Everest Group®

# Everest Group PEAK Matrix® for Network Transformation and Managed Service Providers 2021

## Focus on HCL Technologies

August 2021

Everest Group PEAK MATRIX®



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# Background of the research

The COVID-19 pandemic fueled the digital transformation initiatives of enterprises to ensure business continuity. With a work-from-home culture prevalent for the past 12-18 months, there has been a shift in network strategies of enterprises to provide seamless and secure connectivity to their workforce. Rapid cloud adoption along with other digital transformation initiatives have further accelerated the enterprise needs to adopt next-generation network technologies. The network services industry is further bound to undergo radical changes in enterprise needs and priorities, as next-generation network technologies such as private 5G network, SD-WAN, and IoT/edge networks come into play. Service providers need to realign their strategies with these shifts in the network services market to ensure that they can provide next-generation network services to enterprises.

In this research, we present an assessment and detailed profiles of 12 network service providers featured on the network transformation and managed services PEAK Matrix®. The assessment is based on Everest Group's annual RFI process for calendar year 2021, interactions with leading network services providers, client reference checks, and an ongoing analysis of the network services market.

**This report includes the profiles of the following 12 leading network service providers featured on the Network Transformation and Managed Services PEAK Matrix® :**

- **Leaders:** Accenture, HCL Technologies, TCS, and Wipro
- **Major Contenders:** IBM, Infosys, Microland, Orange Business Services, Tech Mahindra, and Zensar
- **Aspirants:** Computacenter and Mphasis

**Scope of this report:**

**Geography**
Global

**Service providers**
12

**Services**
Network transformation and managed services

# Network transformation and managed services PEAK Matrix® characteristics

**Leaders:**

Accenture, HCL Technologies, TCS, and Wipro

- Leaders in network services have established successful businesses in delivering global network services, driven by capability building and experience across the end-to-end network services spectrum (consult, build/design, and manage) across industry verticals
- These players continue to proactively drive investments in next-generation technology themes and services capability development (internal IP/tools, partnerships, acquisitions, etc.)
- Leaders have a strong focus on driving alignment between the business and IT teams of enterprises to drive higher value through contextual solutions tailored to specific enterprise requirements
- All Leaders have a strong focus on driving large-scale/complex network transformation, specifically for the large enterprise segment (with annual revenue greater than US$5 billion)

**Major Contenders:**

IBM, Infosys, Microland, Orange Business Services, Tech Mahindra, and Zensar

- Major Contenders in the network services space include a mix of large and mid-sized service integrators
- These players have built meaningful capabilities to deliver network services (both management/run and transformation services); however, their service portfolios are not as balanced and comprehensive as those of Leaders (either in terms of coverage across industry verticals or geographies or both) – this is also reflected in the scale of market success achieved by these players (vis-a-vis Leaders)
- However, all these players are making continued investments in developing internal IP and tools, as well as expanding their service and technology partnership networks in order to plug their “capability gaps”, and are thereby, positioning themselves as strong challengers to the Leaders in this space

