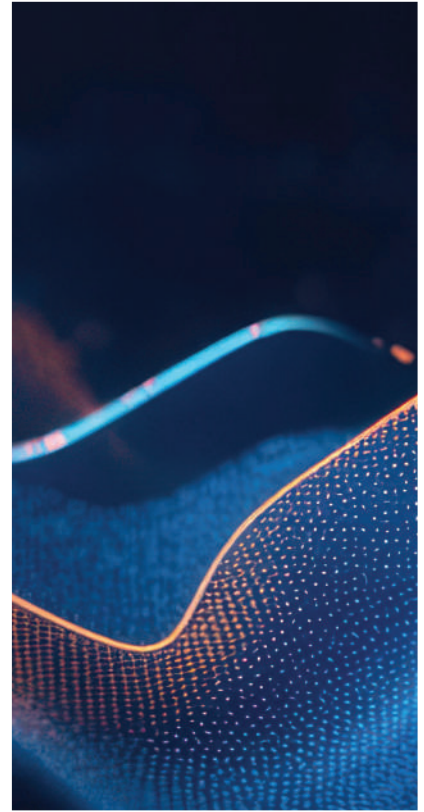
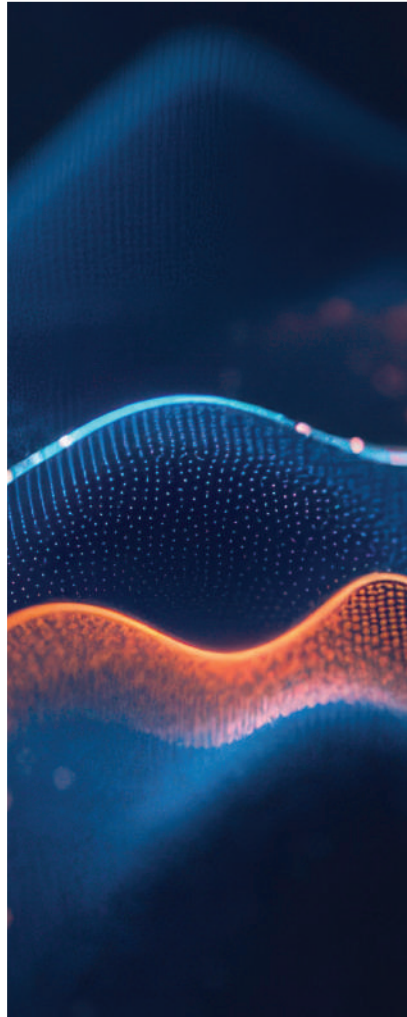


FROST & SULLIVAN  
BEST PRACTICES



2026

NORTH AMERICAN DEDICATED  
INTERNET ACCESS

**COMPANY OF THE YEAR**

LUMEN®

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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. Lumen excels in many of the criteria in the North American DIA space.

RECOGNITION CRITERIA	
<i>Visionary Innovation &amp; Performance</i>	<i>Customer Impact</i>
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

### The Transformation of the Dedicated Internet Access (DIA) Industry

DIA has become a core component of enterprise digital transformation, providing the reliable, high capacity connectivity required to support cloud adoption, distributed IT environments, and mission critical applications. As enterprises modernize their network architectures, demand for uncontended, business grade internet access continues to increase, reinforcing DIA’s role as foundational connectivity infrastructure.

In North America, growing adoption of SD WAN has emerged as a structural demand driver for DIA, as enterprises prioritize application performance, network agility, and cloud centric operating models. DIA has solidified its position as the preferred underlay for SD WAN deployments, strengthening long term market growth prospects. Deployment activity remains resilient across both retail and wholesale segments, with wholesale DIA and IP transit enabling carriers and integrators to extend enterprise reach through local access and backbone connectivity.

