FROST & SULLIVAN

2024 CUSTOMER VALUE LEADER

IN THE GLOBAL CARRIER
MANAGED NETWORK
SERVICES INDUSTRY

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BEST

2024 PRACTICES

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 carrier MNS space.

AWARD CRITERIA	
Business Impact	Customer Impact
Financial Performance	Price/Performance Value
Customer Acquisition	Customer Purchase Experience
Operational Efficiency	Customer Ownership Experience
Growth Potential	Customer Service Experience
Human Capital	Brand Equity

Extensive Network Presence and Comprehensive Network Services Portfolio Power AT&T's Position in Global Carrier MNS

With 145 years of history in telecommunications services, AT&T is a prominent global network services

"AT&T powers its MNS suite with a team of 750+ engineers with 20+ years of diverse industry experience in implementing and managing complex engagements. The company has regional offices in Europe, Latin America, the Middle East, Asia-Pacific, and the United States to serve global MNS customers while delivering superior customer experience."

Amrit SinghIndustry PrincipalEnterprise Network

provider present in 200+ countries. The company reported \$122 billion in revenues in 2023, with nearly 1.5% growth over 2022, while other service providers reported a decline or sustained growth. This indicates the strategic focus of AT&T's leadership on strengthening its network infrastructure (fiber and 5G) while simplifying products, processes, and support functions.

Building on its uniquely strong and extensive core network, AT&T offers a wide selection of network products and services that form the

basis for an MNS suite that meets the network services needs of various businesses. Its product and services portfolio includes:

• Networking services (business Wi-Fi, software-defined wide area network [SD-WAN], Ethernet)

- Cloud connectivity (on-demand, managed cloud connect)
- Business internet (dedicated internet, shared internet, and business wireless)
- The Internet of Things
- Voice and collaboration (unified communications, business phone)
- Business 5G solution (private wireless)

A robust partner ecosystem for software-defined networks, cloud services, operations support systems (OSS)/ business support systems (BSS), security, and devices supports these services. Partners include Cisco, VMware, HPE Aruba (SD-WAN), Palo Alto Prisma and Zscaler (SSE), and Amdocs (OSS/BSS).

With 1.4 million+ fiber route miles worldwide, AT&T's network presence strengthens its global MNS position. It is present in over 760 on-net data centers globally, including over 565 carrier hotels in the United States, and offer connectivity speeds up to 400 Gbps. Frost & Sullivan's analysis finds that an MNS customer usually starts with one or more network services (e.g., security or connectivity) before shifting to co-managed or fully managed services. The transition percentage (attach rate) is between 20% and 30%. This indicates AT&T's strength in its network services portfolio and vast network presence are crucial for maintaining its leading global MNS provider position and acquiring MNS customers.

Network products and services offered as MNS are complemented by consulting/advisory services and professional services teams, usually comprising sales engineers. The consulting team is the most crucial aspect of MNS because they are the first to discuss with the potential customer about their existing network infrastructure and suggest the best solution and strategy to achieve their network goals. AT&T powers its MNS suite with a team of 750+ engineers with 20+ years of diverse industry experience in implementing and managing complex engagements. The company has regional offices in Europe, Latin America, the Middle East, Asia-Pacific, and the United States to serve global MNS customers while delivering superior customer experience.

AT&T Labs and Consulting Services Team Enhance the Customer Purchase Experience

AT&T delivers a superior customer purchase experience for MNS customers through its proof-of-concept (PoC) product showcase labs, which underscores "partnering to transition from concept to deployment." The lab simulates a prospective customer's network operation and compares how efficiently it runs after transitioning to AT&T. The lab enables customer-specific use case testing and develops migration strategies while ensuring a successful implementation that meets customer expectations. AT&T PoC labs provides an excellent opportunity for customers to assess the benefits of collaborating with AT&T. Frost & Sullivan acknowledges AT&T PoC labs as a distinctive proposition in the global MNS market, enabling customers to perform a value analysis for partnering with AT&T.

AT&T's consulting team has vast experience delivering complex projects and vertical-specific expertise. After the initial conversation with the customer, the consulting team of expert engineers analyzes the customer's existing network architecture, recommending changes in architecture and conferring on integration with AT&T services. The next step is to design and develop the migration plan and align it with customer requirements. Then comes testing/examining the solution (proof of concept testing) and

recommending an alternative if the test solution fails to deliver the expected results. Once the solution meets expectations, it is ready for implementation and later supported by the customer services team. The whole process—from initiation to implementation and support—varies depending on the customer's existing infrastructure and requirements.

Embedding Artificial Intelligence/Machine Learning in Network Function Increases Operational Efficiency

Service providers are using artificial intelligence (AI) and machine learning (ML)-based models to amplify their network management capabilities, which help deliver an enhanced experience to MNS customers with automated tasks. AT&T has been using AI for many years and has embedded AI throughout different

"AT&T uses AI automation to reduce energy consumption and carbon footprint during cell sleep (periods with low traffic) when the capacity is not needed. This has contributed to AT&T's sustainability initiative. Integrating AI/ML models is critical to streamlining network operations while reducing energy consumption results in cost savings and can be attractive to potential MNS customers."

- Amrit Singh Industry Principal Enterprise Network business functions, which strengthens its business processes and operations. For instance, when planning and designing network expansion, AT&T uses AI-based models that predict expected traffic, capacity, and required spectrum at a particular location, which simplifies designing a cell site.

AT&T also uses AI/ML-based predictive analytics to examine network operations in near real-time, auto-heal networks, configure complex network environments, and manage capacity requirements per customer needs. In addition,

AT&T uses Al automation to reduce energy consumption and carbon footprint during cell sleep (periods with low traffic) when the capacity is not needed. This has contributed to AT&T's sustainability initiative. Integrating AI/ML models is critical to streamlining network operations while reducing energy consumption results in cost savings and can be attractive to potential MNS customers.

