

Everest Group 5G Engineering Services PEAK Matrix® Assessment 2025

Focus on Capgemini September 2025



Introduction

5G continues to redefine connectivity, serving as the backbone for process enablement and superior user experience. In 2025, telecom firms are emphasizing on accelerated enterprise adoption of 5G to augment private networks, cloud-native functionalities, edge computing, and Al-integrated operations. Engineering service providers are playing a pivotal role in enabling this shift through domainspecific solutions and deep ecosystem alignment.

As enterprise expectations expand from basic network rollout to intelligent operations and monetization, providers are embedding AI across the 5G life cycle to support automation, orchestration, and assurance. Open and disaggregated architectures have further increased the need for flexible integration models and proven IP accelerators.

There is also a growing focus on Non-terrestrial Networks (NTN), especially for sectors such as defense, logistics, and rural connectivity, pushing service providers to extend capabilities beyond terrestrial systems.

In response, providers are investing in CoEs, flexible delivery structures, proprietary solutions (for example, intelligent Network Operations Centers (NOCs) and agentic operations), strategic partnerships with hyperscalers and technology

providers, and actively contributing to industry bodies including 3GPP, O-RAN Alliance, and TIP. Their goals include reducing time-to-market, enhancing performance, simplifying adoption for enterprises, and driving monetization.

The third edition of Everest Group's 5G engineering services PEAK Matrix® evaluates 20 leading providers on their vision, capabilities, and market impact. The analysis is based on RFI submissions, briefings, client references, and our ongoing research in 5G engineering space.

The full report includes the profiles of the following 20 leading providers featured on the 5G Engineering Services PEAK Matrix® Assessment 2025:

- Leaders: Capgemini, HCLTech, Infosys, LTTS, NTT DATA, TCS, and Tech Mahindra
- Major Contenders: Brillio, Cyient, DXC Luxoft, HARMAN Digital Transformation Systems (DTS), Persistent Systems, Sasken Technologies, Tata Elxsi, Tietoevry, UST, VVDN Technologies, and Wipro
- Aspirants: BICS and Neurealm

Scope of this report

Geography: global

Industry: market activity and investments

of 20 leading providers

Services: 5G engineering services

Scope of research (page 1 of 2)

5G engineering services cover all activities involved in the development and deployment of commercial and private 5G networks

Ecosystem entities

Telecom Service Providers (TSPs)

For example, AT&T, Telefonica, Airtel, and Orange

Technology providers

For example, Palo Alto Networks, Celona, and Mavenir

Hyperscalers and cloud providers

For example, AWS, Azure, GCP, and VMWare

Telecom Equipment Providers (TEPs)

For example., Ericsson, Nokia, Huawei, and ZTE

Regulatory bodies and industry consortia

For example, GSMA, 3GPP, and Al-RAN Alliance

Enterprise customers

For example., Bosch, DFW Airport, and BMW

Engineering services [REPRESENTATIVE]



Ideation, development. testing, and support of 5Gcapable equipment including:

- RAN and core network equipment
- End-user devices and eSIM modules
- Customer premises equipment and purposebuilt private network components

- Planning, orchestration, testing, certification, and deployment and operations of 5G networks
- Development and integration of network elements such as open-source components, OSS-BSS, network security, network functions, network analytics, and intelligent network operations
- Network upgradation/modernization initiatives such as 5G stand-alone, APIs, Non-Terrestrial Networks(NTN), Fixed Wireless Access(FWA), virtualization and telco cloud adoption, SDN, and network slices



Ideation, development, testing, and rollout and support of use cases and monetization streams:

- Data and API monetization
- Network slice-based use cases (for example, gaming and emergency services)
- Integrated network and use case offerings
- Connected products, edge computing, and IoT use cases

Private 5G: a horizontal capability, encompassing equipment, network, and solution engineering concentrated on private 5G networks and use cases

Note: Scope of 5G Engineering Services PEAK Matrix® Assessment 2025 is limited to commercial public 5G networks and private 5G networks facilitating connected products and operational technologies (for example, manufacturing and material handling on shopfloor)

Scope of research (page 2 of 2)

5G engineering services across the value chain

[REPRESENTATIVE]



Equipment engineering

Ideation and consulting

- Ideation of 5G access network, core, and end-user equipment for public and private networks
- Consulting services for firmware development of 5G-capable devices