**Aspirants:**

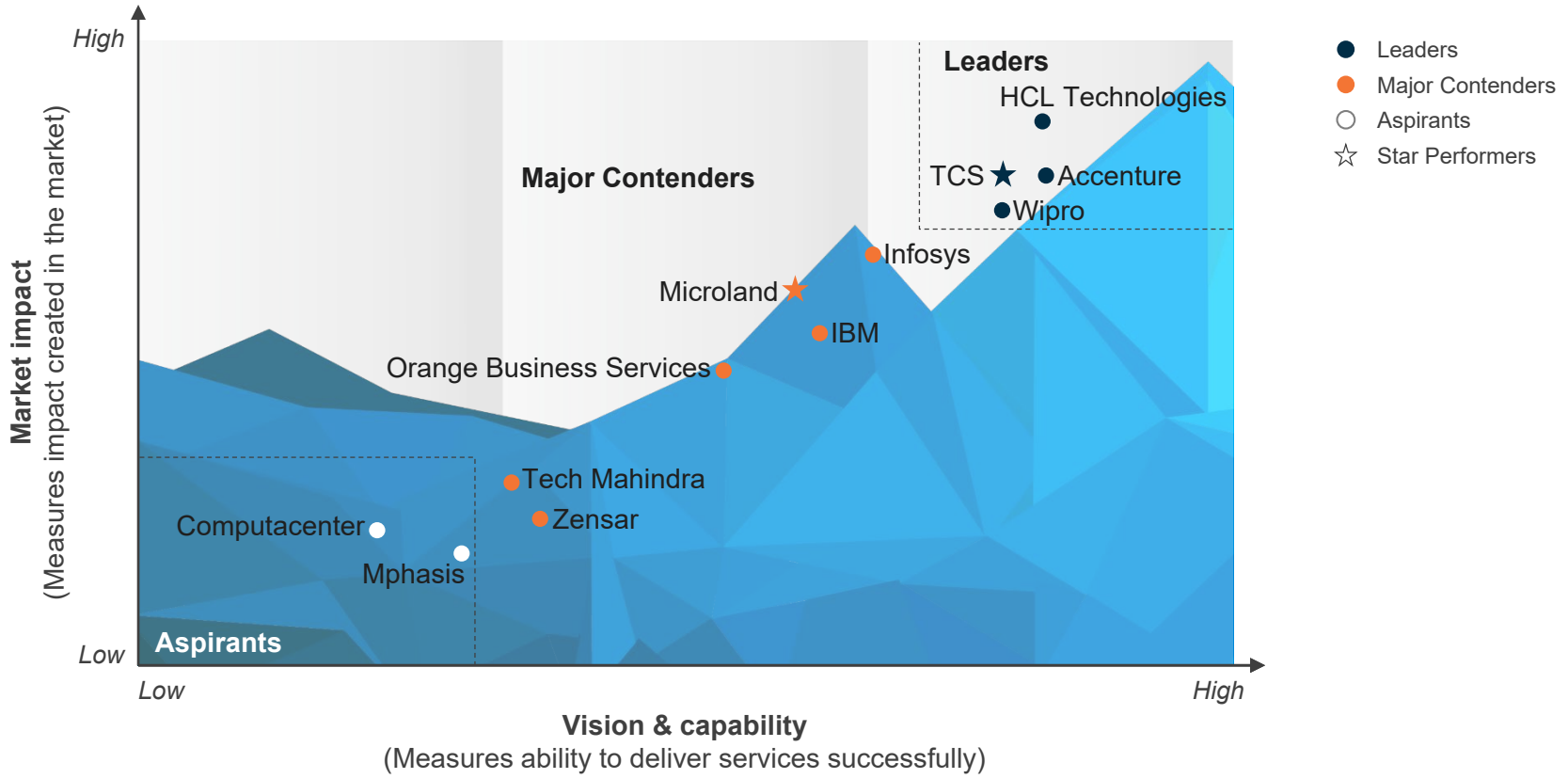
Computacenter and Mphasis

- The network services business of Aspirants is in the initial stages of growth and is currently not a leading revenue generator for these players
- Nevertheless, these companies are making investments to build broader capabilities to cater to buyers (through service and technology partnerships as well as internal IP/tools)

# Everest Group PEAK Matrix®

## Network Transformation and Managed Services PEAK Matrix® Assessment 2021 | HCL Technologies positioned as Leader

**Everest Group Network Transformation and Managed Services PEAK Matrix® Assessment 2021[1]**




1 Assessments for Computacenter, IBM, and Tech Mahindra exclude service provider inputs and is based on Everest Group's proprietary Transaction Intelligence (TI) database, ongoing coverage of these service providers, service provider public disclosures, and Everest Group's interaction with buyers

Source: Everest Group (2021)

# HCL Technologies | network transformation and managed services (page 1 of 6)

## 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

- HCL Technologies has made meaningful investments in developing solutions and IPs in next-generation capabilities such as IoT/edge networks, private 5G, and Wi-Fi 6
- Its verticalized use cases for SDN, edge networks, and IoT act as key differentiators in the market
- It has made credible solutions such as Fluid Connect and Intello-Fi in response to COVID-19 pandemic to help enterprises transition to work-from-home as well as maintain safety at the workplace
- Clients have appreciated its domain and technical expertise that allows it to provide seamless end-to-end network transformation services

### Limitations

- Despite having credible IPs and solutions for network transformation, its network services remain more focused on managed services rather than network transformation
- It needs to improve its network services consulting capabilities with business case creation specific to enterprises to be able to provide end-to-end network transformation
- It has fewer engagements with stand-alone network services in scope and has engagements more focused on IT outsourcing
- Some clients believe that it needs to improve its roadmap for planning and transformation

# HCL Technologies | network transformation and managed services (page 2 of 6)

## Overview

HCL Technologies stands poised to embrace the current ecosystem with a vision for the coming decade of technology-driven disruption, which is – technology for the next decade today. It strives towards delivering "network transformation as a digital foundation" with an unwavering focus on creating customer value – going beyond expectations, effectively taking the relationship beyond the contract.

