



# Everest Group 5G Engineering Services PEAK Matrix® Assessment 2023: The Next Frontier in the Hyperconnected Era

**Focus on NTT DATA**  
June 2023



## Introduction

5G's lower latency and higher bandwidth has unlocked newer use cases for enterprises to explore. Additionally, adoption of 5G is allowing transformation of network infrastructure to make them quickly scalable, leading to higher levels of customization and lower operating costs. Enterprises are primarily exploring the below areas within 5G engineering:

- Decoupling of hardware and software in the form of network function virtualization and automation of network operations to lower the costs of network hardware, accelerate network deployment, and enhance efficiency in establishing networks
- Adoption of open-source components (hardware and software) and benchmarking their performance and operational challenges against proprietary solutions
- Feasibility of 5G-enabled use cases to boost monetization opportunities
- 5G-enabled private networks and edge computing solutions to improve industrial processes through connected IoT devices, improved data security protocols, reduced operational expenses, and faster decision-making

However, the nascent nature of the market is leading to uncertainty and increased complexity for enterprises. As a result, they are looking to partner with service providers to share development risks, lower operational costs, implement system integration measures, bring in a larger talent pool, and leverage the diverse expertise of their partner ecosystem to engineer solutions faster. To address these expectations, service providers are investing in enhancing their 5G engineering capabilities through skillset development programs, CoEs, labs to carry out R&D and showcase their solutions, partnerships with ecosystem players, and strategic investments to gain competencies and expand across geographies.

This research, the second edition of Everest Group's 5G Engineering PEAK Matrix® Assessment, evaluates 20 engineering service providers, features them on the PEAK Matrix®, and shares insights on enterprise sourcing considerations. The study is based on RFI responses from service providers, interactions with their 5G engineering leadership, client reference checks, and ongoing analysis of the engineering services market.

**The full report includes the profiles of the following 20 leading engineering service providers featured on the [5G Engineering Services PEAK Matrix® Assessment 2023: The Next Frontier in the Hyperconnected Era](#):**

- **Leaders:** Accenture, Capgemini, HCLTech, Infosys, NTT DATA, TCS, and Tech Mahindra
- **Major Contenders:** Brillio, Cyient, DXC Luxoft, HARMAN DTS, IBM, LTTS, Tata Elxsi, Tietoevry, VVDN Technologies, and Wipro
- **Aspirants:** BICS, GS Lab I GAVS, and Sasken

### Scope of this report



**Geography**  
Global



**Providers**  
20 leading broad-based and pureplay service providers



**Services**  
5G engineering services

## 5G Engineering Services PEAK Matrix® characteristics

### Leaders

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

- Leaders are investing significantly in enhancing their 5G engineering capabilities in the form of talent upskilling, labs and CoEs, building extensive partner ecosystem, creating IPs and frameworks that would help accelerate the pace of 5G deployment and streamline operations, and explore current themes in 5G engineering such as virtualization and adoption of open-source components
- Leaders are also contributing toward shaping the market through thought leaderships and by defining standards and specifications through the industry consortia they are a part of
- These service providers generally have a high employee strength, global presence, and a comparatively bigger client base to build on. These capabilities help them form a comprehensive 5G engineering services portfolio, and establish long-term relationships with enterprises, giving them an edge in winning client engagements

### Major Contenders

Brillio, Cyient, DXC Luxoft, HARMAN DTS, IBM, LTTS, Tata Elxsi, Tietoevry, VVDN Technologies, and Wipro

- Major Contenders consist of both broad-based players and pureplay firms that have a noteworthy presence in 5G engineering services and showcase expertise in specific areas within 5G
- Most Major Contenders are small to midsized firms with a fast-growing 5G engineering services business. The distribution of revenue and client portfolio is generally inclined toward specific subsegments, ecosystem entities, or verticals with lower presence across others
- While Major Contenders are also investing in scaling their 5G engineering competencies, their investments are not at the scale of Leaders

