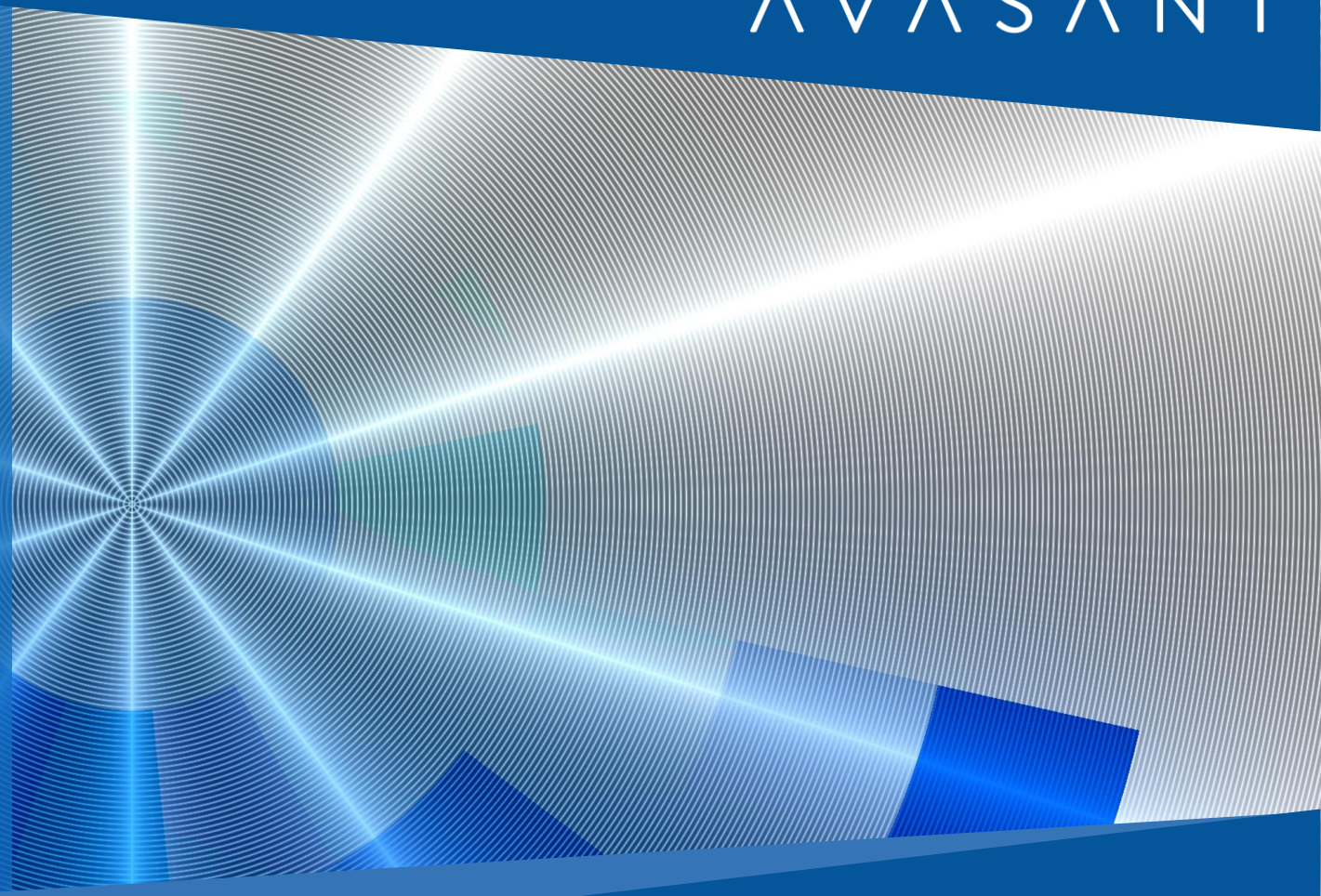
Advanced Network Services 2025 RadarView™

Redefining advanced network services with Gen AI and agentic AI

June 2025



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About the Advanced Network Services 2025 RadarView

1. To address the growing enterprise need for autonomous network management, service providers are integrating generative AI (Gen AI) and agentic AI across their advanced network services portfolio, especially in monitoring and support services. This shift enables proactive and predictive vulnerability management, policy-driven incident remediation, assisted troubleshooting, and capacity planning to enhance network reliability and operational efficiency.

