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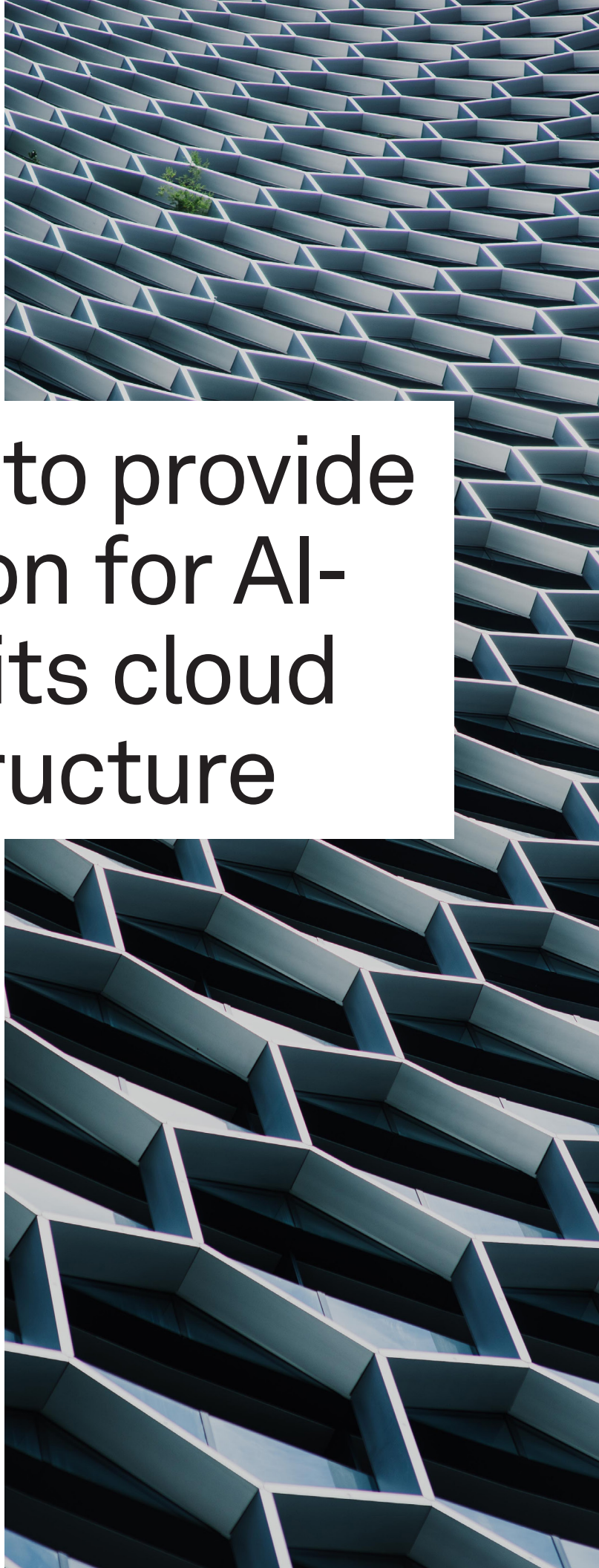
Lumen looks to provide the foundation for AI-ready CX via its cloud voice infrastructure

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by Raul Castanon-Martinez

By embedding AI-ready voice capabilities directly into its low-latency fiber network, the vendor is positioning itself as the essential infrastructure partner for enterprises seeking to power real-time, data-driven customer experiences to modernize legacy voice and data systems.

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Introduction

Lumen Technologies Inc. is transforming its voice infrastructure to power AI-ready customer experiences. Leveraging its ultra-low-loss fiber network along with integrated services like cloud private branch exchanges, contact centers and unified collaboration, the company is modernizing legacy voice and data systems. Strategic moves — including the acquisition of Level 3 Communications in 2016 and recent divestitures — sharpen its focus on scalable, secure connectivity that meets evolving enterprise demands.

THE TAKE

Lumen's strategic pivot is a bet that its core fiber network is the missing link for enterprises struggling to connect legacy systems with AI-powered customer experience tools. While its integrated portfolio is compelling, the vendor's success hinges on proving that its specialized, high-performance infrastructure delivers tangible value beyond the "good enough" bundled tools offered by cloud hyperscalers.

Context

Monroe, Louisiana-based Lumen Technologies (formerly known as CenturyLink) was established in 1968. Serving both domestic and international markets, the company provides integrated connectivity, voice and data services. Its evolution from legacy communications to advanced cloud services has been driven by the \$24 billion acquisition of Level 3 Communications in 2016, as well as the divestitures of its Latin American and incumbent local exchange carrier assets in 2021. These initiatives focus on high-speed internet, virtual private networks, and other network services essential for enterprise, wholesale and government clients.