### Aspirants

BICS, GS Lab I GAVS, and Sasken

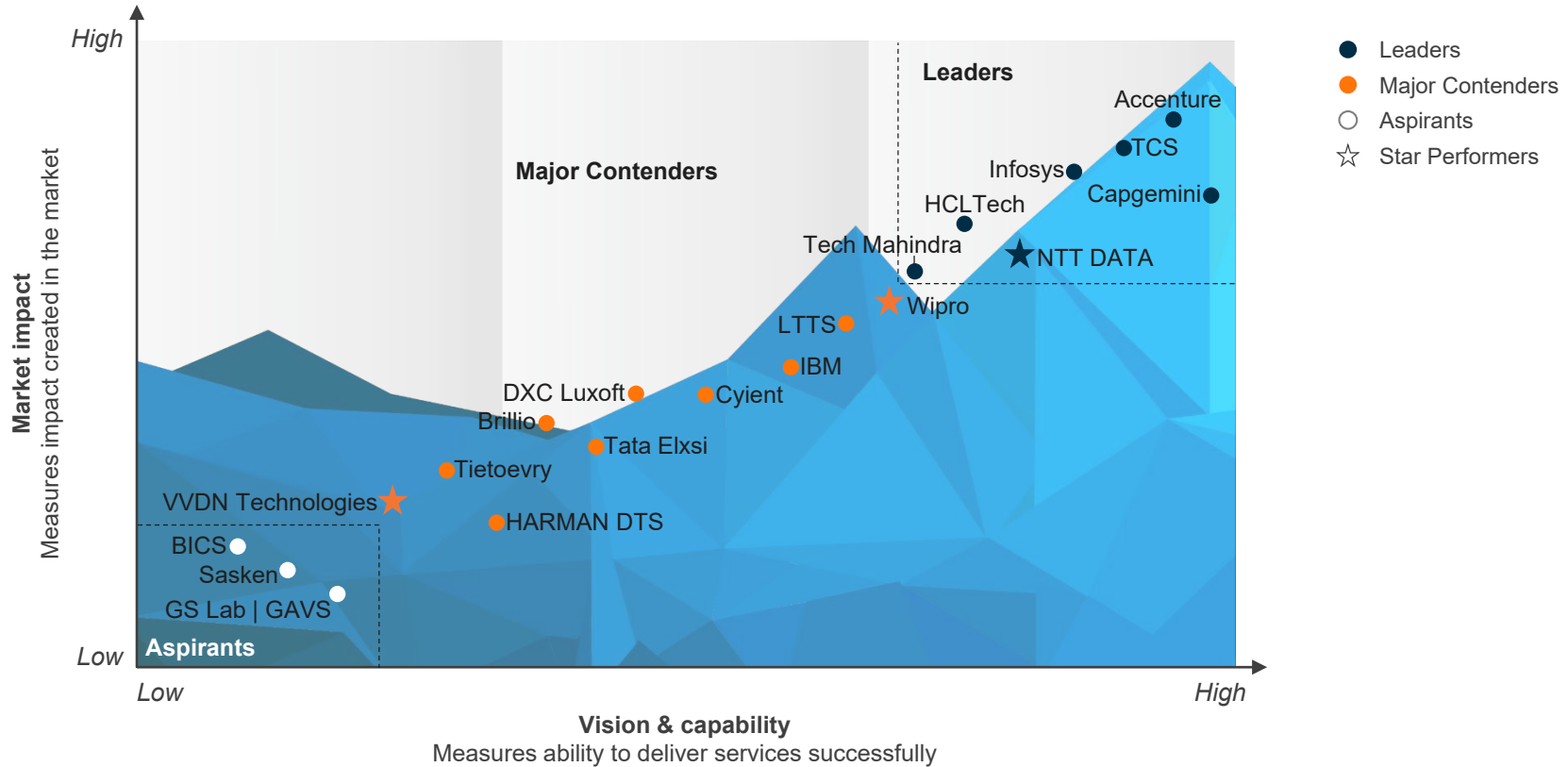
- Aspirants consist of players whose 5G engineering services business is in nascent stages. They have capabilities in specific stages of the value chain and limited diversity in their client portfolio. They have a smaller employee base and limited geographical presence that hinders their chances at scaling their business rapidly
- Aspirants have made limited investments in enhancing their 5G engineering capabilities and they are more focused on scaling the current offerings than having a diversified portfolio