2. Avasant evaluated 40 providers using a rigorous methodology across the key dimensions of practice maturity, partner ecosystem, and investments and innovation. Through our analysis, we recognized 21 providers that brought the most value to the market over the past 12 months.

3. The *Advanced Network Services 2025 RadarView* aims to provide a view into the leading service providers for advanced network services. Based on our methodology, these service providers are categorized into four broad segments: leaders, innovators, disruptors, and challengers.

4. To enable decision-making for enterprises, Avasant has provided an overview of the major advanced network service providers. The RadarView profile for each service provider includes a list of its top enterprise clients, customer success stories, key IP assets/solutions and partnerships, and major industry verticals. This is supported by an analyst's insights on the provider across the three key dimensions mentioned in the second point above.

Note: Please refer to Avasant's *Advanced Network Services 2025 Market Insights™* for demand-side trends.

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Executive summary

Definition and scope of advanced network services

Key definitions

Advanced network services:

Advanced networks are next-generation networks that capitalize on cutting-edge network technologies and protocols to provide enhanced capacity, performance, automation, and security compared to traditional networks. This RadarView covers service providers offering end-to-end services, including the following elements across the network types mentioned in the right-side column:

1. **Network strategy, consulting, and assessment:** This involves defining and analyzing an organization's network infrastructure, design, configuration, and topology to modernize, transform, and optimize networks.
2. **Network design, implementation, and integration:** This involves network infrastructure design, implementation, configuration, migration, integration, and testing and verification of network connectivity.
3. **Network orchestration, automation, and assurance:** This involves utilizing solutions/tools to automate and streamline network management tasks, including provisioning, configuration, and automating the monitoring of network behavior, compliance checks, and identifying performance improvements.
4. **Network management, maintenance, and administration:** This involves utilizing a network operations center (NOC) to monitor, manage, and maintain the networks. It also encompasses services such as field engineering services, hosting and colocation, security, and patch management.

Networks considered under the scope of the RadarView

Software-defined networks	Private wireless networks	Other advanced networks
• SD-WAN • SD-LAN • SDN for hybrid cloud • SASE	• Private 5G network • Private LTE network • Cloud RAN/ORAN	• Multicloud networking • LPWAN – NB-IoT, LTE-M, and Sigfox

Criteria:

To qualify for the current assessment, a service provider:

