2022 MARKET LEADER

NORTH AMERICAN MANAGED SD-WAN INDUSTRY
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. AT&T excels in many of the criteria in the managed SD-WAN space.

AWARD CRITERIA

<table>
<thead>
<tr>
<th>Growth Strategy Excellence</th>
<th>Technology Leverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Excellence</td>
<td>Price/Performance Value</td>
</tr>
<tr>
<td>Brand Strength</td>
<td>Customer Purchase Experience</td>
</tr>
<tr>
<td>Product Quality</td>
<td>Customer Ownership Experience</td>
</tr>
<tr>
<td>Product Differentiation</td>
<td>Customer Service Experience</td>
</tr>
</tbody>
</table>

Growth Strategy Excellence

Software Defined Wide Area Network (SD-WAN) is an increasingly popular software approach to managing, provisioning, and controlling the underlying enterprise network technologies, which can be direct internet, wireless, broadband, Ethernet, or Multi-Protocol Label Switching (MPLS). To reap the benefits of SD-WAN, most organizations utilize a mix of these technologies. SD-WAN separates control and management from data or traffic flows; therefore, the controllers and management software can be implemented in the edge, cloud, or traditional data center. Like Internet protocol security (IPSEC) technologies, SD-WAN has tunnels that connect the customer device to the controllers, where the “intelligence” of the software can define traffic routes, priority, and management.

“One reason for AT&T’s success in the SD-WAN market is its extensive global network, which extends to over 200 countries and territories. The company is a leader in many enterprise network technologies, including MPLS, Ethernet, dedicated Internet access, and optical waves, which provides a solid connectivity base within the network services portfolio.”

- Stephen Thomas, Senior Industry Director

With an estimated 100,000 connections under management, AT&T is the market leader in the managed SD-WAN industry. As an early entrant to the market, AT&T is a strong driver of market growth. One reason for AT&T’s success in the SD-WAN market...
is its extensive global network, which extends to over 200 countries and territories. The company is a leader in many enterprise network technologies, including MPLS, Ethernet, dedicated internet access (DIA), and optical waves, which provide a solid connectivity base within the network services portfolio. Furthermore, AT&T does offer wireless internet in over 70 countries. This is particularly important, as the recent Frost & Sullivan SD-WAN survey indicates that the most common setup deployed by enterprises is DIA with 4G and 5G backup. AT&T highlighted that one of its clients has a 6000+ site SD-WAN deployment which uses nearly 85% wireless access; this demonstrates why a solid network underlay helps win the SD-WAN overlay platform as well.

Frost & Sullivan notes that AT&T’s success in network and managed services has enabled it to capture large, distributed enterprises — including a client with 18,000 sites, which is equivalent to a mid-sized managed service provider’s total connections.

As part of its growth strategy, the company focuses on vertical markets that are well-served by SD-WAN, including retail; AT&T offers support for pop-up stores with transportable Point of Sale (POS) kits, making it simple for remote storefronts to deploy SD-WAN. AT&T also enables retailers to split traffic by application types, e.g., guest wi-fi, POS, video, and surveillance, enabling each application to be routed across the network technology that delivers optimal price performance.

**Implementation Excellence**

AT&T offers SD-WAN as fully managed and co-managed services, providing clients with flexibility and control over their SD-WAN deployments. SD-WAN contractual options include “try before buy” and “paid buy and try experiences” with short contract terms. This way, additional flexibility is provided, as well as the certainty that implementation is successful.

In addition, AT&T offers quick turnarounds on the implementation of certain access layer technologies. For instance, a switched ethernet implementation can be as short as 10 days. For DIA, the company offers build-out at no cost to the client if the installation is within 1000 feet of an AT&T fiber hub. Some DIA implementations are completed in as few as 3 days. For clients deploying both internet and ethernet, AT&T combines the two services with an integrated port. Wireless broadband can be used for backup or as a quick start option in 75% of use cases; this allows the clients to turn up services while waiting for the primary fixed access circuit to be installed.