# Everest Group PEAK Matrix®

## 5G Engineering Services PEAK Matrix® Assessment 2023 | NTT DATA is positioned as a Leader and a Star Performer



Everest Group 5G Engineering Services PEAK Matrix® Assessment 2023<sup>1,2</sup>



1 Assessments for Sasken and Tietoenvy exclude service provider inputs and are based on Everest Group's proprietary Transaction Intelligence (TI) database, service provider public disclosures, and Everest Group's interaction with buyers  
 2 Assessment of NTT DATA reflects the combined capabilities of NTT DATA and the global IT services of NTT; and GS Lab | GAVS covers the capabilities of the combined entity formed by merging GS Lab and GAVS  
 Source: Everest Group (2023)

# NTT DATA profile (page 1 of 4)

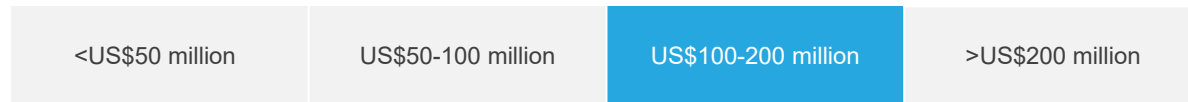
## Overview

### Vision and Strategy

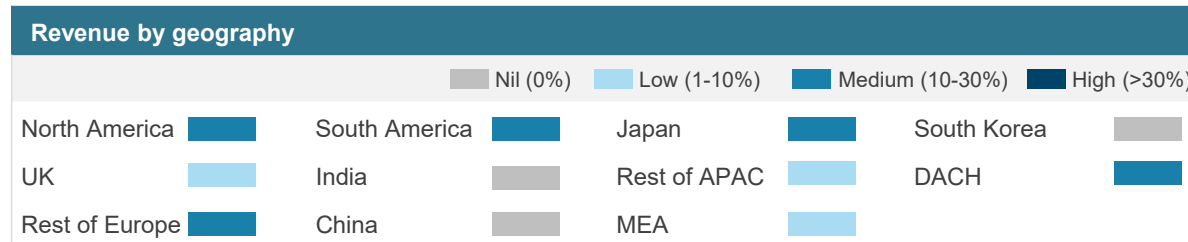
NTT DATA's long-term vision is to support telco operators and other industries with faster 5G adoption, network disaggregation and automation, and monetization solutions, thereby providing value to stakeholders and end-users.

NTT DATA aims to support its parent company, NTT's vision of the Innovative Optical and Wireless Network (IOWN) concept, expected to be achieved in CY2030. NTT DATA caters to CSPs, enterprises, and enterprise businesses. The company provides open and disaggregated network offerings to CSPs, a private network and edge solutions for enterprises, and IP solutions to aid enterprise businesses with CSPs.