**Network services revenue**

| <US$200 million | US$200-500 million | US$500 million-1 billion | >US$1 billion |
|---|---|---|---|

**Adoption by type of network services**

High (>50%) Medium (30-50%) Low (<30%)

| Traditional network services | Next-generation network services |
|---|---|

Low (<10%) Medium (10-20%) High (>10%)

**Adoption by industry**

| | | | |
|---|---|---|---|
| BFSI | | Energy and utilities | |
| Healthcare and life sciences | | Telecom, media, and entertainment | |
| Public sector | | Manufacturing | |
| Technology | | Retail, distribution, and CPG | |

**Adoption by geography**

| | | | |
|---|---|---|---|
| North America | | Asia Pacific | |
| Middle East & Africa | | Europe (excluding UK) | |
| United Kingdom | | South America | |

**Adoption by buyer groups**

| | |
|---|---|
| Small (annual revenue < US$1 billion) | |
| Medium (annual revenue = US$1-5 billion) | |
| Large (annual revenue > US$5 billion) | |

**Adoption by service segments**

| | |
|---|---|
| Consulting | |
| Design and build services | |
| Managed services | |

# HCL Technologies | network transformation and managed services (page 3 of 6)

## Case studies

### Case study 1

**Network transformation and modernization through Software Defined Networking (SDN)**

**Client**

A leading American transportation company

**Business challenge**

The client had limited network visibility and WAN utilization with no automation in the network. Its LAN was not flexible to cater to dynamic network changes and traffic prioritization was not focused on application performance. It also needed to coordinate with telecom technicians and hands & feet technicians for device provisioning.

**Solution**

- Implemented Sensus framework for datacenter modernization using a holistic assessment-driven SDN approach
- Leveraged TIS for WAN redesign, optimization, and bandwidth aggregation
- Introduced LAN lifecycle management and automation through Nucleus framework
- Reduced new investment needs for network transformation by reusing existing installed base
- Facilitated integration of services and allowed smooth transition from existing network infrastructure to modernized SDN ecosystem

**Impact**

- Faster ramp-up of remote sites and new network devices configuration through zero-touch deployment and plug & play
- Local internet breakout to reduce MPLS link consumption for surge in traffic
- Scalability on-demand with reduced IT footprint for wireless infrastructure
- Ability to perform packet capture analysis from web console and improved security suite with cloud proxy solutions from Zscaler

### Case study 2

**Accelerated application delivery and uptime through WAN reengineering and network automation**

**Client**

A leading American cosmetics manufacturing company

**Business challenge**

The client has poor application performance for branch users with complex, diverse network and bandwidth impacting rapid application deployments. It also had high cost of operating branch IT infrastructure with vendor lock-ins preventing in-time deployment of new applications.

**Solution**

- Deployed NetBot for automation of L1, L2 tasks for faster ticket resolution, and AI-enabled troubleshooting. It also provided automated backups, IOS upgrades, and changes in bulk configuration
- Implemented Sensus framework for end-to-end transformation of the datacenter network infrastructure
- Incorporated Nucleus solution for managing SD-LAN architecture and wireless components.
- Performed WAN reengineering and helped the customer to move from datacenter LAN to Software-defined datacenter LAN.
- Performed WAN optimization to improve application performance at all sites

**Impact**

- Revamped security by assigning isolated workloads its own security policy through micro-segmentation
- Increase in application uptime by moving live workloads across regions with zero downtime
- Savings in capital cost through reduced dependency on physical hardware and elimination of vendor lock-in
- Faster time to market through accelerated application delivery by using virtualization and automated provisioning