Despite its maturity, the North American DIA market is expected to sustain growth, supported by bandwidth intensive collaboration tools, deeper cloud and data center interconnection, AI driven workloads, and expanding hybrid work models. Concurrently, the market continues to shift toward higher capacity circuits, with 1 gigabits per second (Gbps) increasingly standard and rising demand for 10 Gbps and 100 Gbps among data intensive industries.

Lumen has long held a leadership position in the North American DIA market. While the company faced a significant downturn at the beginning of the decade, this period catalyzed a broad strategic

transformation that is now delivering tangible results and restoring momentum across its core connectivity businesses. Its improved performance reflects the successful alignment of large scale network assets with disciplined operational execution and a digitally driven strategy. High capacity DIA services, an extensive fiber footprint, AI enabled network operations, and flexible digital purchasing models collectively enhance service quality, customer experience, and differentiation within an increasingly competitive and mature DIA landscape.

## Leadership Focus

Over the past several years, Lumen has executed a multifaceted restructuring strategy aimed at sharpening its focus on the North American B2B market. Following the divestiture of its European and Latin American operations, the company has prioritized portfolio simplification, balance sheet optimization, and reinvestment in core growth areas. Between 2024 and 2026, Lumen accelerated debt reduction efforts while advancing a transformation centered on fiber network expansion and digital enablement, including Network-as-a-Service capabilities. This strategic realignment, led under the continued leadership of CEO Kate Johnson, positions Lumen to drive more sustainable, capital-efficient growth as enterprise demand for high-performance connectivity intensifies.

## Customer Service Experience

*“Artificial intelligence has emerged as a defining megatrend shaping the future of enterprise networking, influencing how service providers design, operate, and monetize connectivity services. Lumen is aligning its DIA strategy with this trend by embedding AI-driven capabilities across both customer-facing and internal operational domains.”*

**- Leandro Agion,  
Industry Director**

Enterprises adopting Dedicated Internet Access (DIA) increasingly require business-grade connectivity that delivers symmetrical bandwidth, high availability, and consistent performance backed by strict service-level agreements (SLAs). These requirements have intensified as DIA serves as a foundational enabler for cloud connectivity, SD-WAN architectures, and mission-critical enterprise applications. As a result, service reliability, proactive network management, and operational execution have emerged as key decision criteria in the mature US DIA market.

Lumen is positioned to address these requirements through its extensive IP backbone and scalable DIA portfolio, offering bandwidth options ranging up to 400 Gbps. This scalability enables the company to support a broad spectrum of enterprise customer profiles, including those with bandwidth-intensive and latency-sensitive workloads. The integration of proactive threat monitoring and mitigation capabilities through Black Lotus Labs further strengthens the resilience of Lumen’s DIA services by addressing security risks at the network level.

Network scale and architectural design remain central to Lumen’s competitive differentiation. The company operates approximately 340,000 global route miles of fiber and serves around 163,000 on-net buildings, supported by broad off-net access across North America and select international markets. Its dense and distributed metro network architecture, combined with substantial peering capacity, allows for efficient traffic routing with fewer network hops, contributing to predictable performance, lower latency, and improved service reliability.

Operational excellence has become an increasingly important factor in the North American DIA landscape, where infrastructure capabilities alone are no longer sufficient to sustain differentiation. Over the past two years, Lumen has made measurable improvements in service delivery and customer experience through faster provisioning processes, expanded use of AI-driven network operations, and enhancements to digital customer engagement tools. These initiatives have contributed to higher customer satisfaction levels, reflected in improved Net Promoter Scores (NPS) and stronger service delivery metrics, such as reduced provisioning intervals and lower incident volumes.

Collectively, these factors strengthen Lumen's performance profile in the North American DIA market and position the company to capture incremental demand as enterprises continue to migrate toward higher-capacity, performance-driven connectivity models.