**Technology Leverage / Product Differentiation**

AT&T’s SD-WAN offers flexible technology options, including its own AT&T Universal CPE (uCPE), a generic server placed on customer premises that supports multiple Virtual Network Functions. In addition, AT&T partners with leading technology vendors: to maximize flexibility and choice for customers. AT&T clearly differentiates itself with multiple SD-WAN and Secure Access Secure Edge (SASE) platforms, including Aruba, Cisco, VMware, Fortinet, and Palo Alto Networks, while in parallel investing to simplify its portfolio.

“To maximize flexibility and choice for customers, AT&T has partnered with many SD-WAN and Secure Access Secure Edge (SASE) platforms including Aruba, Cisco, VMware, Fortinet, and Palo Alto Networks. Many of the competitors offer only two to three vendor choices, which is why AT&T is the clear leader in leveraging various technologies to maximize its portfolio.”

- Stephen Thomas, Senior Industry Director
and make it more integrated. Many competitors offer only two to three security and networking vendor choices, which is why AT&T is the clear leader in leveraging various technologies to maximize its portfolio. Additionally, AT&T takes advantage of existing client deployments with these vendors and extends security offerings. SASE represents the progression of SD-WAN, combining network services and security services like firewalls, intrusion detection, prevention, and security gateways at the hubs and endpoints. Partnering with leading security and networking vendors positions AT&T quite well to win clients with its extensive portfolio of network solutions, and it also takes advantage of existing client deployments with these vendors and extends the security offering.

Enterprises more and more often host applications in the cloud, edge, and corporate data centers, as well as allow employees to work remotely. To support these hybrid configurations, AT&T has multi-cloud connectivity already pre-provisioned at AT&T’s 750 plus global on-net cloud locations. The company boasts a strong partner network, including its main partner, Equinix, to provide a product called a Total Access Orchestration (TAO) platform. TAO is a virtualized network infrastructure platform that allows easy integration into 500 different cloud service providers through Equinix. This allows AT&T to bring connectivity closer to where the applications are located and extend the SD-WAN to Equinix’s robust partner network.

**Customer Service Experience**

AT&T’s business center online portal offers customers transparency and control over their networks. A comprehensive portal is essential for effective SD-WAN services, because it offers access to the management and control layers of the SD-WAN software, as well as visibility into the underlying network technologies for health and performance information. In addition, its integration with other services, such as voice, unified communications, Internet of Things (IOT), and cloud platforms, ensures a consistent customer experience. The company’s on-demand offering of software-defined network (SDN) gives customers the ability to procure dynamic bandwidth across its portfolio of AT&T Switched Ethernet, AT&T MPLS VPN, and AT&T DIA, thus increasing flexibility in WAN provisioning. AT&T has a strong focus on customer experience, and in 2021, it started an organization-wide effort to collapse all their IT Service Management platforms into one for a more seamless and frictionless customer experience.

**Brand Strength**

AT&T is among the top 10 US brands, according to [Brand Finance](https://www.brandfinance.com). The brand itself is valued at $47 billion and is well respected in the industry and within its client base. AT&T serves nearly all of the Fortune 1000 companies and possesses a strong commitment toward corporate social responsibility. AT&T also invests in local communities, supporting programs such as its signature education initiative, AT&T Aspire. AT&T Aspire is a $100 million initiative focused on raising high school graduation rates and preparing students for college and careers through the AT&T/Junior Achievement Worldwide Job Shadow Program. Specifically, the company reports that more than 23,000 students in over 200 cities have participated since the initiative began in 2008. It is the largest corporate job shadowing partnership that Junior Achievement has ever launched. For all of these reasons, Frost & Sullivan appreciates AT&T’s brand strength and support to the local communities.
Conclusion

Frost & Sullivan recognizes AT&T’s hybrid and forward-looking approach to enterprise digital transformation. AT&T has a strong base of network assets to leverage across the SD-WAN portfolio, strong partnerships with leading SD-WAN vendors, as well as an enhanced Virtual Network Functions platform. The superior focus on cloud providers and pre-provisioned integrations positions AT&T quite well in this portfolio.

AT&T as a market leader can target a wide range of customer segments by giving them the choice to deploy services that best suit their price points and application requirements. The approach is particularly significant to drive managed SD-WAN adoption, as businesses of all sizes re-assess and optimize their technology spending. With its strong overall performance, AT&T earns the 2022 Frost & Sullivan North American Market Leadership Award in the managed SD-WAN 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)