# HCL Technologies | network transformation and managed services (page 4 of 6)

## Solutions

| **Proprietary solutions** (representative list) | |
|---|---|
| **Solution** | **Details of the tool/solution** |
| NetBot/NetBot 2.0 | A workflow driven network automation product offers seamless network management and increases enterprise agility while reducing recovery time. With NetBot 2.0, HCL is envisioning a future in which customers would need a universal controller (a controller of controllers) for task auto-remediation. A universal controller can connect with all the controllers across branch sites, on-premise, and public cloud datacenter network environments to offer seamless management and automation. |
| Sensus/Sensus 2.0 | An SDN framework that covers end-to-end data center network transformation through automated policy enforcement, intelligent abstraction, and hybrid interconnects across a multi-cloud and on-premise environment. The new framework of Sensus 2.0 empowers the existing SDN overlay solution with the in-house developed SDN modules. All these modules are strategically embedded to stimulate and synchronize the customer's SDN transformation. |
| Transport Independent Site (TIS)/TIS 2.0 | An SD-WAN framework that dynamically routes and connects the global WAN infrastructure of the enterprise that also makes it transport agnostic. It provides centralized control, cloud-management, AIOps, global network automation & orchestration, advanced analytics, network security, and carrier-neutral aggregation. It comes in a pay-as-you-go service model. TIS 2.0 now also supports NFVi based uCPE stack for branch overlay and a new model agile connect that encompasses SmartNet WAN architecture-based Communications Service Provider (CSP) backbone and UltraNet WAN architecture-based network service nodes and carrier neutral location. |
| Intello-Fi | A rapidly deployable intelligent campus solution that helps organizations ensure safety and well-being of employees and assets by proactively addressing and reporting employee health concerns. Through real-time location & analytics services enabled on existing wireless ecosystem of the enterprise, it can help enterprises trace infected contacts and ensure physical distancing. With accurate workspace metrics, it helps in hotspot identification and workspace density management. |
| Nucleus | Is a software-defined access network offering that enables central management and automation of wired and wireless LAN. The platform integrates with HCL NetBot and a third-party tool for automation, device discovery, and provisioning of access switches, access points, controller, and remote access points from multiple vendors. |
| Nlighten | A cognitive assessment tool for next-generation network services. |
| BluGenie | Provides IP-led services for automation of end-to-end network and service management i.e., provisioning and deployment, upgrade, healing, and full life cycle management. |
| TURBO | A telco automation platform that performs end-to-end validation and automation of 2G/3G/4G network. |
| SON | A self-organizing network platform that goes beyond RAN management to automate and optimize multi-vendor, multi-technology networks. |
| Hardware acceleration | Accelerates 5G deployment by offloading low-level networking functions to Field Programmable Gate Array (FPGA)-based smart Network Interface Case (NIC). |
| Private network-as-a-kit | Consists of Citizens Broadband Radio Service (CBRS) / Radio Access Network (RAN), Multi-access Edge Computing (MEC), Virtual Evolved Packet Core (vEPC), orchestrator, and IoT use cases stack. |
| Real-time Manufacturing Insights (RMI) use case migration over private networks | Provides real time operation visibility from shop floor to top floor; is available over private network. |

