



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

**Focus on Infosys**  
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

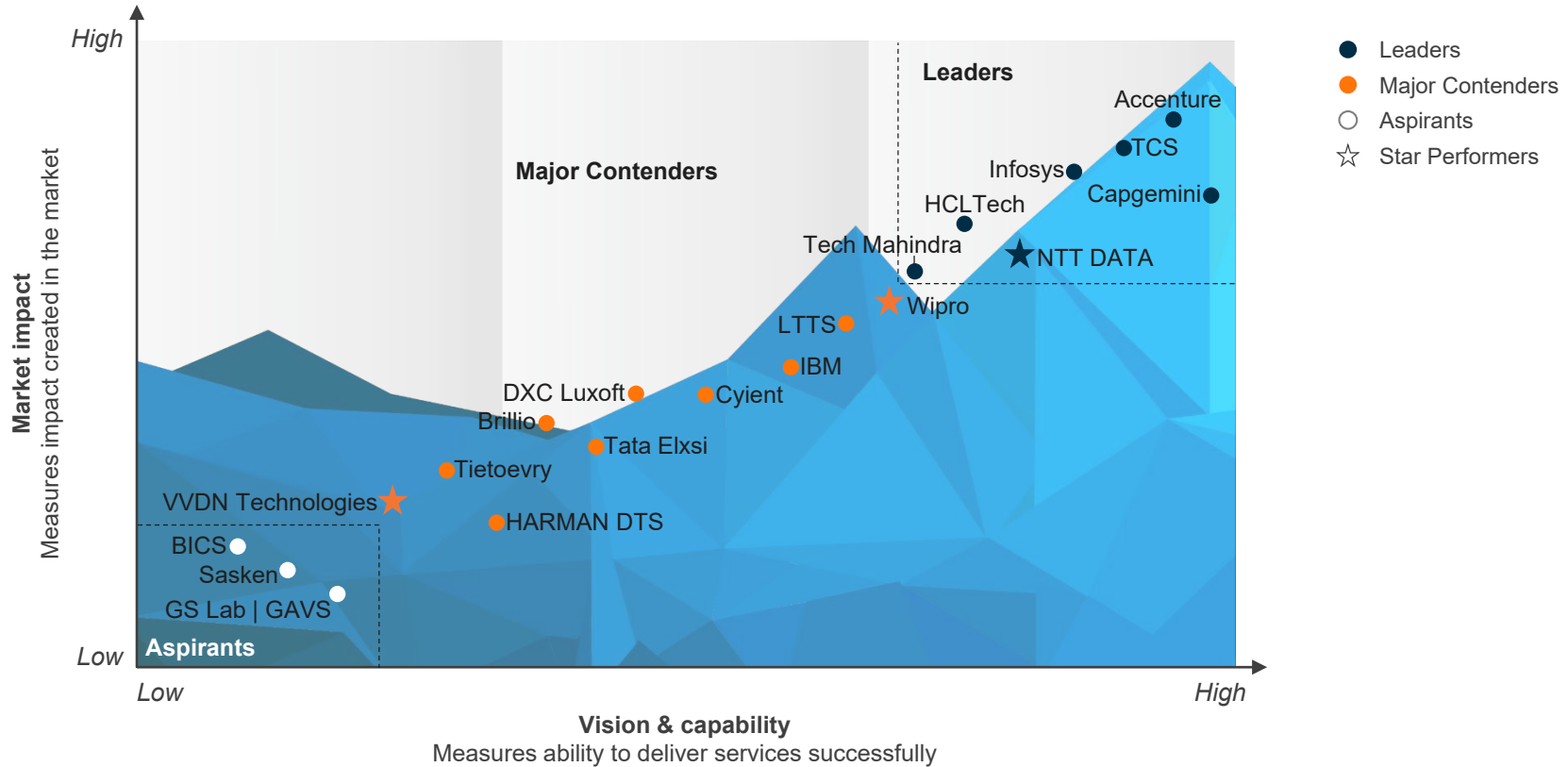
- Aspirants consist of players whose 5G engineering services business is in nascent stages. They have capabilities in specific stages of the value chain and limited diversity in their client portfolio. They have a smaller employee base and limited geographical presence that hinders their chances at scaling 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 | Infosys is positioned as a Leader