Design and development

- Hardware development for 5G network and user equipment
- Development of software and firmware stacks for 5G network and customer premises equipment
- Use case-led equipment customization for private networks

Testing and certification

- Testing and validation of equipment such as base stations, antenna arrays, and new radio
- Ideation and development of test cases and test automation

Deployment and support

- Sustenance and aftermarket support services for deployed equipment
- Integration of private network devices with core systems and IoT devices
- 5G network equipment life cycle management services



Network services

- Ideation and planning of public and private 5G networks including site selection, capacity planning, and architecture
- Consulting on technology adoption and integration with existing network
- Roadmap creation and advisory on emerging technology trends such as network slices, NTN, and FWA

- · Design and orchestration of the 5G network
- Development and integration of software capabilities such as VNFs, SDN, analytics, and network security and data privacy
- Network and network elements' testing, validation, and certification
- Field testing and validation
- Ideation and development of test cases and test automation
- Network deployment
- Integration of private networks with operational technologies
- Network monitoring and support
- Intelligent network operations
- Business and operation support services for 5G networks



Solution engineering

- Ideation and conception of revenue streams and private 5G use cases
- Scope definition, future roadmap, and commercial viability
- Consulting on appropriate technology selection
- Design and development of use cases across verticals
- Proof-of-concept (PoC) creation and fine-tuning for purpose specific applications
- Prototype testing and validation
- Compliance with industry standards
- Pilot runs and field testing
- Ideation and development of test cases and test automation
- Use case deployment and integration with the network
- Monetization and business value realization
- Real-time monitoring, sustenance, and upgradation



5G engineering services PEAK Matrix® characteristics

Leaders

Capgemini, HCLTech, Infosys, LTTS, NTT DATA, TCS, and Tech Mahindra

- Leaders continue to invest heavily in building IP, automation frameworks, and CoEs to support fullstack 5G engineering across RAN, core, private 5G, and monetization use cases
- They bring end-to-end delivery capabilities, often supported by strong client references, large-scale network transformation programs, and global delivery scale
- In-house IPs and frameworks such as Al-led platforms and integrated offerings across network intelligence, assurance, and life cycle management are helping drive differentiation
- Leaders demonstrate stronger ecosystem alignment, with active participation in industry bodies and partnerships across the ecosystem including hyperscalers, NEPs, and OEMs

Major Contenders

Brillio, Cyient, DXC Luxoft, HARMAN Digital Transformation Solutions, Persistent Systems, Sasken Technologies, Tata Elxsi, Tietoevry, UST, VVDN Technologies, and Wipro

- Major Contenders offer robust capabilities across specific 5G subsegments such as Radio Access Network (RAN) testing, private 5G deployment, device validation, telco software modernization, or intelligent automation
- They are expanding their IP footprint and platform offerings but remain narrower in scale and vertical integration compared to Leaders
- Engagements are often concentrated in telecom or industrial domains, with a growing push into edge, automation, and cloud-native services
- Ecosystem participation and co-innovation momentum is increasing, though partnerships in areas such as Al-native 5G, slicing, or RedCap are still developing for many

Aspirants

BICS and Neurealm

- Aspirants are focused on select capabilities in the 5G stack such as device enablement, test and measurement, or private 5G deployment, typically delivered through deep technical specialization
- These providers often operate with narrower client portfolios and geographic reach, limiting their participation in large-scale 5G transformation deals
- Investments in labs, platforms, and ecosystem engagement remain limited, but providers are scaling steadily within their chosen focus areas

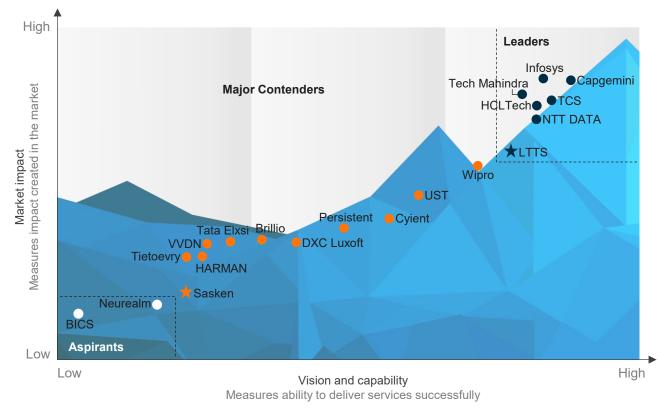


Everest Group PEAK Matrix®

5G Engineering Services PEAK Matrix® Assessment 2025 | Capgemini is positioned as a Leader