# HCL Technologies | network transformation and managed services (page 5 of 6)

## Partnerships

| **Partnerships** (representative list) | | |
|---|---|---|
| **Partner name** | **Type of partnership** | **Details of the partnership** |
| Cisco | Technology | Has had a partnership with Cisco for over 21 years and they jointly deliver next-generation IT solutions and services across multiple domains. HCL leverages Cisco solutions for network transformation (Sensus SDN (ACI & DNA), NetBot), datacenter transformation (Velocity- software-defined infrastructure), cloud, communications & collaboration, autonomics & orchestration, and IoT. |
| HPE | Technology | Leverages partnership with HPE for network solutions such as SDN and SD-WAN. |
| VMWare | Technology | Has had a strategic partnership with VMware since 2008. HCL's Software Defined Infrastructure (SDI) solution, VelocITy, is a VMware Validated Design (VVD) 3.0 and 4.0 certified. HCL's LibreSpace, a fully managed, cloud-hosted, workplace virtualization Desktop-as-a-Service (DaaS) solution leverages VMware technologies. |
| Zscaler | Technology | Is Zscaler's global partner and has developed solutions around Zscaler capabilities to secure cloud and SD-WAN. HCL's secure access service offering around Zscaler includes cost-benefit analysis, deployment, and managed services. |
| Dell | Technology | Has 360-degree partnership with Dell and together, HCL and Dell, jointly offer solutions for software-defined datacenter, connectivity & IoT solutions, hybrid cloud solutions and services, etc. It also leverages Dell for SD-WAN, CNL, and colocation technology services. |
| CheckPoint | Technology | Leverages CheckPoint products such as next-generation firewall, next-generation threat protection, and mitigation of advanced threats for the large data centers and cloud. HCL has also trained and certified engineers to handle the critical installations and operations of Check Point infrastructure. |
| SilverPeak | Technology | Leverages partnership with SilverPeak to provide SD-WAN, CNL, and colocation technology services. |
| Equinix | Technology | Leverages partnership with Equinix to provide SD-WAN, CNL, and colocation technology services. |
| VMWare | Technology | Leverages partnership with VMware to provide SD-WAN, CNL, and colocation technology services. |
| AT&T | Technology | Has partnership with AT&T for ISP, NSP, and cloud cross-connect services. |
| Verizon | Technology | Has partnership with Verizon for ISP, NSP, and cloud cross-connect services. |
| Aviatrix | Technology | Leverages partnership with Aviatrix for hybrid and multi-cloud networking. |
| Megaport | Technology | Leverages partnership with Megaport for hybrid and multi-cloud networking. |
| Intel | Technology | Has collaborated with Intel for developing framework/solution to accelerate adoption of 5G technologies such as ORAN, MEC, core, and private networks. |
| Commscope | Technology | Has collaborated with CommScope for developing framework/solution to accelerate adoption of 5G technologies such as ORAN, MEC, core, and private networks. |