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



<sup>1</sup> Assessments for Sasken and Tietoevry 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  
<sup>2</sup> 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)

# Infosys profile (page 1 of 4)

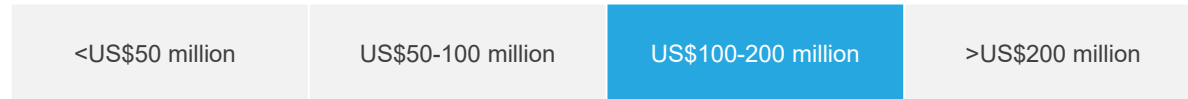
## Overview

### Vision and Strategy

Infosys 5G vision is to drive enterprise digital transformation by engineering innovative platforms, products, and solutions in collaboration with ecosystem partners. It aims to be the No.1 5G orchestrator in the world.

It aims to achieve this through ecosystem integration, acquisitions, and collaboration with forums such as ONF, TIP, and O-RAN, by developing 5G living labs, helping clients take conscious steps toward sustainability, and by enabling vertical-specific use cases across media, retail, healthcare, etc., while creating open platforms and a metaverse foundry.

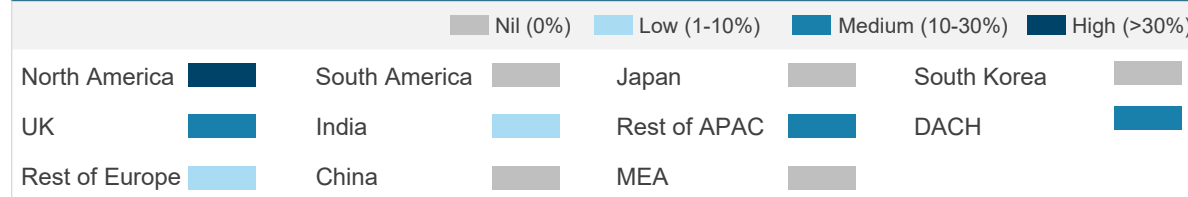
### 5G engineering services revenue (July 2021 – June 2022)



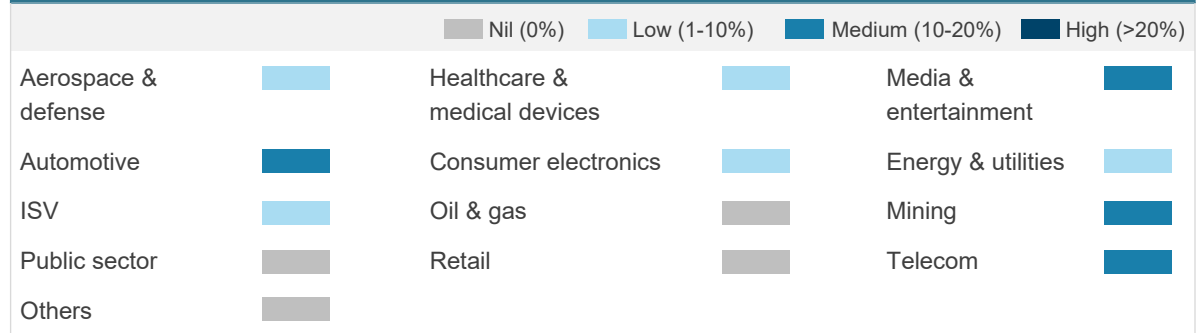
### YoY growth rate in 5G engineering services revenue (July 2021 – June 2022)