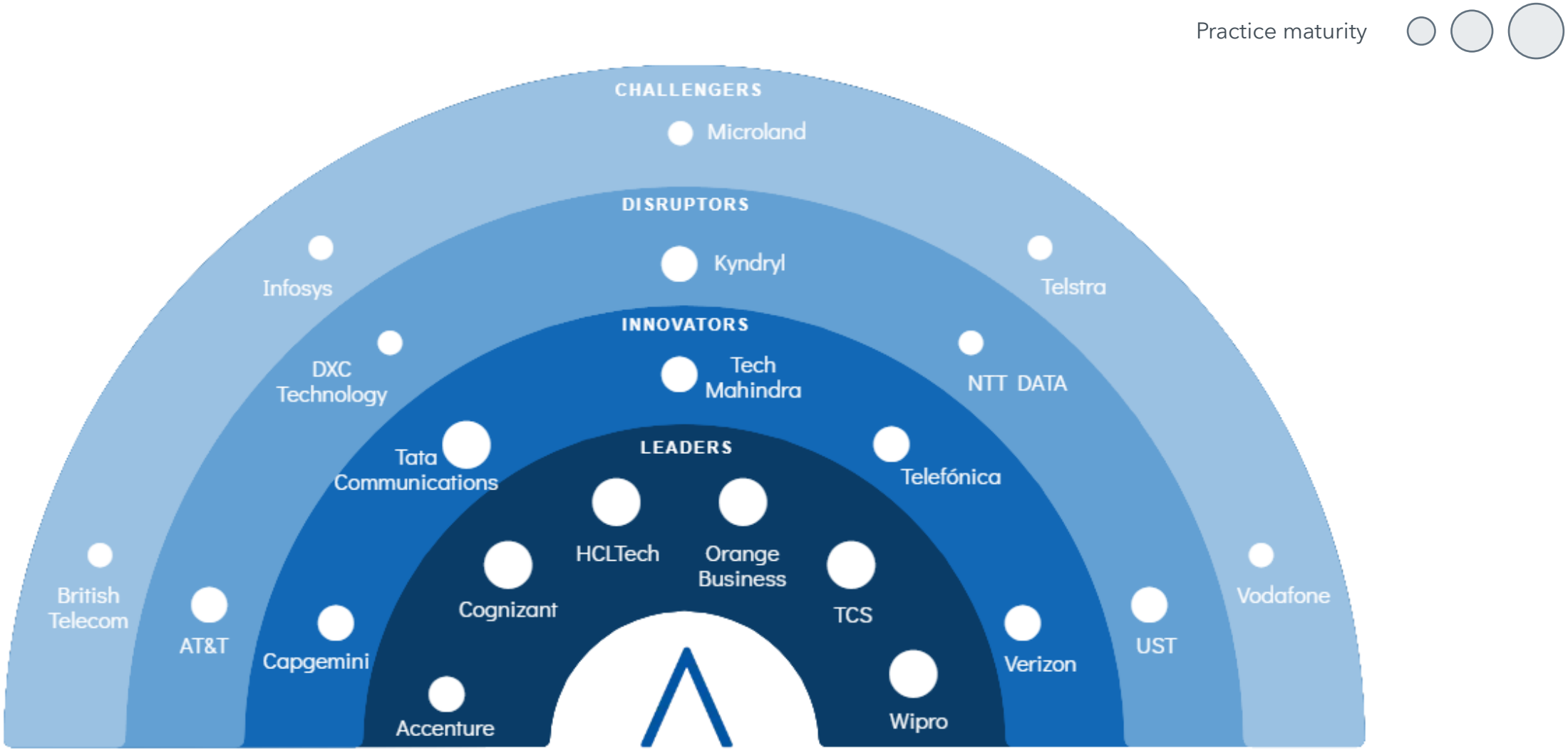
- Should offer end-to-end services across the three categories: software-defined networks, private wireless networks, and other networks
- Should have their own in-house or partner-based joint solutions to enable advanced network technology implementation spanning the above network types. They should offer any of the below offerings:
  - Managed SD-WAN/SASE product
  - Managed private 5G/LTE platform/solution
  - Managed multicloud networking platform/solution
- Have significant evidence of client case studies

Glossary of acronyms:

SDN: Software-defined networking, **SD-WAN:** Software-defined WAN, **SD-LAN:** Software-defined LAN, **SASE:** Secure access service edge, **RAN:** Radio access network, **ORAN:** Open radio access network, **LPWAN:** Low-power wide-area network, **NB-IoT:** Narrowband-IoT, **LTE-M:** Long-term evolution–machine type communication

Source: Avasant Research

Avasant recognizes 21 top-tier providers offering advanced network services



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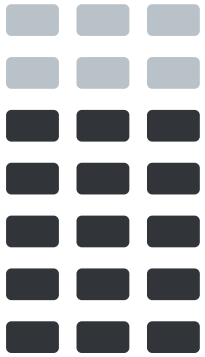
State of the market

Security, talent shortage, and legacy infrastructure pose significant hurdles for advanced network management

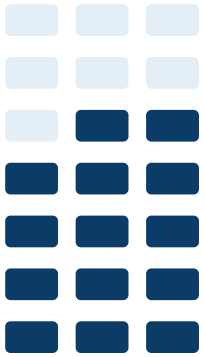
Top five implementation challenges faced by enterprises