Everest Group 5G Engineering Services PEAK Matrix® Assessment 2025^{1,2}

- Leaders
- Major Contenders
- Aspirants
- ☆ Star Performers



¹ Assessments for Cyient, DXC Luxoft, Neurealm (GS Lab I GAVS), Harman DTS, Tata Elxsi, and Tietoevry exclude service provider inputs and are based on Everest Group's proprietary Transaction Intelligence (TI) database, service providers' public disclosures, and Everest Group's interaction with buyers

Confidentiality: Everest Group takes its confidentiality pledge very seriously. Any information we collect that is contract-specific will be presented only in an aggregated fashion



² The source of all content is Everest Group unless otherwise specified

Capgemini

Everest Group assessment – Leader

Measure of capability:







Market impact

Market adoption	Portfolio mix	Value delivered	Overall	Vision and strategy	Scope of services offered	Innovation and investments	Delivery footprint	Overall
•	•	•	•		•	•	•	•

Strengths

- Capgemini has built a strong suite of 5G offerings, which give it a balanced coverage across the value chain and 5G segments
- The offerings are backed by robust investments in IP, well-rounded partner ecosystem, talent development initiatives, and concentrated efforts on emerging themes such as Al adoption in networks, NTN, monetization, and platform models of delivery
- · Capgemini is increasingly leveraging innovative, value-based pricing constructs over traditional time-and-material or fixed-price models
- The firm's private 5G capabilities and solution engineering focus have helped it to engage with enterprise customers across different verticals
- Capgemini stands out among peers with its storytelling and challenge-redressal marketing narrative, contribution to industry consortia, and thought leadership that help the firm create a differentiated position

Limitations

· Capgemini's client portfolio is skewed toward Europe, with limited focus on North America and APAC, with one being a prime market while the other being a rapidly growing market

Vision and capability

• Capgemini has an onshore intensive delivery model, which can impact its expenses and access to a wider talent pool

Market trends

5G engineering services

Market size and growth

- The 5G engineering services market expanded from ~US\$2.95 billion in 2023 to ~US\$3.4 billion in 2024, reflecting a strong YoY growth of ~13-14%
- Growth in services is primarily led by network operations, private 5G, testing and validation, and exploring monetization
- The outlook remains positive; growth will depend on the ability to capitalize on the pockets of opportunities and justifying Rol

Key drivers for 5G engineering spending

Al adoption	Increased focus on automation, assurance, and intelligent networks			
Network modernization	FWA rollouts gaining traction and increased interest in NTN and RedCap			
Monetization levers	API exposure, network slices, integrated offerings, and as-a-service business models			
Private 5G	Increase in private networks and industrial use cases tied to IoT, edge computing, and smart factory rollouts			

Opportunities and challenges

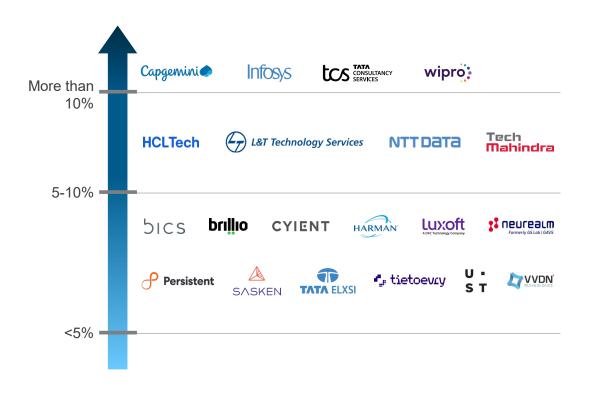
Complexity in networks	Growing network complexity is driving need for expertise in architecture, orchestration, and cybersecurity
Talent scarcity	Talent availability remains a constraint, especially for cloud-native and RAN skillsets
High capex and uncertain Rols	High upfront costs and longer realization cycles are slowing business case conversions
Vendor/Technology lock-in	Lock-in risks are impacting flexibility and limiting use case exploration