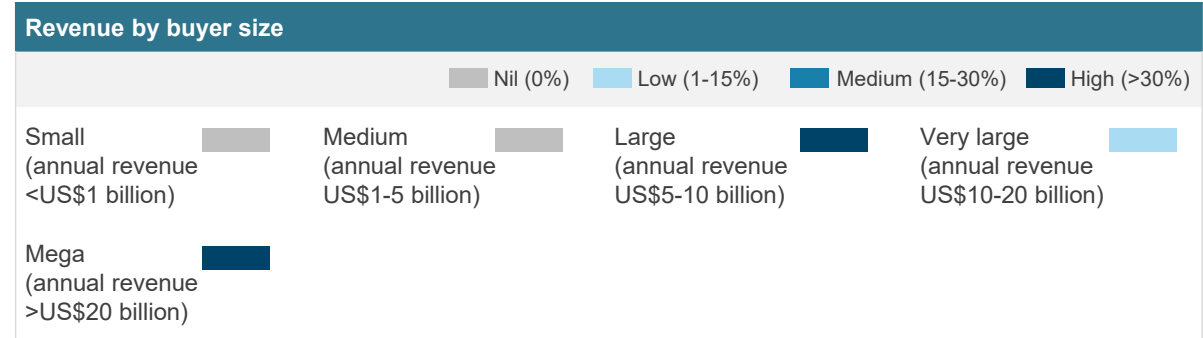
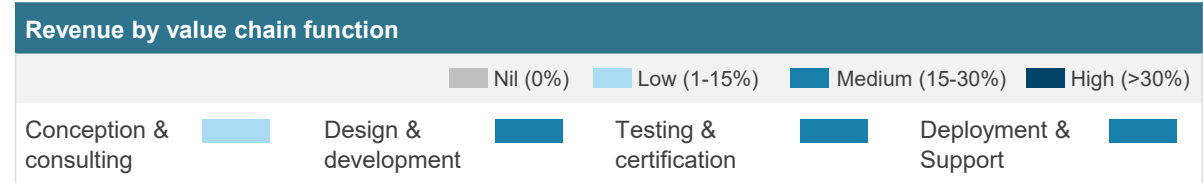
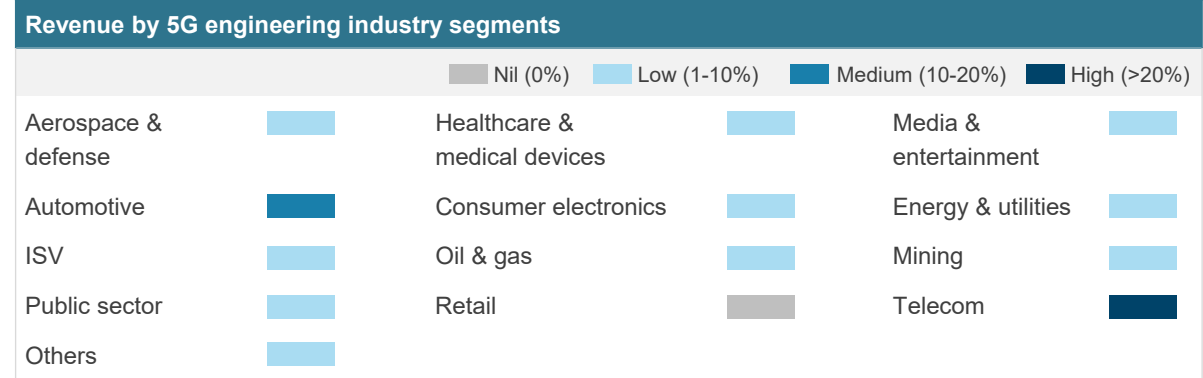
### 5G engineering services revenue<sup>1</sup> (July 2021 – June 2022)



### YoY growth rate in 5G engineering services revenue<sup>1</sup> (July 2021 – June 2022)



<sup>1</sup> Everest Group estimates



# NTT DATA profile (page 2 of 4)

## Case study

**Case study 1** **Helped a European client achieve reduced costs by increasing the automation in the production factories**

**Business challenge**  
The client needed help to increase the automation in its production factories to reduce cost as well as increase efficiency, quality, and control.

**Solution and impact**  
NTT DATA helped the client to automate its intralogistics platform for the end-to-end orchestration of multiple mobile devices, Automated Guided Vehicles (AGVs), sensors, and systems. It helped the client in resource optimization, reduced labor risks, and improved quality with respect to ERPs and Manufacturing Execution Systems (MESs).

