2024

MARKET LEADER

IN THE GLOBAL CARRIER MANAGED NETWORK SERVICES INDUSTRY

FROST & SULLIVAN

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2024 BEST PRACTICES AWARD

verizon

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Verizon excels in many of the criteria in the carrier managed network services space.

AWARD CRITERIA

Growth Strategy Excellence	Technology Leverage
Implementation Excellence	Price/Performance Value
Brand Strength	Customer Purchase Experience
Product Quality	Customer Ownership Experience
Product Differentiation	Customer Service Experience

Product Differentiation

Businesses increasingly implement advanced networking technologies as part of their digital transformation roadmap to improve processes, increase efficiency, and reduce costs. However, implementing, integrating, and managing these network technologies is a complex task that falls outside most enterprises' expertise. Thus, many businesses are turning to managed network service (MNS) providers to address the complications so they can reap the optimal benefits of these technologies.

> *"Verizon supports its MNS with a team of professionals adept at designing, implementing, and managing these network services per customer requirements. It has 47,000+ network and technology professionals globally supporting individual service and MNS customers. The company serves 4,500+ MNS customers, including Fortune 500 companies, and manages 500,000+ devices worldwide, spanning network, hosting, and security devices."*
>
> *– Amrit Singh*
> *Industry Principal*
> *Enterprise Network*

Verizon Business (Verizon), a global carrier MNS provider, offers a comprehensive network services suite to accommodate the needs of different business sizes. Businesses that engage with an MNS provider prefer to get diverse network products and services under one

umbrella supported by expert IT teams to address their current and future needs. To lead the global MNS market, an MNS provider must have a comprehensive network infrastructure and services portfolio, a robust vendor partner ecosystem (comprising software-defined networking, cloud, security, and devices), and an expert team for professional services.

Verizon offers MNS in 150+ countries. Its expansive network infrastructure, including terrestrial assets, subsea cables, satellite facilities, and 1 million miles of fiber network, helps reach and serve global MNS customers. Verizon's products and services portfolio includes network services (virtual network services, connectivity, private 5G, satellite and device/equipment subscription), diverse security services, voice and collaboration, contact center, the Internet of Things, and 5G edge/multi-access edge computing. Customers can purchase these services individually or as part of an MNS engagement. Verizon has a robust partner ecosystem that strengthens its MNS suite, including Versa, Cisco, Zscaler, Palo Alto, HPE (Aruba) \ Juniper, Netskope, Viptela, and Equinix, along with 100+ OEM partners. Furthermore, these MNS are backed by customer service and artificial intelligence (AI)-enabled observability tools to offer visibility and network management via a self-service portal.

Verizon supports its MNS with a team of professionals adept at designing, implementing, and managing these network services per customer requirements. It has 47,000+ network and technology professionals globally supporting individual service and MNS customers. The company serves 4,500+ MNS customers, including Fortune 500 companies, and manages 500,000+ devices worldwide, spanning network, hosting, and security devices. Verizon also has 18+ network and security operation centers globally to strengthen its delivery experience.

MNS discussions usually start with a dialogue with the professional services team, but customers can also order MNS through Verizon's network-as-a-service (NaaS) platform. NaaS is an excellent integrated platform that allows customers to choose from a range of network services under a single contract through a single portal.

Customer Purchase Experience

The as-a-service model supports flexibility and scalability, access to advanced technology, customization and personalization of products and services, and cost efficiency. The standard as-a-service model includes software-as-a-service, platform-as-a-service, and infrastructure-as-a-service, but the new NaaS integrates all of them to provide a holistic model with a range of services. NaaS offers network services on a pay-as-you-go model, including hardware, software, and services, but the distinction among providers is what services they provide through this model. Unlike Verizon, most service providers offer limited services—usually connectivity—through their NaaS model.

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Verizon's comprehensive MNS suite underlies its ability to offer a solid NaaS solution. Its NaaS model offers a range of hybrid networking options with virtual solutions built on OpenStack to provide a competitive delivery approach. Verizon's NaaS model is

supported by its extensive expertise in solution designing, which provides customized solutions per customer needs. The services offered through the model include Ethernet, Internet, broadband, multiprotocol label switching, Secure Cloud Interconnect (SCI), managed secure access service edge, fixed wireless access, virtual network services, managed local area network (LAN), and managed wireless LAN.

In 2023, the premier industry organization MEF awarded Verizon the Best North American NaaS Provider, and Frost & Sullivan awarded Verizon the 2024 Global Competitive Strategy Leadership Award for NaaS, exhibiting Verizon's stronghold in the emerging NaaS solution space.

Customer Ownership Experience

Verizon's success in MNS is supported by its superior customer ownership experience through the customer portal. The customer portal, Verizon Enterprise Center (VEC), is a bouquet of digital tools that simplify service management through a dynamic network manager, software-defined wide area network (SD-WAN) dashboard, voice over Internet Protocol (VoIP)-integrated administrative console, and wide-area network (WAN) analysis. The dynamic network manager enables bandwidth changeability in private IP and SCI connections and priority traffic routing. The SD-WAN dashboard and WAN analysis allow capacity assessment and performance management and generate trend reports to plan capacity needs. The VoIP-integrated administrative console manages real-time changes to VoIP services. Apart from these digital tools, VEC offers standard services, including order (order and compare service prices), pay (invoices and billing), monitoring (network and inventory health), and analyzing (network data assessment) across services. In addition, the portal allows customers to view their services, initiate trouble tickets, view the status of their trouble tickets, and perform self-serve functions.

