the best ROI and superior value compared to similar market offerings

Customer Purchase Experience: Purchase experience with minimal friction and high transparency assures customers that they are buying the optimal solution to address both their needs and constraints

Customer Ownership Excellence: Products and solutions evolve continuously in sync with the customers' own growth journeys, engendering pride of ownership and enhanced customer experience

Customer Service Experience: Customer service is readily accessible and stress-free, and delivered with high quality, high availability, and fast response time

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty, which is regularly measured and confirmed through a high Net Promoter Score®

Best Practices Recognition Analytics Methodology

Inspire the World to Support True Leaders

This long-term process spans 12 months, beginning with the prioritization of the sector. It involves a rigorous approach that includes comprehensive scanning and analytics to identify key best practice trends. A dedicated team of analysts, advisors, coaches, and experts collaborates closely, ensuring thorough review and input. The goal is to maximize the company's long-term value by leveraging unique perspectives to support each Best Practice Recognition and identify meaningful transformation and impact.

VALUE IMPACT

STEP		WHAT	WHY
1	Opportunity Universe	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	Transformational Model	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	Ecosystem	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	Growth Generator	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	Growth Opportunities	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	Frost Radar	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	Best Practices	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	Companies to Action	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

*Board of Directors, Investors, Customers, Employees, Partners

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About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Generator™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.

Learn more.

Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- Growth Strategies: Proven Best Practices
- Innovation Culture: Optimized Customer Experience
- ROI & Margin: Implementation Excellence
- Transformational Growth: Industry Leadership



The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Megatrend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)