**Case study 2** **Helped the city of Las Vegas to build a private 5G network to deploy applications and services**

**Business challenge**  
The city of Las Vegas wanted to build a private 5G network that would be an open platform, allowing local businesses, government agencies, educational institutions, and technology companies to deploy innovative new applications and services that benefit and enrich the lives and experiences of the citizens and tourists.

**Solution and impact**  
NTT DATA's wireless network helped the city of Las Vegas to better support its education, security, and healthcare needs. It helped to build intelligent monitoring systems and motion-sensing cameras in parks, event venues, and traffic congested areas, helping the law enforcement agencies. The connectivity will also provide residents with better access to telehealth services.

Proprietary solutions (representative list)	
Solution	Details
5G App framework	A framework that integrates and orchestrates network, cloud/edge infrastructure, and devices together with both NTT DATA and third-party applications for delivering a wide portfolio of 5G use cases
5G Campus	A secure private network for enterprise customers that uses the full capabilities of enhanced mobile broadband, with pre-integrated and pure cloud OSS, deployed on any hyperscale cloud platform
5G Enabling Fabric (5GEF®)	A cloud-based platform that is especially designed for configuring and delivering business services to enterprise customers or telco operator environments
5G Network-as-a-Service (NaaS)	A solution that is customized and targeted at connectivity services, bringing together 5G technology, programmable networking solutions (such as SDN), and rapid service provisioning techniques. NaaS delivers network slices dynamically, with cloud-native user experience, while meeting demanding Quality of Service (QoS) requirements using AIOps
5G planning digital tools	A solution to improve design and planning activities for 5G
CreEdgeOn (Create Edge On)	A specialized product platform aimed at automating the deployment process of software components, use cases, and network functions belonging to the RAN, transport network, and mobile core network level
NTTView	A global network management platform and managed services
Security Edge Protection Proxy (SEPP)	A cloud-native product platform that allows 5G telco operators to manage 5G stand-alone roaming with other Mobile Network Operators (MNOs) or carriers

# NTT DATA profile (page 3 of 4)

## Offerings

### Key alliances and partnership (representative list)

Company	Details
Celona	A partnership for the supply of enterprise network equipment for the NTT Private 5G (PMN) solution
Facebook	An open-source software provider for magma and core network software
Fujitsu	A collaboration to develop power efficient hardware
GlobalStar	A partnership that allows clients to use licensed spectrum for the use of private mobile network
Microsoft	A collaboration for edge computing and cloud platforms
NEC	A partnership to build dedicated radio unit for ORAN
Nokia	A partnership for the supply of enterprise network equipment for the NTT Private 5G (PMN) solution
Cisco	A partnership for the supply of enterprise network equipment for the NTT Private 5G (PMN) solution










### Recent software product engineering services investments/acquisitions (representative list)

Investment/Target	Company description
Enso Lab	Investment to improve the design, deployment, integration and support of 5G services
Network Engineering CoE	Investments to improve network engineering product development and solution delivery
Open network CoE – Spain & LATAM	Investments in product development, solution testing, development and delivery of 5G services
Private 5G Labs	Investments in private 5G labs for product development and use case testing
Innovation Centers	Investment in centers for private and public 5G use cases development and use cases demonstration to clients
Venture capital investment	Investment in 5G engineering equipment
5G App Framework	Investment to develop new product for design and development of 5G services
Private 5G in a Box	Investment to develop new products specifically for transport industry use cases such as smart stations and transport security

# NTT DATA profile (page 4 of 4)

## Everest Group assessment – Leader and Star Performer

Measure of capability:  Low  High

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

### Strengths

- The merger of NTT with NTT DATA has helped it scale the 5G engineering services capabilities rapidly, with employee and customer base almost doubling
- Compared to peers, NTT DATA has created a robust private 5G portfolio, where the revenues are being driven by engagements across aerospace and defense and automotive verticals
- NTT DATA has a balanced portfolio of clients ranging across different industries and geographies
- It is making significant investments on enhancing its 5G engineering capabilities in the form of IPs, CoEs, labs, partnerships, and talent building initiatives
- Clients have appreciated NTT DATA’s commitment to the engagement, ability to form long-term relationships, and flexibility to adapt to client’s requirements