# HCL Technologies | network transformation and managed services (page 6 of 6)

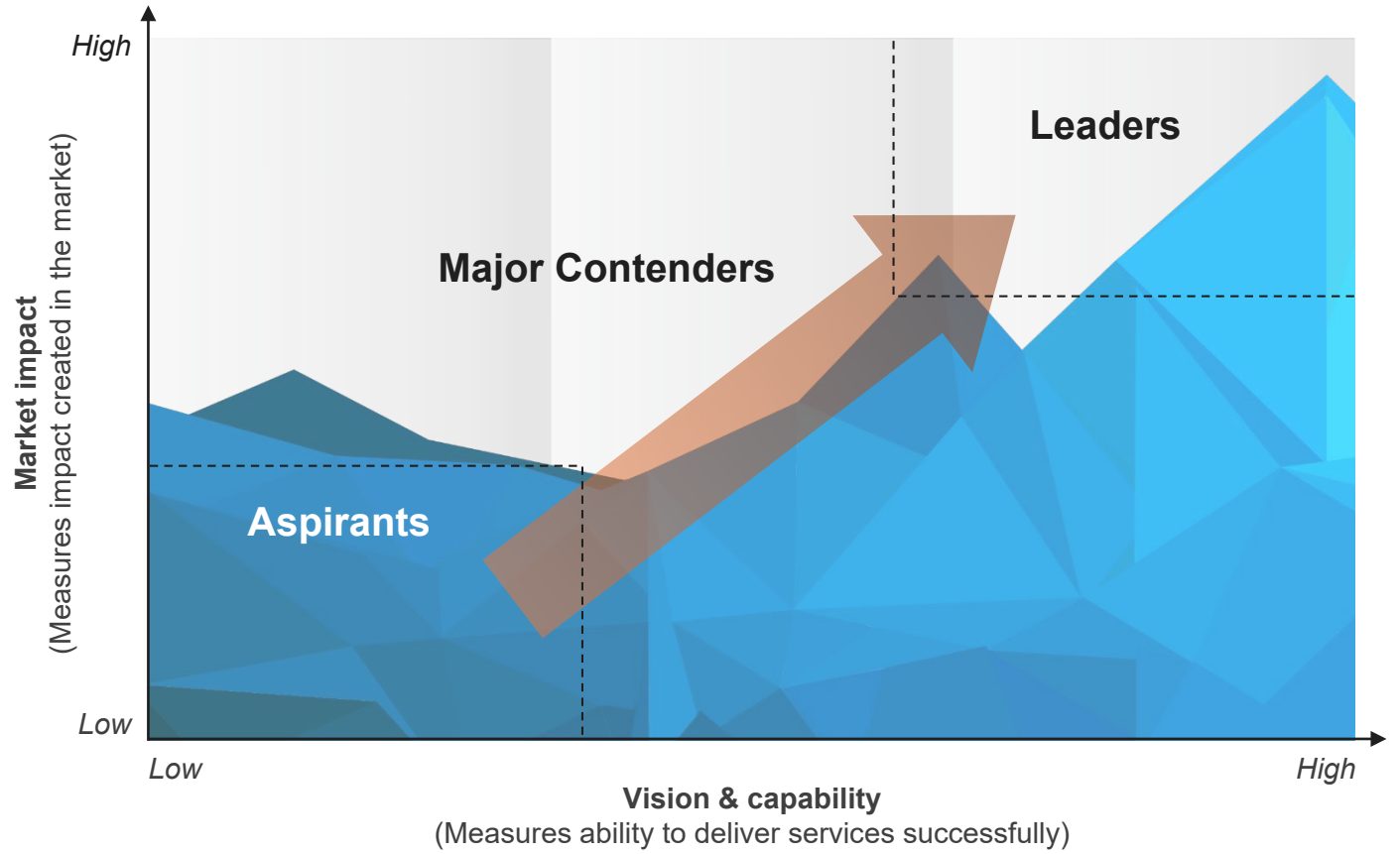
## Investments and recent activities

| Investments and recent activities (representative list) | |
|---|---|
| **Theme** | **Details of the investment** |
| Acquisition | • Cisco SON: HCL acquired Cisco's SON technology, the management solutions business for mobile 4G/5G deployment. The product is aimed at optimizing performance of the Radio Access Network (RAN) portion of mobile solutions. This transaction will allow HCL to continue to sell, develop, and support SON<br>• HCL recently acquired Cisco's Prime Home and Service Control Engine (deep packet inspection) product that is rearchitected & rebranded as iCE.X (Intelligent Connected Experience). iCE.X is an IOT remote device management product mainly focused on fully onboarding and managing devices for telecom service providers with either fixed line / fixed wireless / wireless - cable modems, Wi-Fi routers, ONTs, OLTs, GPON, cellular, CBRS / private LTE, 5G, etc. This is readily available on public cloud & on-premise deployments |
| Network Innovation Hub | Invested in establishing Network Innovation Hub in Noida, India, that enables it to explore innovative network solutions. |
| Partnership | Expanded partnership with Broadcom to include Symantec Enterprise Division (SED) consulting services, a part of Broadcom's enterprise security solutions. Through this partnership, HCL will leverage expertise across endpoint security, web security services, cloud security, and data loss prevention. |
| Talent development | Conducted training on 5G air interface, MEC & ORAN with 25 professionals getting certified and has been regularly hiring network programmers. |
| Datacenters and delivery centers | Invested in two datacenters and a delivery center in Lyon to spearhead research and technology-led innovation. |

# 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**

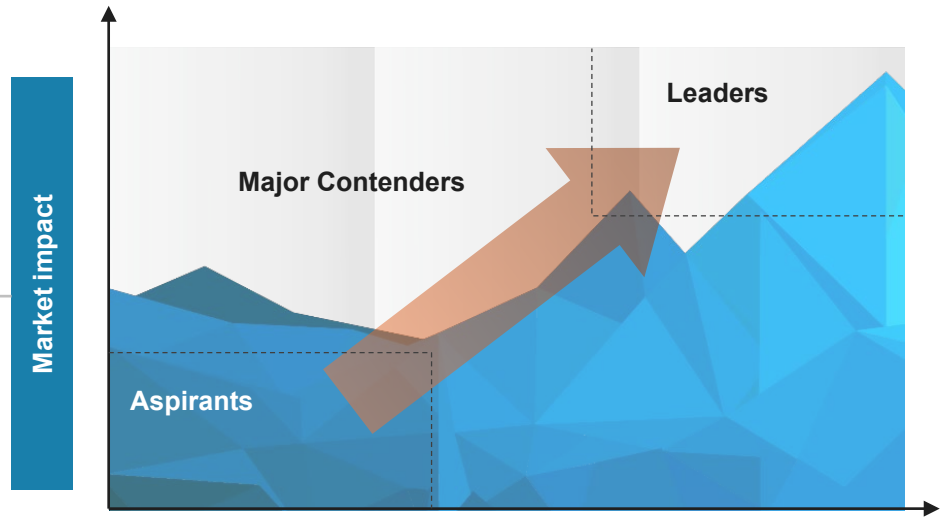
Number of clients, revenue base, YOY growth, and deal value/volume

**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




**Vision & capability**

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.