73%

Security and privacy

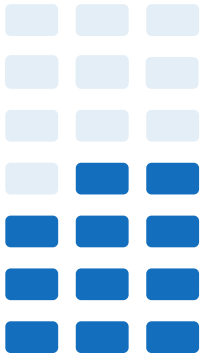
- Distributed network architecture, such as SD-WAN and multicloud networks, increases the attack surface
- Privacy concerns with cross-border data flow over IoT and 5G networks



69%

Talent and skills shortage

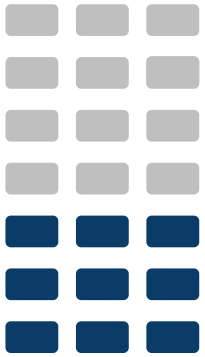
- Shortage of skilled professionals in SDN, private 5G, ORAN, and network security
- Skill gaps in network planning and operational phases with inability to scale projects



52%

Legacy infrastructure

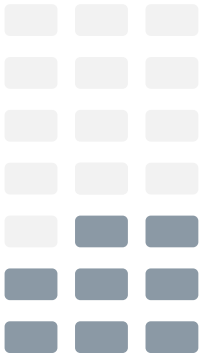
- Difficulty in integrating advanced networks such as SD-WAN with aging network infrastructure
- Technical debt from outdated equipment nearing end of life



43%

High CAPEX and OPEX

- High capital investments to deploy and maintain advanced network infrastructure
- Unclear ROI due to underutilized network resources and delayed transformations



36%

Multivendor network visibility

- Lack of standardization and interoperability across diverse networks
- Managing multiple vendors with different tools, SLAs, and network architecture increases complexity

Note: Since multiple organizations encounter these challenges, the total percentage exceeds 100%.
Source: Avasant Advanced Network Services RadarView Survey, January–March 2025; Avasant Research

Enterprises are seeking ease of deployment, end-to-end offerings, and SLA management for advanced network engagements

Key service criteria used by enterprises to choose advanced network service providers

End-to-end advanced network service offerings

Customers are looking for comprehensive services from a single provider to simplify operations and manage advanced networks across the value chain, including assessment, design, deployment, and support.

Transition/Ease of deployment

Organizations are prioritizing streamlined and automated deployments to expedite the transition to advanced network architecture and ensure minimal disruption to business operations.

Network performance and SLAs

Clients are expecting high network performance backed by clearly defined SLAs that align with their business-critical needs. They seek end-to-end visibility and accountability through measurable KPIs such as uptime and latency.