### Limitations

- Customers believe that NTT DATA can focus on enhancing its thought leadership around the requirements of end consumer in the 5G space, helping drive more engagements
- While clients appreciate NTT DATA’s flexibility to accommodate requirements, they also suggest that it needs to be more concrete in setting expectations in order to avoid any potential timeline delay
- NTT DATA engages primarily through traditional pricing models such as time and material or fixed-price model. There is limited exposure to innovative pricing constructs such as revenue-sharing or outcome-based pricing

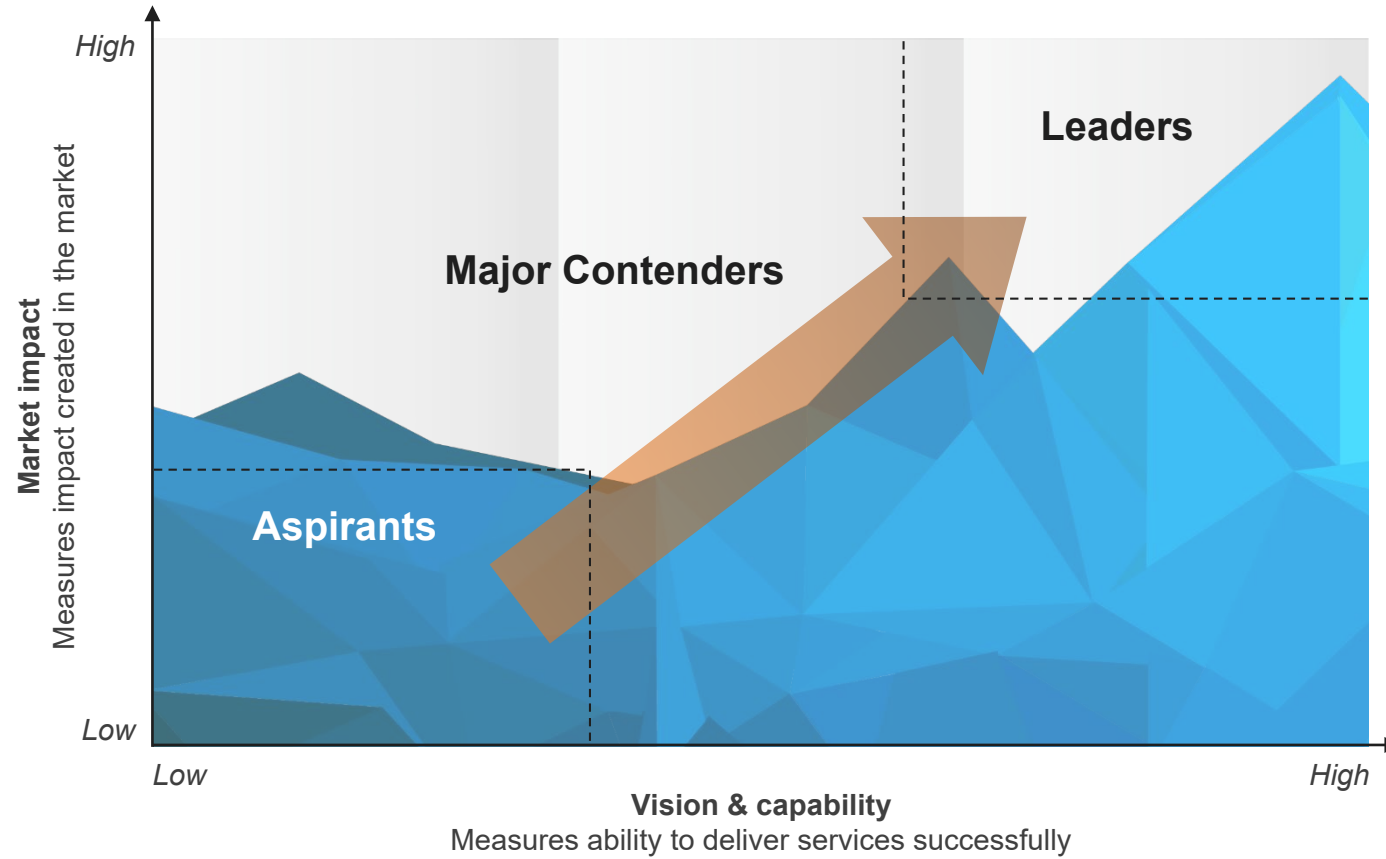


# Appendix

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



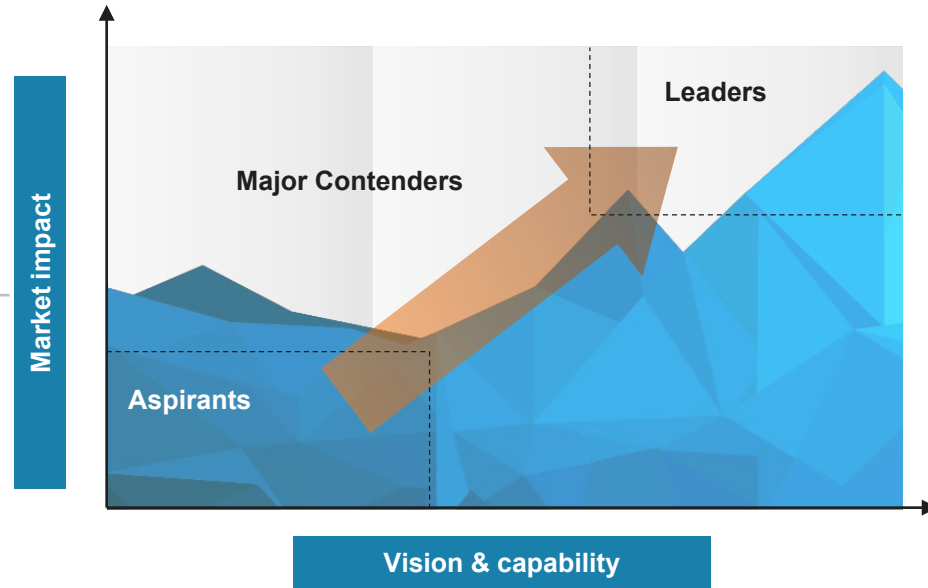
Everest Group PEAK Matrix



# 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



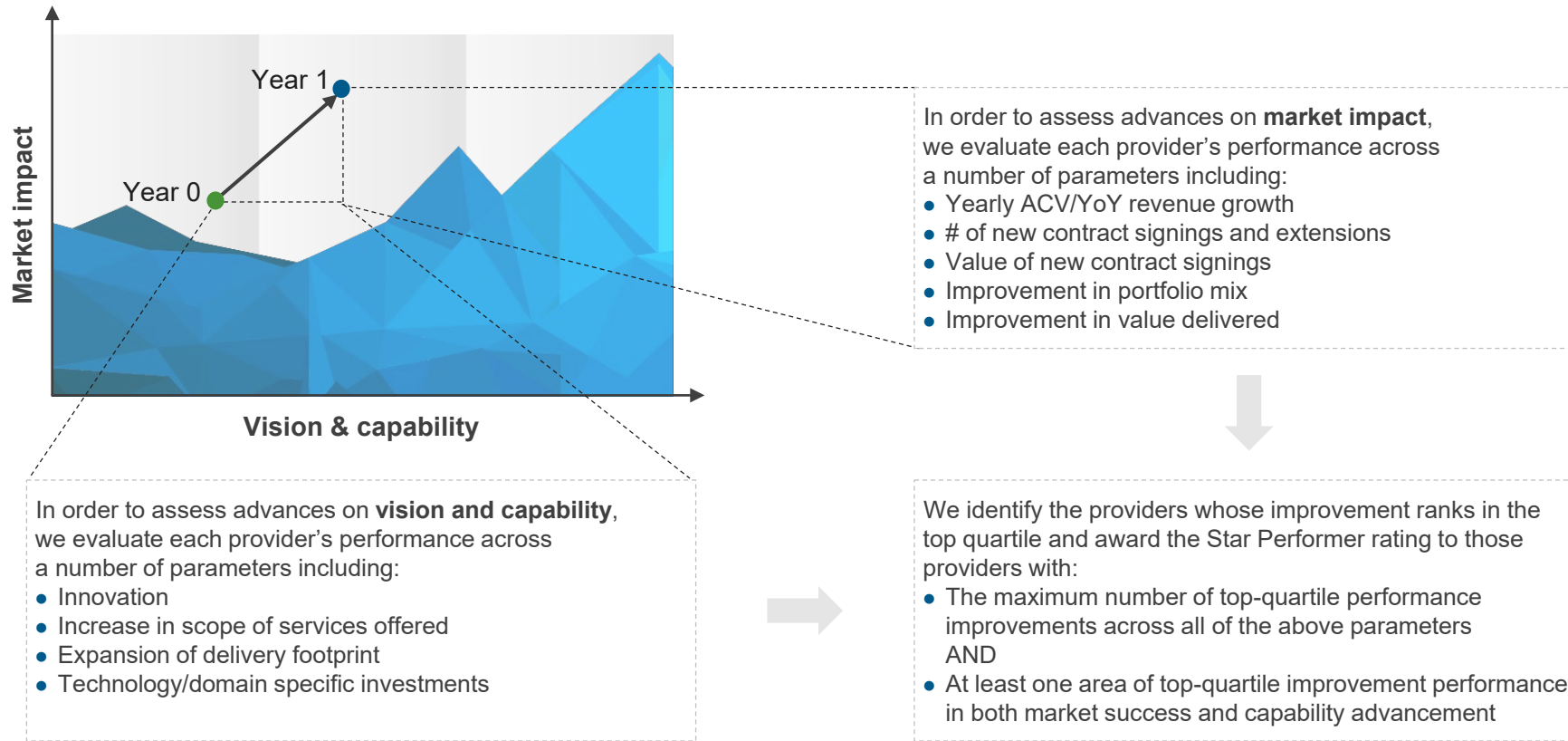
Measures ability to deliver services successfully. This is captured through four subdimensions

- 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