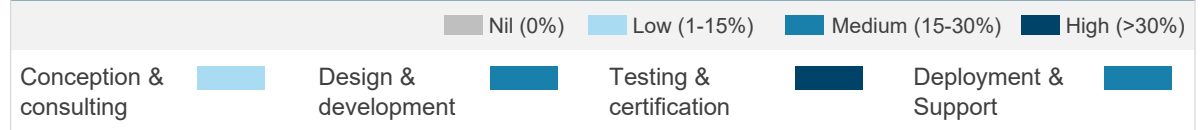
### Revenue by geography



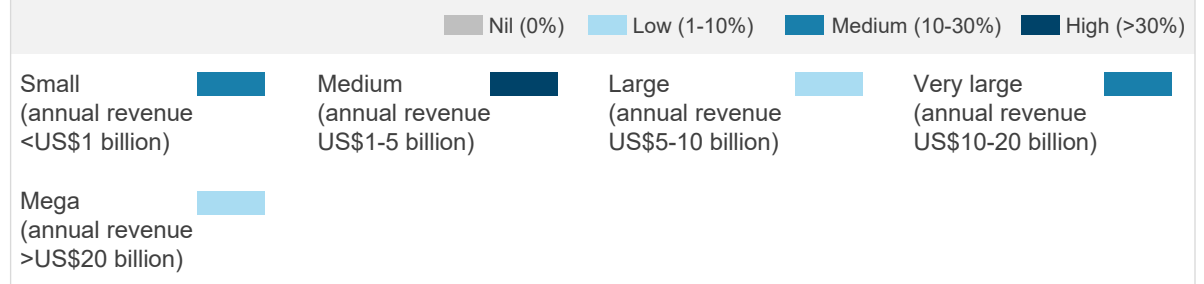
### Revenue by 5G engineering industry segments



### Revenue by value chain function



### Revenue by buyer size



# Infosys profile (page 2 of 4)

## Case study

**Case study 1** **Helped a North American OEM in accelerating 5G Core development and validation**

**Business challenge**  
The OEM intended to launch next generation 5G solutions and needed assistance in 5G Core network development to meet 3GPP release.

**Solution and impact**  
Infosys provided 5G Core solution development, testing (new features), and implementation as per the release note for 5G NF. Infosys helped in 5G Core end-to-end network validation using Python and Automation Framework (ROBOT) and performed multi-OEM interoperability testing and validation. The testing and validation was done using automated scripts to minimize error and deviation.

**Case study 2** **Helped a North American CSP by providing end-to-end engineering and services for V-RAN implementation and operations**

**Business challenge**  
The client needed support in 5G MMW and C-band deployment in a brown field network in the US, to upgrade the wireless network for 5G coverage expansion by at least 100 million users.

**Solution and impact**  
Infosys provided end-to-end services including field services for site deployment and operational support. It carried out OSS changes to support Cell Site Integration for 5G MMW and VRAN Site Integration for 5G C-band network rollout. It also changed the network assurance to conduct health checks and capture alarms from 5G RAN.

Proprietary solutions (representative list)	
Solution	Details
Infosys 5G Slice Manager	A solution to provide end-to-end slice configuration covering the VRAN, core, network, and infrastructure
Infosys Active Inventory Solution	A solution that adapts to the agile and dynamic nature of SDN networks, mandating the need of a unified, real-time view of the physical and virtual network components.
Infosys Active Monitoring Solution	An end-to-end monitoring solution for legacy and next-generation networks focused on monitoring challenges raised by SDN/NFV networks and 5G networks.
Infosys Core Network Testing	A testing framework, providing a flexible API-based mechanism to create test scenarios and execute them for 5G call flows
Infosys Network Edge Controller (INEC)	A solution for SDN-enabled networks
Infosys Network Function Automation (INFA)	A workflow automation tool for onboarding of VNFs and CNFs and improving time-to-market
Infosys Private 5G Network Management Solution (IPNM)	A solution to enable end-to-end network visibility, management, and operations of multi-provider-based private 5G networks
Infosys 5G Security Framework	A framework to enable next-generation network function workload security.
Infosys Virtual Network Infra Platform	A PaaS platform based on Kubernetes to host CNFs and IT workloads
O-RAN Deployment automation	An automation tool for the deployment of ORAN solutions for service providers
Infosys Edge Application Management	A framework to dynamically manage, scale, and run applications on the edge cloud