Provider landscape analysis

5G engineering services

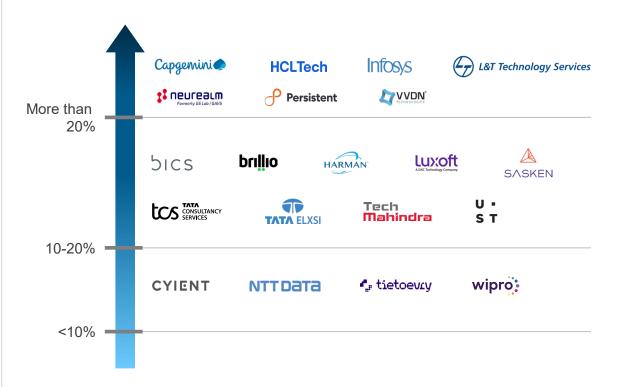
Market share analysis of the providers¹

2024; Percentage of overall market of 5G engineering services



YoY growth analysis of the providers¹

2023-24; YoY growth



¹ Providers are listed alphabetically within each range



Key buyer considerations

5G engineering services

Key sourcing criteria

High

Priority



Cost-savings and profitability

Impact of outsourcing on the bottom-line through efficient resource allocation, automation, and scale



Implementing AI capabilities across the value chain

Al-powered autonomous 5G operations, predictive maintenance, and real-time service assurance, with tangible impact on productivity and efficiency



Accelerated time-to-market

Ability to fasten rollout of 5G networks/network components and 5G-enabled use cases to gain an early-mover advantage and accelerate monetization



IP. innovation, and frameworks

Proprietary accelerators and reusable frameworks that showcase innovation, reduce engineering effort, and offer unique value propositions



Service provider's partnership ecosystem

Robust partner network, which helps gain access to newer technologies, build more comprehensive solutions, and gain operational efficiencies

Low



Summary analysis

Cost optimization has become the prime sourcing consideration for enterprises as they navigate through a soft market and an uncertain macroeconomic environment. All enablement is also gaining traction, as buyers look for greater intelligence across assurance, orchestration, and network operations, which can translate to productivity and efficiency gains in near term. For industrial use cases, where rapid deployment can impact competitive positioning, time-to-market becomes more critical. IP-led frameworks are becoming increasingly important as factors of consideration given that they help reduce engineering efforts and build unique value propositions. Given 5G's disaggregated structure and ecosystem play, partnerships will remain table stakes, albeit they might feature lower on the list of priorities.

Key takeaways for buyers

Buyers should prioritize providers that can co-innovate even while delivering on-cost and productivity gains.



Strategic partnership

Buyers should increasingly prefer strategic partners that can coinnovate, take ownership across the 5G engineering value chain, help minimize vendor lock-ins, and bring full-stack capabilities.



Innovative deal constructs

With automation and gen AI reducing dependence on manual effort, buyers are shifting away from resource-based pricing to value-led models that better reflect outcomes such as cost efficiency, productivity gains, incremental value addition, uptime, and service quality.



Asset-led delivery model

Asset portfolio (IP, frameworks, etc.) must become a key deciding factor as these help showcase innovation and realize impact faster; there should be a focus on assets around intelligent operations, compliance, and cybersecurity.



Partner ecosystem

Buyers are prioritizing providers that bring a robust network of partners including hyperscalers, OEMs, and technology providers to deliver integrated, use case-ready solutions.

Appendix

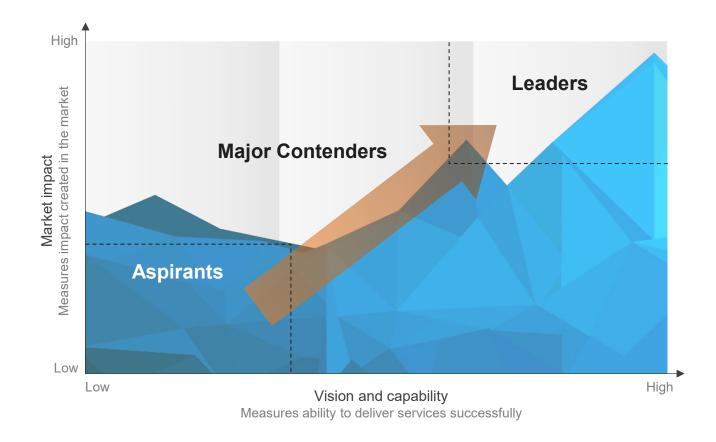
PEAK Matrix® framework

FAQs



Everest Group PEAK Matrix® is a proprietary framework for assessment of market impact and vision and capability