Frost & Sullivan applauds AT&T's efforts to strengthen its product portfolio through AI integration and partnering with diverse vendors, which solidify its position as a global MNS leader.

Diversified Product Portfolio Delivers a Positive Ownership Experience

AT&T provides satellite connectivity and private wireless (4G/5G) services, which is a differentiator because not all MNS providers offer these services. With the increasing focus on security and business reach, satellite connectivity and private wireless provide an edge to an MNS customer with global branch locations and offices in remote locations. Private wireless enables higher reliability, efficiency, coverage, and security, suitable for sectors emphasizing security, including government organizations. AT&T has been offering satellite connectivity for the past few years and now offers Low Earth Orbit connectivity services in 28 countries and the US. AT&T recently partnered with AST SpaceMobile to offer space-based direct to cellular device services in the future. This addition will power its MNS capabilities—especially for customers with remote locations to remain connected—avoiding business disruption due to communication failure. This relationship also extends AT&T's expansive connectivity.

Superior Customer Service Experience Through Self-service Tools

Customer portals enable visibility on network services and operations for a single-service customer and an MNS customer. With evolving technology, customers prefer value-added services from their service providers—including proactive, always-on support; improved engagement; effective automation; enhanced analytics; and visibility—enabling them to respond to changing business needs. AT&T allows customers to manage all their network access services in one place via the Business Center portal. The Business Center portal is another aspect that differentiates AT&T's offerings. It uses single sign-on for all services, making it easy for customers to manage the services purchased.

Through the Dynamic Exchange feature accessible via the Business Center portal, customers can choose the port and cloud partner they want to connect with. Dynamic Exchange, offered to customers with existing AT&T Switched Ethernet Service with Network on Demand and virtual private network, is a programmable virtual network connection that allows businesses to connect to the cloud and thousands of points of presence in the United States using an on-demand platform. Dynamic Exchange does not require a new contract or term commitment. Frost & Sullivan finds Dynamic Exchange a unique service in the market.

AT&T offers several service tools to its MNS customers, including business center support, live agent conversations, online chat support (enterprise virtual assistant), and express ticketing while continuously informing customers of progress via their preferred communication method (text, chat, email, or call). The focus is to deliver real-time status updates while being transparent. AT&T's focused investment in automated tools to improve customer experience resulted in 97% first-contact resolution.

Community Investment Strengthens Its Brand Value

The world's most respected companies contribute to social welfare as part of their responsibility toward the community, empowering underprivileged sections and bringing them into the mainstream. AT&T is one of the most admired brands worldwide and continues to invest in different initiatives to promote the wellness of society.

Firstly, to bridge the digital divide, AT&T committed to spend an additional \$3 billion on top of its initial \$2 billion from 2021 to 2023. In its renewed commitment, the company aims to spend \$5 billion connecting 25 million people in the United States to the internet by 2030. The additional \$3 billion will primarily focus on affordability and increasing internet adoption. It is a multi-year initiative where the company introduced different programs, such as AT&T Connected Learning, to benefit students and families in under-resourced neighborhoods by removing connectivity barriers. More than 5 million Americans, including low-income students and families, have benefited from these programs since 2021. The following initiatives are part of this \$5 billion commitment:

- AT&T plans to open 100 Connected Learning Centers by 2027. The company has opened over 50 centers, serving 33,000 underserved students and families with free access to high-speed internet, computers, and education and mentoring resources, all under one roof.
- AT&T contributes \$50,000 to each Connected Learning Center, equipping it with AT&T internet, and Dell Technologies supports it with technology, including configuration, installation, OptiPlex

desktop PCs, integrated audio, and webcams. Dell Technologies has been AT&T's key technology collaborator since the inception of Connected Learning Centers in 2021.

In addition, the company offers discounted wireless solutions to 135,000+ public and private educational institutions. It has also expanded network coverage and opened Connected Learning Centers in tribal areas, including the Pinoleville Pomo Nation and Rincon Band of Luiseno Indians in California and the Cherokee Nation in Oklahoma.

Frost & Sullivan considers AT&T's community initiatives and focus on bridging the digital divide by supporting underprivileged and local communities in the United States exemplary.

Conclusion

AT&T offers great value to customers through the depth and breadth of its product and services suite, extensive network infrastructure, and vastly experienced consulting and professional services team that can deliver complex network projects. To deliver an enhanced customer experience, AT&T has automated network functions by embedding AI/ML into network operations, providing customers with observability tools and reducing incident response time. In addition, AT&T PoC labs is a distinctive feature that enables customers to evaluate the value of working with AT&T.

With its strong overall performance, AT&T earns Frost & Sullivan's 2024 Global Customer Value Leadership Award in the carrier managed network services industry.

What You Need to Know about the Customer Value Leadership Recognition

Frost & Sullivan's Customer Value Leadership Award recognizes the company that offers products or services customers find superior for the overall price, performance, and quality.

Best Practices Award Analysis

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

Business Impact

Financial Performance: Strong overall financial performance is achieved in terms of revenues, revenue growth, operating margin, and other key financial metrics

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

Customer Impact

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 proudly 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 high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

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 $^{\text{TM}}$.

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

OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Adapt strategy to changing market dynamics and unearth new opportunities PLANNING & IMPLEMENTATION Execute strategic plan with milestones, targets, owners and deadlines OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis opportunities OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis opportunities GROWTH PIPELINE ENGINE™ GO-TO-MARKET STRATECY Translate strategic alternatives into a cogent strategy

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)