## Infosys profile (page 3 of 4)

### Offerings

#### Key alliances and partnership (representative list)

Company	Details
Airspan, Asocs, Nokia, and BTI wireless	Partnerships to provide solution elements in the 5G Radio Access Network (RAN) solution
Athonet, Cisco, Mavenir, Microsoft, HPE, and Nokia	Partnerships to provides solution elements in the 5G Core network
Computacenter and Nexius	Partnerships to provide field services in the 5G deployments
Innoeye	A partnership to enable product innovation and development for communication service providers
Red Hat	A partnership to provide the open stack components for network integrations and deployments
Saguna	A partnership to provide software-based niche solutions in Multi Access Edge Computing (MEC)
Verizon, Telstra,Optus, AT&T, and LGI	A partnership to provide expertise in 5G network integration
Keysight, TEMS Discovery, and DevSol	A partnership to test out the 5G network elements










#### Recent 5G engineering services investments/acquisitions (representative list)

Investment/target	Description
5G academy for training & certification	Investment in talent building while focusing on fungibility
5G Living Labs	Investment to set up 5G labs across the US, Germany, India, and Australia to empower the partner ecosystem to effectively define business use cases, innovative solutions, RoI, and create Proofs of Concept (PoCs)
Device lab for ISVs	Investment to set up labs for conceptualizing and developing mobility-based automation framework across multiple form factors
Infosys Cobalt Cloud Community	Investment to set up a cloud community to help enterprises drive innovation at scale
Infosys digital innovation hubs in the US	Investment in upscaling talent in digital technologies through partnerships with global start-ups and universities
Innovations and solutions	Investment in solutions and IPs to speed up time-to-market for clients
Marketing and branding	Investment to enhance thought leadership and company branding across the 5G ecosystem
External and standard forums	Investment in the international and industry forums – TIP, ONF, LNF, IEEE, IETF, ONOS, ONAP,O-RAN, and MWC

# Infosys profile (page 4 of 4)

## Everest Group assessment – Leader

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

- Infosys has a balanced portfolio of services across the entire 5G engineering services value chain, and the equipment, network, and solution engineering services
- It has had a strong revenue growth that could be attributed to a significant increase in its new client engagements
- Infosys has a good delivery mix that enables it to serve customers from both onshore as well as low-cost locations
- It has a core competency in networks and systems supported by a good mix of IP solutions and partnerships in the domain
- Infosys showcases a good mix of pricing models in both traditional as well as emerging models such as outcome-based, revenue sharing, and others
- Customers recognize Infosys for understanding project requirements and its flexibility to adapt as per customer needs