Strategy and innovation

Lumen's strategy is to leverage its core network not just for voice, but also as a high-speed, low-latency data fabric. This positions its Cloud Voice and unified communications as a service (UCaaS) offerings as the human interface for a broader ecosystem of AI-driven operations, from real-time customer sentiment analysis in contact centers to data processing for internet of things (IoT) sensors at the network edge.

The company's product strategy centers on leveraging its core asset — a 340,000-mile-plus global fiber network — to address key growth areas. These include offering enterprises fast, secure, low-latency cloud connectivity with major cloud suppliers like AWS, Google Cloud and Microsoft Azure. Lumen has thousands of physical real estate locations (e.g., central offices, network nodes) that it is converting to host edge data centers very close to end users and businesses that facilitate nearly instantaneous data processing for IoT, industrial automation and augmented reality. The vendor's approach also includes network security, with services like distributed denial of service mitigation embedded directly within its network fabric.

This strategy aligns with key market trends identified in 451 Research's Voice of the Enterprise: AI & Machine Learning, Use Cases 2025 survey, which shows robust interest in AI-enabled customer experiences. Survey results indicate that over half (58%) of participating organizations are "very interested" in AI agents — i.e., AI-powered agents designed to analyze data, make decisions, and take actions without human intervention — and are actively seeking opportunities to implement them, while an additional 40% are "somewhat interested" in exploring the possibilities of AI (see Figure 1). These trends present a significant opportunity for Lumen to position its cloud voice infrastructure as a foundational piece for AI-ready customer experiences.

Figure 1: Organizations demonstrate strong interest in deploying AI agents

- Very interested: We are actively seeking opportunities to implement AI agents or assistants in our organization.
- Somewhat interested: We are open to exploring the possibilities of AI agents or assistants but have not yet made a formal commitment.
- Not interested: We do not see a significant value proposition in AI agents or assistants for our organization at this time.
- Undecided: We are still evaluating the potential benefits and drawbacks of AI agents or assistants.



Source: 451 Research's Voice of the Enterprise: AI & Machine Learning, Use Cases 2025.

Q. How interested is your organization in exploring the potential of AI agents and assistants to enhance your operations?

Base: All respondents (n=1,006).

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Products

Lumen Cloud Communications is a nationwide cloud private branch exchange that offers PBX or business-line replacement for voice, while also including collaboration capabilities. Customers can buy it over the top with their existing internet provider or optimized with Lumen Internet service. Services includes Lumen Cloud Voice; Lumen Specialty Lines, which offer cloud connectivity for life, health and safety systems; and Lumen Cloud SIP. Lumen Communications is being expanded with Lumen Cloud Contact Center, as well as unified communications/collaboration offerings (e.g, Zoom, Microsoft Teams, Webex) and contact centers (Genesys, Talkdesk).

Competition

Lumen Technologies vies with vendors across several categories. These include UCaaS vendors RingCentral Inc. and 8x8 Inc., which contend based on feature-rich all-in-one voice, video and contact-center platforms. The company also competes with API-first specialists such as Twilio Inc. and Bandwidth Inc. for developer mindshare and custom-built tools. Further rivalry comes from hyperscalers AWS (Amazon Connect), Microsoft Corp. (Teams Phone) and Google, all of which offer integrated tools on their own clouds.

SWOT Analysis

<p>STRENGTHS</p> <p>Its extensive global fiber network and direct, secure connectivity to major cloud suppliers, coupled with its integrated cloud communications portfolio, position Lumen as a one-stop provider enabling businesses to make the jump into next-generation communications and connectivity. The vendor's extensive footprint and established enterprise customer base offer scale and credibility in a competitive market.</p>	<p>WEAKNESSES</p> <p>Lumen's historical legacy as CenturyLink entails a perception risk. Overcoming its legacy brand identity and proving its transformation into an agile, innovative partner remains a key challenge in convincing enterprise buyers.</p>
<p>OPPORTUNITIES</p> <p>The company's network infrastructure, which facilitates high-speed, low-latency connectivity, should help it capitalize on emerging trends such as AI-enabled customer experiences, IoT, industrial automation and augmented reality.</p>	<p>THREATS</p> <p>Platform commoditization remains a looming threat. Intense competition from hyperscalers AWS, Microsoft and Google could commoditize connectivity and voice, forcing Lumen to clearly articulate the return on investment of its premium, network-centric approach versus cheaper, bundled alternatives.</p>

CONTACTS

Americas: +1 800 447 2273

Japan: +81 3 6262 1887

Asia-Pacific: +60 4 291 3600

Europe, Middle East, Africa: +44 (0) 134 432 8300

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