# Everest Group confers the Star Performers title on providers that demonstrate the most improvement over time on the PEAK Matrix®

## Methodology

Everest Group selects Star Performers based on the relative YoY improvement on the PEAK Matrix



The Star Performers title relates to YoY performance for a given vendor and does not reflect the overall market leadership position, which is identified as Leader, Major Contender, or Aspirant.

## FAQs

### **Does the PEAK Matrix® assessment incorporate any subjective criteria?**

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.

### **Is being a Major Contender or Aspirant on the PEAK Matrix, an unfavorable outcome?**

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.

### **What other aspects of the PEAK Matrix assessment are relevant to buyers and providers other than the PEAK Matrix positioning?**

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.

### **What are the incentives for buyers and providers to participate/provide input to PEAK Matrix research?**

- 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 included in our research reports

### **What is the process for a provider / technology vendor to leverage its PEAK Matrix positioning?**

- 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](#)

### **Does the PEAK Matrix evaluation criteria change over a period of time?**

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.



Everest Group is a leading research firm helping business leaders make confident decisions. We guide clients through today's market challenges and strengthen their strategies by applying contextualized problem-solving to their unique situations. This drives maximized operational and financial performance and transformative experiences. Our deep expertise and tenacious research focused on technology, business processes, and engineering through the lenses of talent, sustainability, and sourcing delivers precise and action-oriented guidance. Find further details and in-depth content at [www.everestgrp.com](http://www.everestgrp.com).

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