### Limitations

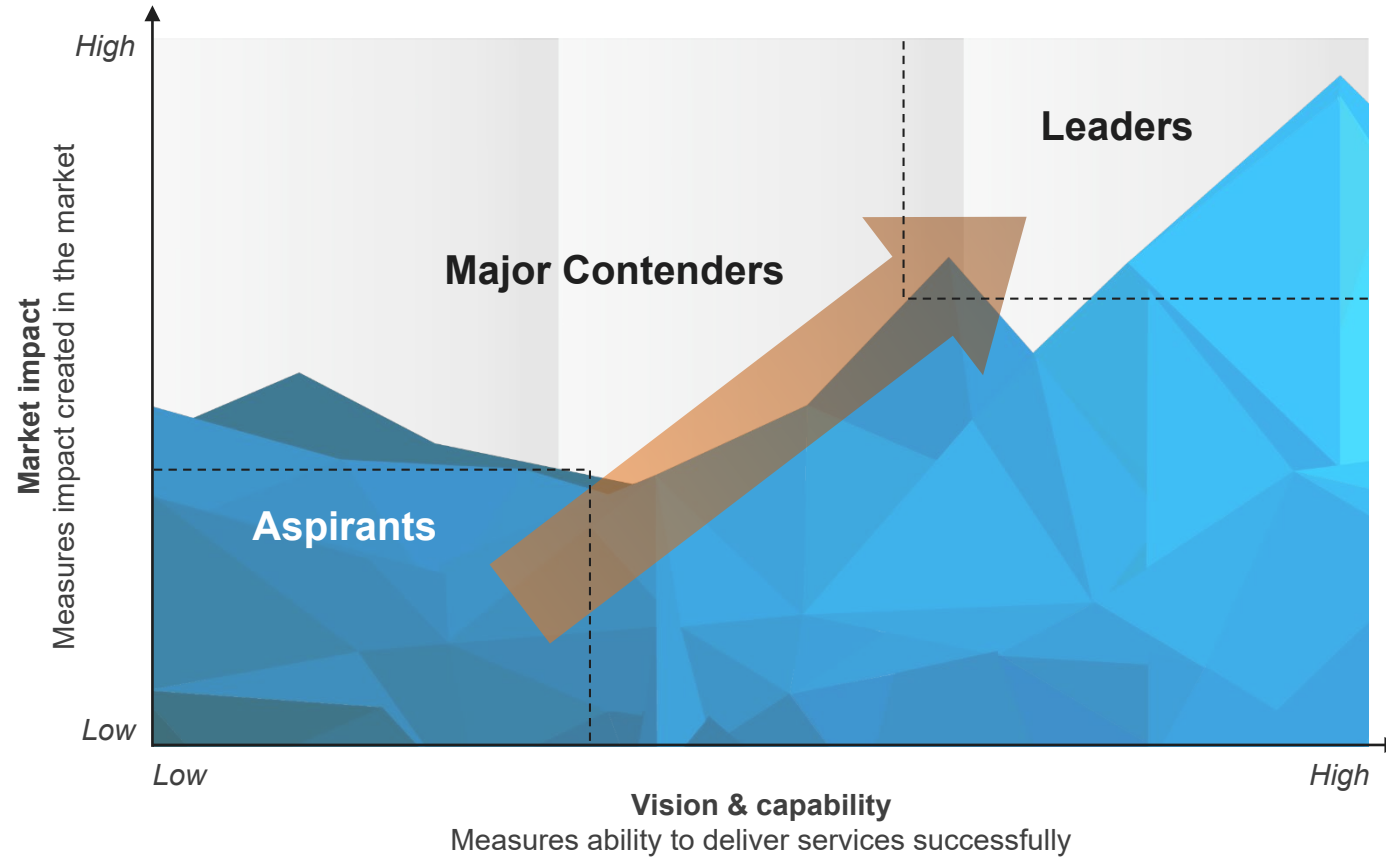
- While Infosys has a good share of engagements with TSPs and NEPs, it has fewer engagements with enterprise customers and technology providers
- Compared to peers, Infosys has made fewer investments in establishing dedicated CoEs in 5G engineering to enhance their domain understanding
- Customers believe Infosys can be more competitive by focusing on commercial flexibility and increasing its 5G talent pool
- While Infosys has engaged well with small or medium buyers, there are fewer engagements with large-sized enterprises, compared to peers