### Customer Purchase Experience

Digital purchasing capabilities and commercial flexibility are becoming increasingly important differentiators in the mature DIA market. Enterprises are seeking more agile and transparent ways to procure and manage connectivity, aligning network consumption models more closely with the on demand characteristics of cloud services. In this context, Lumen has enhanced its DIA value proposition through flexible billing options and a digital first commercial model enabled by Lumen Marketplace.

Through its marketplace, Lumen allows enterprise customers to configure, price, and purchase DIA services via a self-service model, complementing its broader ecosystem of APIs and its Control Center customer portal. In addition to DIA, customers can provision adjacent network services, including Ethernet and IP VPN, as well as value added offerings such as managed security, SD WAN, cloud connectivity, and edge computing.

Looking ahead, flexibility represents a significant growth opportunity within the DIA market. Although most DIA services are still delivered via fixed bandwidth contracts, enterprises are showing growing interest in usage based and on demand connectivity models. Lumen's Internet On Demand capability allows customers to dynamically scale bandwidth and pay based on actual usage, addressing emerging requirements for burstable or time-based capacity to support temporary projects, special events, and disaster recovery scenarios.

### Visionary Scenarios Through Megatrends

Artificial intelligence has emerged as a defining megatrend shaping the future of enterprise networking, influencing how service providers design, operate, and monetize connectivity services. Lumen is aligning its DIA strategy with this trend by embedding AI-driven capabilities across both customer-facing and internal operational domains. On the commercial side, continued investment in automation and API-enabled interfaces enables wholesale and enterprise customers to digitally query service availability, provision connectivity, and integrate network procurement into their own workflows—an increasingly important requirement as ecosystems become more software-driven.

Operationally, Lumen is applying AI and machine learning to its large-scale AS3356 internet backbone through advanced artificial intelligence for IT operations (AIOps) initiatives. By analyzing vast volumes of real-time network performance data, AI-based models can proactively identify congestion risks, detect

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anomalies, and accelerate root-cause analysis. These capabilities contribute to improved service resilience, reduced latency and packet loss, and faster incident resolution for DIA customers. As networks continue to grow in scale and complexity, AI-driven automation is expected to play an increasingly central role in sustaining service quality and performance.

## Brand Equity

Lumen is a US-based IT and communications service provider formed through the merger of CenturyLink and Level 3 Communications in 2017 and rebranded in

2020. Following the integration, the company undertook a multi-year effort to rationalize its network assets and streamline its product portfolio, sharpening its focus on B2B networking, edge cloud, collaboration, and managed services. Strategic investments in network modernization and advanced technologies have strengthened Lumen’s positioning as a provider of scalable and resilient connectivity solutions. These efforts also support brand loyalty and operational consistency.

## Financial Performance

Lumen’s equity performance rebounded sharply through 2024 and early 2025, reflecting renewed investor confidence following a multi-year decline. This improvement coincided with balance-sheet stabilization and a clearer strategic focus on AI-driven network enablement. Continued investments in AI-ready infrastructure, including Private Connectivity Fabric solutions supporting hyperscalers such as Microsoft and AWS, have reinforced Lumen’s long-term growth narrative. Entering 2026, capital commitments tied to AI networking are expected to generate sustained cash inflows and support valuation recovery. While some financial metrics remain in transition, market sentiment increasingly reflects confidence in Lumen’s repositioning as a key provider of AI-optimized connectivity.

## Conclusion

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Lumen stands out in the US DIA market by combining large-scale network assets with strong operational execution and a forward-looking digital strategy. Its extensive fiber footprint, high-capacity DIA offerings, and AI-driven network operations enable reliable, high-performance connectivity at scale. At the same time, digital purchasing capabilities, flexible consumption models, and a clear focus on AI-ready infrastructure enhance customer experience and service stickiness, reinforcing Lumen’s differentiation in a mature and increasingly competitive DIA landscape.

With its strong overall performance, Lumen earns Frost & Sullivan’s 2026 North American Company of the Year Recognition in the DIA industry.

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

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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 megatrends 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.

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

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

## 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 fueled 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)**