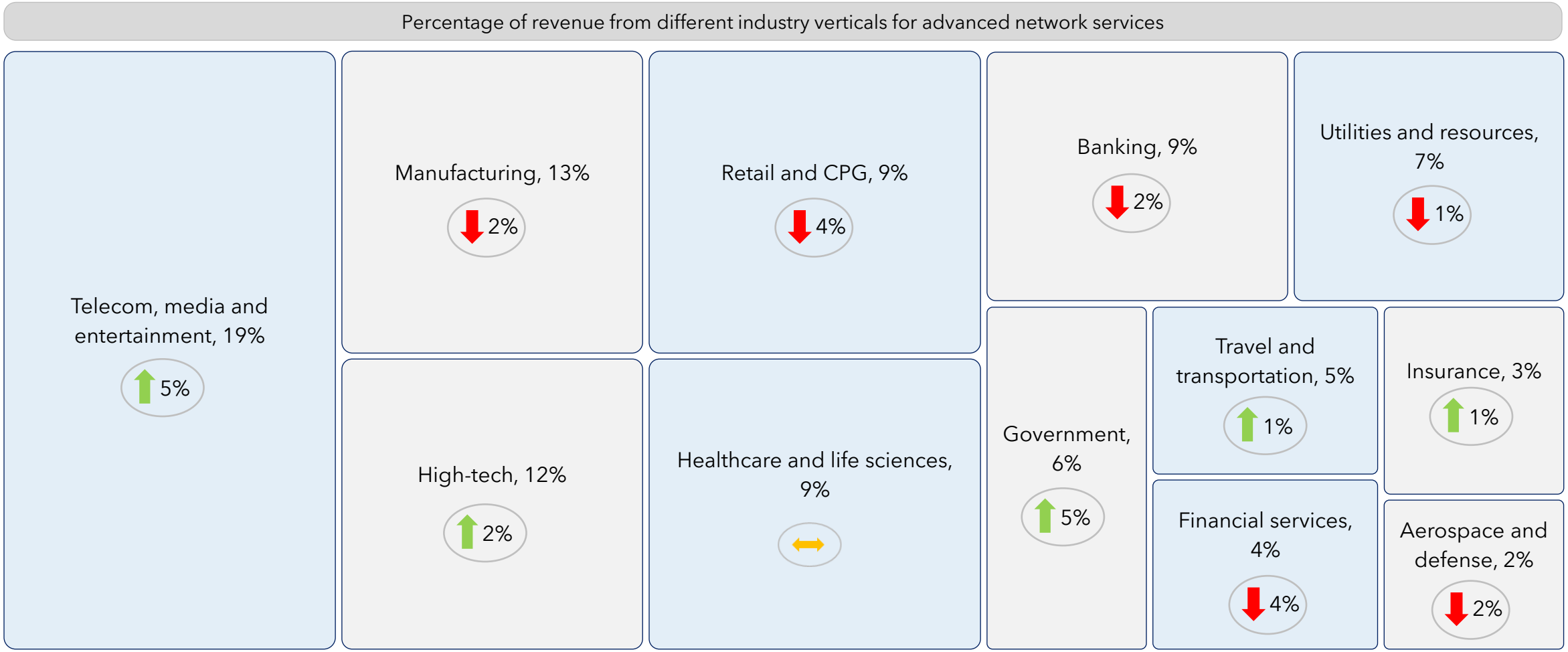
Automation and orchestration

Enterprises are seeking AI/ML-driven automation and orchestration capabilities that drive advanced network transformation, including proactive fault detection, automated fault resolution, self-healing, and streamlined service delivery.

Source: Avasant Advanced Network Services RadarView Survey, January–March 2025; Avasant Research

Telecom, media and entertainment, and manufacturing sectors lead the way in advanced network transformations

Rising demand for low-latency services, high-speed data transfer and availability, industrial IoT integration, and smart factory implementation are the key factors driving the demand for advanced network services in these industries.



Note: Other industries account for around 2% of the revenue.