# Appendix

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

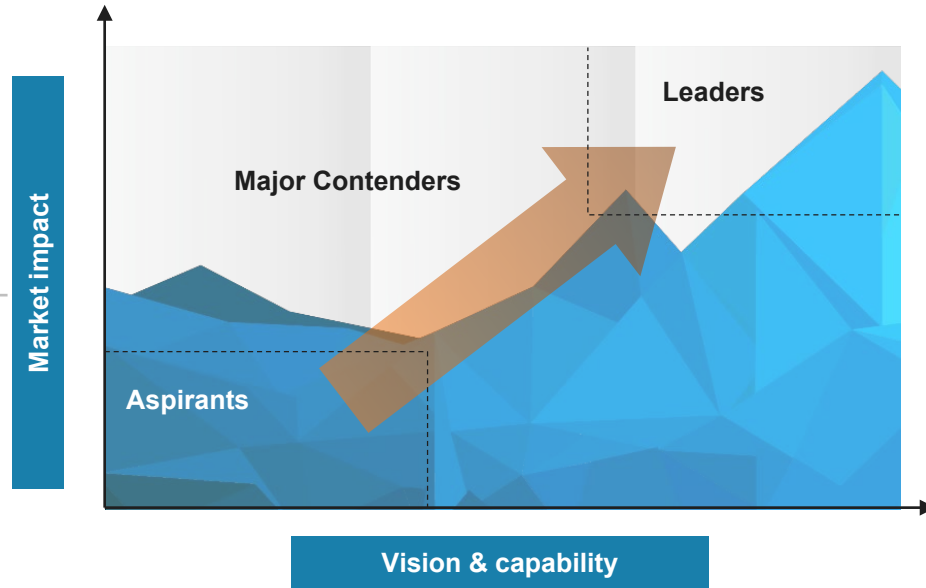
Everest Group PEAK Matrix



# 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



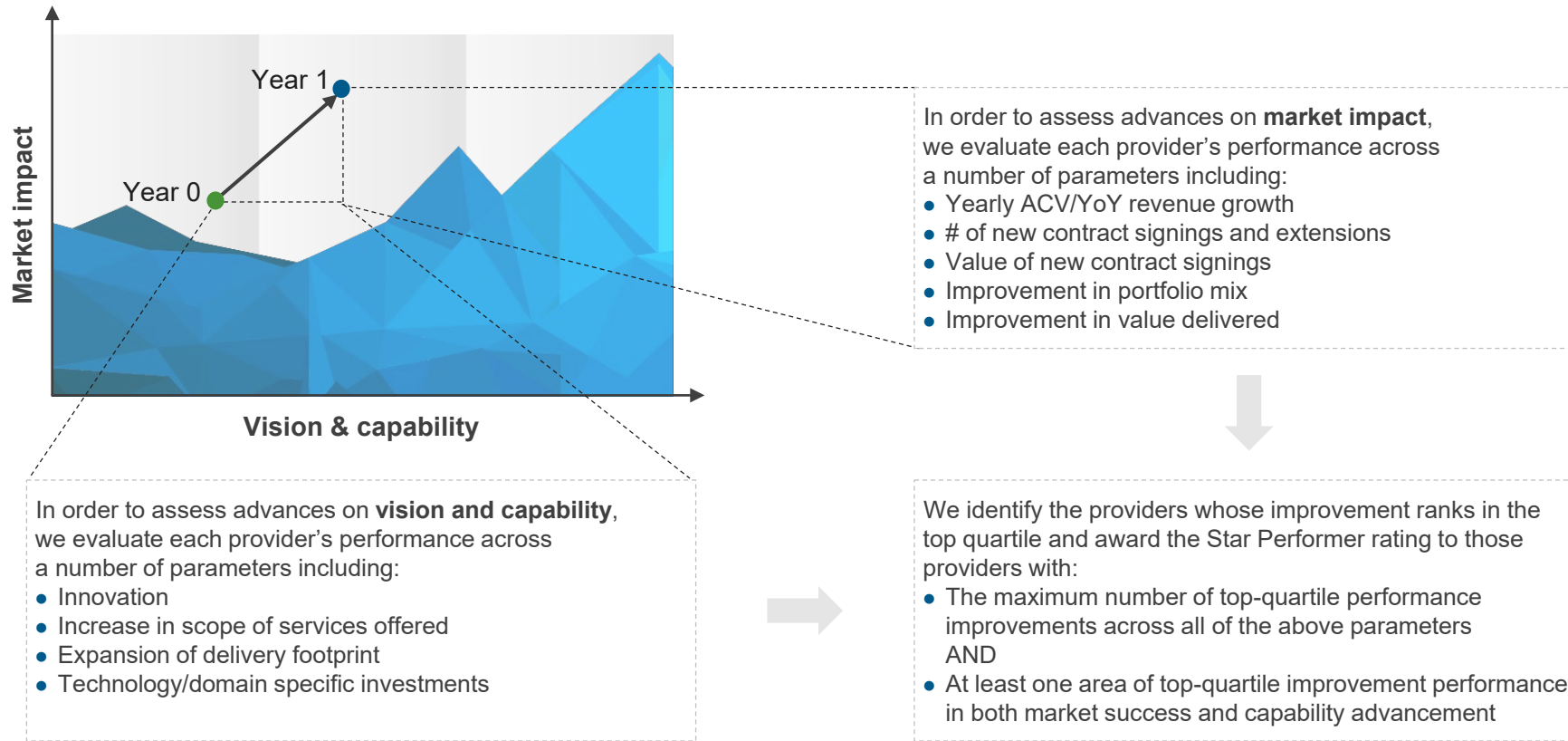
Measures ability to deliver services successfully. This is captured through four subdimensions

- 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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