Further enhancing VEC capabilities, Verizon developed a global automated ecosystem that incorporates MNS with multiple subsystems, bringing various service administrative functions under one umbrella; for instance, integrating trouble ticketing systems of multiple domestic and international carriers to isolate and repair faults faster than manual systems; and a global customer premise equipment inventory system to track the status of all customers' equipment and their configurations. Integrating various subsystems enables all service management in one place, eliminating the complexity of managing different portals for individual services.

Technology Leverage

The evolving technological landscape gives businesses numerous choices to improve their processes and outcomes. MNS providers also utilize these technologies internally; for instance, they integrate AI in network functions to automate and optimize various processes, including enhanced security, improved customer experience, and cost reduction. Verizon is at the forefront of implementing AI in its network functions and processes. It has integrated AI and machine learning (ML) in its SD-branch solution for faster deployment and easy management of multiple devices. In addition, Verizon introduced new AI tools in customer service products to minimize overload and enhance efficiency. For instance, integrating tools to automate the sales representative and customer interaction processes like scheduling meetings and creating follow up tasks to help measure effectiveness of meetings and improve the customer experience.,

Verizon offers AI-enabled tools for network observability, including end-user experience monitoring to gain user perspective, WAN analysis reporting for performance management, and AIOps insights reporting

and analytics platform to bridge wireline and wireless access environments. The company also invested in advanced analytics for capacity, fault, performance, and predictive analytics for LAN deployment using AI/ML-based models. Moreover, the company invested in a scalable service assurance framework to improve service assurance alerts/tickets across customer tenants and various LAN, WAN, and security services. These tools and frameworks power Verizon's MNS suite as they make it easy and efficient to manage network services from both Verizon's and customers' perspectives.

Growth Strategy Excellence

Verizon goes to market with a value proposition that includes its 30+ years of expertise in managing customer networks, which exhibits customer trust, agility to deliver complex network projects across business sizes, and scalability to serve global customers.

To strengthen its MNS growth strategy, Verizon partnered with IT services firm HCLTech in late 2023 to leverage its expertise in managed services. Verizon will continue to design and sell its managed services portfolio to customers, leveraging its vast network infrastructure and partner ecosystem. Meanwhile, HCLTech will handle the "day two" operations, including managed service support and delivery. The partnership enhances operational capability by delivering optimized services in information and operational technology. Moreover, the collaborative approach to using shared resources, expertise, and technologies helps address customer's evolving network service needs. In addition, HCLTech brings its network automation expertise to deliver a digitized experience to customers using AI and ML models. Verizon has already integrated AI into some of its network functions, and HCLTech's automation expertise will further strengthen its automation capabilities.

Verizon has also focused on the sports and entertainment industry with its MNS suite. A prime example is the 2023 National Football League (NFL) season, where Verizon introduced live coach-to-coach communications in all 30 NFL stadiums. Based on managed private wireless solutions, this pioneering move was an industry first and set a new standard for the future. Some recent large MNS contracts include the Department of the Navy of the United States, which selected Verizon for providing wireless devices and services for a contract value of close to $2.67 billion for 10 years, and the Commonwealth of Virginia, for which Verizon implemented managed SD-WAN to 1,000 sites, strengthening its digital landscape.

Brand Strength

Verizon, a renowned global brand, understands its responsibility toward communities and the environment. It actively focuses on lowering carbon emissions, reducing almost 24% of emissions under Scope 1 and 2 and 15% under Scope 3 from 2019 to 2022. Verizon set its target to achieve net-zero operational emissions under scope 1 and 2 by 2035. Furthermore, the company plans to reach its target of using 100% electricity generated from renewable resources by 2030. As part of its mandate for community reform, Verizon has provided digital skills training, online courses, and grants to youth and small businesses to prepare them to thrive in today's digital world.

Conclusion

Verizon offers and delivers a comprehensive MNS suite leveraging its extensive fiber footprint and partner ecosystem in over 150 countries. These network services are supported by its VEC portal, which allows customers to access and manage services as a self-service. Verizon has integrated AI into network solutions to increase operational efficiency and provide excellent customer experience. The company partnered with HCLTech to leverage its AI expertise to simplify and enhance network functions. In addition, Verizon's NaaS is an excellent solution and is also recognized by industry forums.

Verizon earns Frost & Sullivan's 2024 Global Market Leadership Award for its strong overall performance in the carrier managed network services industry.

What You Need to Know about the Market Leadership Recognition

Frost & Sullivan's Market Leadership Award recognizes the company that achieved the greatest market share resulting from outstanding performance, products, and services.

Best Practices Award Analysis

For the Market Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Growth Strategy Excellence: Company demonstrates an ability to consistently identify, prioritize, and pursue emerging growth opportunities

Implementation Excellence: Company processes support efficient and consistent implementation of tactics designed to support the strategy

Brand Strength: Company is respected, recognized, and remembered

Product Quality: Products or services receive high marks for performance, functionality, and reliability at every stage of the life cycle

Product Differentiation: Products or services carve out a market niche based on price, quality, or uniqueness (or some combination of the three) that other companies cannot easily replicate

Technology Leverage: Company is committed to incorporating leading-edge technologies into product offerings to enhance product performance and value

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers are proud to own the company's product or service, and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and of high quality

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 Engine™

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:

■ Mega Trend (MT)

■ Business Model (BM)

■ Technology (TE)

■ Industries (IN)

■ Customer (CU)

■ Geographies (GE)