Source: Avasant Advanced Network Services RadarView Survey, January–March 2025

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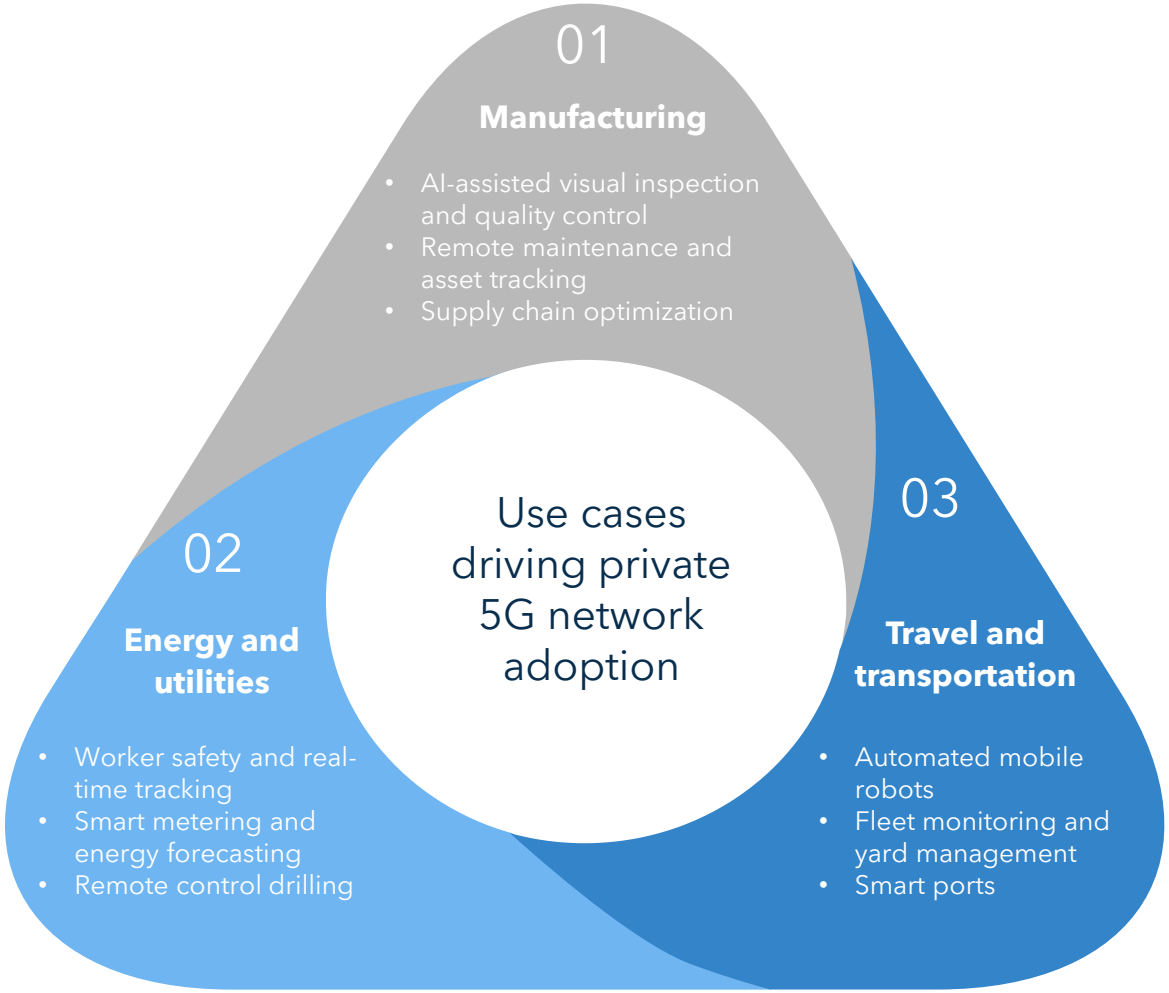
Use cases such as remote maintenance, worker safety, and automated mobile robots drive private 5G network adoption among the top three industries



1

A steel manufacturing company

A steel manufacturing company deployed private 5G connectivity across its industrial sites in France. It enabled network slicing and extensive coverage to address use cases such as remote maintenance, connected operations, autonomous vehicles, and steel recycling. This improved throughput and data security and reduced latency.

2

An oil and energy company

An oil and energy company set up a private 5G network, facilitating outdoor network coverage across 50 acres with Nokia private LTE services. This enhanced worker safety and ease of network access during nuclear refueling and refinery maintenance. Additionally, this reduced routing configuration costs by 92%.

3

A warehouse automation company

A warehouse automation company replaced Wi-Fi with a private 5G network to resolve latency issues. It implemented automated mobile robots (AMR) for inventory management and order picking and integrated AMR with the warehouse management systems for real-time insights. This reduced downtime by 40% and improved order fulfillment by 15%.

Source: Avasant Advanced Network Services RadarView Survey, January–March 2025; Avasant Research

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Cognizant profile

Cognizant: RadarView profile

cognizant

Practice maturity ★★★★★

Partner ecosystem ★★★★★

Investments and innovation ★★★★★

Has integrated Gen AI and agentic AI capabilities for incident remediation and personalized network operations. Partners with Cisco to deliver SD-WAN and switching solutions.