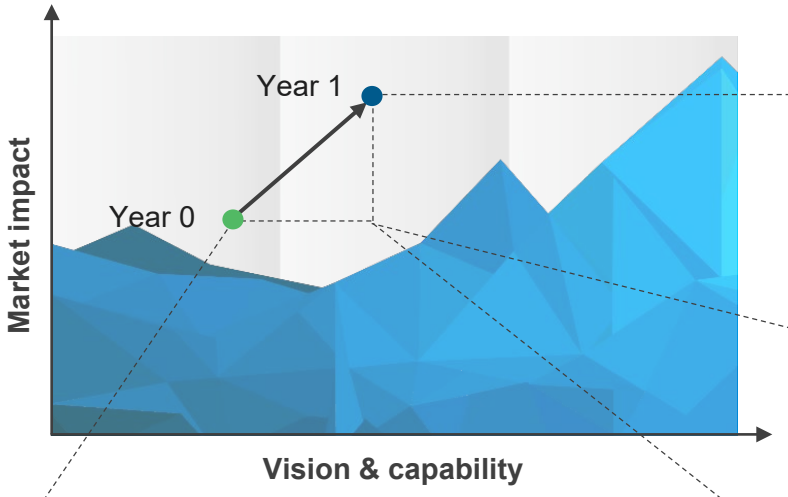
**Delivery footprint**

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




In order to assess advances on **market impact**, we evaluate each service provider's performance across a number of parameters including:

- Yearly ACV/YOY revenue growth
- # of new contract signings and extensions
- Value of new contract signings
- Improvement in portfolio mix
- Improvement in value delivered

In order to assess advances on **vision and capability**, we evaluate each service provider's performance across a number of parameters including:

- Innovation
- Increase in scope of services offered
- Expansion of delivery footprint
- Technology/domain specific investments

We identify the service providers whose improvement ranks in the top quartile and award the Star Performer rating to those service providers with:

- The maximum number of top-quartile performance improvements across all of the above parameters AND
- At least one area of top-quartile improvement performance in both market success and capability advancement

*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 adopts an unbiased and fact-based approach (leveraging service provider / technology vendor RFIs and Everest Group's proprietary databases containing providers' deals and operational capability information). In addition, these results are validated / fine-tuned 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 service 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 PEAK Matrix assessment are relevant to buyers and providers besides the "PEAK Matrix position"?**
A PEAK Matrix position is only one aspect of Everest Group's overall assessment. In addition to assigning a "Leader", "Major Contender," or "Aspirant" title, Everest Group highlights the distinctive capabilities and unique attributes of all the PEAK Matrix providers assessed in its report. The detailed metric-level assessment and associated commentary is helpful for buyers in selecting particular providers/vendors for their specific requirements. It also helps providers/vendors showcase their strengths in specific areas

**What are the incentives for buyers and providers to participate/provide input to PEAK Matrix research?**
- Participation incentives for buyers include a summary of key findings from the PEAK Matrix assessment
- Participation incentives for providers/vendors include adequate representation and recognition of their capabilities/success in the market place, and a copy of their own "profile" that is published by Everest Group as part of the "compendium of PEAK Matrix providers" profiles

**What is the process for a service provider / technology vendor to leverage their PEAK Matrix positioning and/or "Star Performer" status ?**
- Providers/vendors can use their PEAK Matrix positioning or "Star Performer" rating in multiple ways including:
  - Issue a press release declaring their positioning. See citation policies
  - Customized PEAK Matrix profile for circulation (with clients, prospects, etc.)
  - Quotes from Everest Group analysts could be disseminated to the media
  - Leverage PEAK Matrix 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 the designated POC at Everest Group.

**Does the PEAK Matrix evaluation criteria change over a period of time?**
PEAK Matrix assessments are designed to serve present and future needs of the enterprises. 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 as well as serve the future expectations of enterprises

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