Everest Group PEAK Matrix





Services PEAK Matrix® evaluation dimensions

Measures impact created in the market captured through three subdimensions

Market adoption

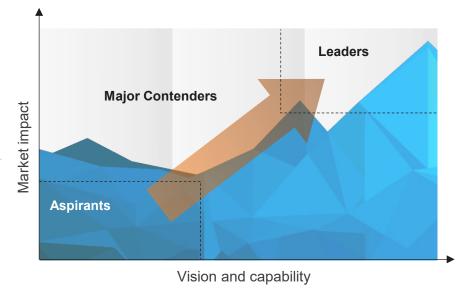
Number of clients, revenue base, YoY growth, and deal value/volume

Portfolio mix

Diversity of client/revenue base across geographies and type of engagements

Value delivered

Value delivered to the client based on customer feedback and transformational impact



Measures ability to deliver services successfully. This is captured through four subdimensions

Vision and strategy

Vision for the client and itself: future roadmap and strategy

Scope of services offered

Depth and breadth of services portfolio across service subsegments/processes

Innovation and investments

Innovation and investment in the enabling areas, e.g., technology IP, industry/domain knowledge, innovative commercial constructs, alliances, M&A, etc.

Delivery footprint

Delivery footprint and global sourcing mix



FAQs

- Q: Does the PEAK Matrix® assessment incorporate any subjective criteria?
- A: Everest Group's PEAK Matrix assessment takes an unbiased and fact-based approach that leverages provider / technology vendor RFIs and Everest Group's proprietary databases containing providers' deals and operational capability information. In addition, we validate/fine-tune these results based on our market experience, buyer interaction, and provider/vendor briefings.
- Q: Is being a Major Contender or Aspirant on the PEAK Matrix, an unfavorable outcome?
- A: No. The PEAK Matrix highlights and positions only the best-in-class providers / technology vendors in a particular space. There are a number of providers from the broader universe that are assessed and do not make it to the PEAK Matrix at all. Therefore, being represented on the PEAK Matrix is itself a favorable recognition.
- Q: What other aspects of the PEAK Matrix assessment are relevant to buyers and providers other than the PEAK Matrix positioning?
- A: A PEAK Matrix positioning is only one aspect of Everest Group's overall assessment. In addition to assigning a Leader, Major Contender, or Aspirant label, Everest Group highlights the distinctive capabilities and unique attributes of all the providers assessed on the PEAK Matrix. The detailed metric-level assessment and associated commentary are helpful for buyers in selecting providers/vendors for their specific requirements. They also help providers/vendors demonstrate their strengths in specific areas.
- Q: What are the incentives for buyers and providers to participate/provide input to PEAK Matrix research?
- A: Enterprise participants receive summary of key findings from the PEAK Matrix assessment For providers
 - The RFI process is a vital way to help us keep current on capabilities; it forms the basis for our database - without participation, it is difficult to effectively match capabilities to buyer inquiries
 - In addition, it helps the provider/vendor organization gain brand visibility through being in included in our research reports

- Q: What is the process for a provider / technology vendor to leverage its PEAK Matrix positioning?
- A: Providers/vendors can use their PEAK Matrix positioning or Star Performer rating in multiple ways including:
 - Issue a press release declaring positioning; see our citation policies
 - Purchase a customized PEAK Matrix profile for circulation with clients, prospects, etc. The package includes the profile as well as quotes from Everest Group analysts, which can be used in PR
 - Use PEAK Matrix badges for branding across communications (e-mail signatures, marketing brochures, credential packs, client presentations, etc.)

The provider must obtain the requisite licensing and distribution rights for the above activities through an agreement with Everest Group; please contact your CD or contact us

- Q: Does the PEAK Matrix evaluation criteria change over a period of time?
- A: PEAK Matrix assessments are designed to serve enterprises' current and future needs. Given the dynamic nature of the global services market and rampant disruption, the assessment criteria are realigned as and when needed to reflect the current market reality and to serve enterprises' future expectations.

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