Practice overview

- Practice size: 336,000+ organization-level head count
- Active clients: N/A
- Certified/trained resources: N/A
- Delivery highlights: 25 delivery centers

$19.7B	5,000+
Overall revenue, FY 2024	Branch networks managed

Client case studies

- Implemented Cisco Catalyst SD-WAN solution across more than 2,500 stores for a Canadian supermarket. It also utilized its Secure Elastic WAN platform for SD-WAN deployment and Neuro NexusCMD Center for network operations services. This reduced the operational costs by 45%.
- Delivered centralized multicloud connectivity services for a global fast-food restaurant chain by leveraging Equinix ECX Fabric and SD-WAN fabric solutions. It also deployed the Secure Elastic WAN solution across more than 138 sites. This reduced the WAN OPEX by 40%.
- Deployed a secure access service edge (SASE) model using Cisco SD-WAN and Zscaler Secure Service Edge solutions for a financial services company. It also implemented a zero-trust architecture and intrusion prevention systems. This enhanced network security and visibility.
- Transformed Wi-Fi to a private 5G network for a warehouse automation company in North America. It also deployed automated mobile robots that utilized the 5G network for inventory management and order picking. This reduced latency from 50 milliseconds (ms) to less than 10 ms.

Key IP and assets

- Secure Elastic WAN: A platform to provision network connectivity across branches, remote users, and cloud services
- Elastic CloudMesh: A multicloud connectivity platform with optimized routing capabilities
- Neuro® AI Multi-Agent Accelerator: A solution that offers adaptive operations with a no-code development framework and prebuilt agent networks

Partnerships/alliances

Cloud platform providers

aws, Google, Microsoft, IBM, ORACLE, vmware by Broadcom

Technology partners

cisco, zscaler, Hewlett Packard Enterprise, FORTINET, paloalto NETWORKS, JUNIPER NETWORKS, EQUINIX, CHECK POINT

Sample clients

- A Canadian supermarket
- A financial services company
- A global fast-food restaurant chain
- A global pharmaceutical company in Canada
- A multifunctional seaport in Portugal
- A UK-based university press
- A US-based clinical research services provider
- A warehouse automation company in North America

Industry coverage

- Aerospace & defense
- Banking
- Financial services
- Government
- Healthcare & life sciences
- High-tech
- Insurance
- Manufacturing
- Nonprofits
- Retail & CPG
- Telecom, media & entertainment
- Travel & transportation
- Utilities & resources

Darker color indicates higher industry concentration:

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Cognizant: RadarView profile

Analyst insights

Practice maturity

★★★★★

- Cognizant delivers comprehensive advanced network services, including SD-LAN, SD-WAN, software-defined data center networks, SASE, private 5G, and multicloud network capabilities. It adopts a three-fold strategy to deliver these services by designing automated software-defined networks, creating an integrated network service platform for SD-WAN, SASE, and private 5G networks, and offering experience-level agreements for enterprises.
- It has developed an Elastic Network as a Service (NaaS) offering to provide integrated network connectivity across remote users, partners, branch offices, manufacturing plants, warehouses, cloud environments, and data centers into a unified, adaptive platform. The Elastic NaaS model offers flexible OPEX subscriptions to deliver a scalable network infrastructure, including hardware, software, management tools, licenses, and life cycle services.
- Cognizant offers managed multicloud connectivity solutions through its Elastic CloudMesh platform, enabling enterprises to dynamically interconnect cloud providers such as AWS, Azure, Google Cloud, Oracle Cloud, and on-premises data centers with optimized routing and automated orchestration capabilities. Additionally, it provides proactive and predictive network analysis and resolution through AIOps-powered network monitoring services.

Partner ecosystem

★★★★★

- Cognizant collaborates with Palo Alto Networks and Zscaler to deliver SASE and zero-trust network access solutions to clients. It has also created joint go-to-market offerings, including AI-powered network security and firewall solutions with Palo Alto Networks and microsegmentation and secure network branch solutions with Zscaler.
- It has a strategic partnership with Cisco to deliver advanced networking, switching, SD-WAN, and security solutions for organizations. Through this partnership, Cognizant leverages Cisco's technologies, such as Cisco pxGrid with ISE, Cisco CloudLock, and Cisco FirePower, to enhance network security and observability, enabling enterprises to transform their network infrastructure and improve operational resilience.

Investments and innovation

★★★★★

- Cognizant has integrated generative AI and agentic AI capabilities into its network operations platform, Neuro IT Operations. Key generative AI use cases include root cause analysis, corrective action recommendations, historical issue-based optimization, and policy-driven incident remediation. Its Neuro Multi-Agent Accelerator platform offers no-code automation and personalized network operations capabilities for clients.
- It has established private 5G innovation labs and experience centers in Bengaluru, India, and Atlanta, US, to codevelop industry-specific private 5G and IoT solutions with clients. Cognizant focuses on developing and testing use cases such as autonomous material handling, vision AI for quality inspection, drone-based operations, robotic quality inspections, fleet management, and real-time remote mining.

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Appendix:
About RadarView

The Advanced Network Services 2025 RadarView assesses service providers across three critical dimensions

Practice maturity	• This dimension considers the current state of a provider's advanced network services practice in terms of its strategic importance for the provider, the maturity of its offerings and capabilities, and client engagement. • The width and depth of the client base, usage of proprietary/outsourced tools and platforms, and quality of talent and execution capabilities are crucial aspects of this dimension.
Partner ecosystem	• This dimension assesses the nature of the provider's partner ecosystem, the objectives of the partnerships (codevelopment and co-innovation), and its engagement with solutions providers, startup communities, and industry associations. • Evaluation of joint development programs around offerings, go-to-market approaches, and the overall depth in partnerships are vital aspects of this dimension.
Investments and innovation	• This dimension measures the strategic direction of the service provider's investments and resultant innovations in the offerings and commercial model and how it aligns with the future direction of the industry. • The critical aspects of this dimension include both organic and inorganic investments toward capability and offering growth, technology development, and human capital development, along with innovative solutions developed with strategic partners.

Research methodology and coverage

Avasant based its analysis on several sources:

Public disclosures	Publicly available information from sources such as Securities and Exchange Commission filings, annual reports, quarterly earnings calls, and executive interviews and statements
Market interactions	Discussions with enterprise executives leading digital initiatives and influencing service provider selection and engagement
Provider inputs	Inputs collected through an online questionnaire and structured briefings during January–March 2025

Of the 40 service providers assessed, the following are the final 21 featured in the Advanced Network Services 2025 RadarView:

accenture, AT&T, BT, Capgemini, cognizant, DXC TECHNOLOGY, HCLTech, Infosys, kyndryl, MICROLAND, NTT DATA, orange Business, TATA COMMUNICATIONS, tcs TATA CONSULTANCY SERVICES, Tech Mahindra, Telefónica, Telstra, UST, verizon, vodafone, wipro

Note: Assessments for AT&T, British Telecom, Infosys, Microland, NTT DATA, Telstra, and Vodafone have been conducted based on public disclosures and market interactions only.

Reading the RadarView

Avasant has recognized service providers in four classifications:

Leaders show consistent excellence across all key dimensions of the RadarView assessment (practice maturity, partner ecosystem, and investments and innovation) and have had a superior impact on the marketplace. These providers have shown true creativity and innovation and have established trends and best practices for the industry. They have proven their commitment to the industry and are recognized as thought leaders in their space, setting the standard for the rest in the industry to follow. Leaders display a superior quality of execution and a reliable depth and breadth across verticals.

Innovators show a penchant for reinventing concepts and avenues, changing the very nature of how things are done from the ground up. Unlike leaders, innovators have chosen to dominate a few select areas or industries and distinguish themselves based on superior innovation. These radicals are always hungry to create pioneering advancements in the industry and are actively sought after as trailblazers, redefining the rules of the game.

Disruptors enjoy inverting established norms and developing novel approaches that invigorate the industry. These providers choose to have a razor-sharp focus on a few specific areas and address those at a high level of granularity and commitment, which results in tectonic shifts. While disruptors might not have the consistent depth and breadth across many verticals like leaders or the innovation capabilities of innovators, they exhibit superior capabilities in their areas of focus.

Challengers strive to break the mold and develop groundbreaking techniques, technologies, and methodologies on their way to establishing a unique position. While they may not have the scale of the providers in other categories, challengers are eager and nimble and use their high speed of execution to great effect as they scale heights in the industry. Challengers have a track record of delivering quality projects for their most demanding Global 2000 clients. In select areas and industries, challengers might have capabilities that match or exceed those of the providers in other categories.

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