



Everest Group Next-generation Quality Engineering (QE) Services PEAK Matrix® Assessment 2023

Focus on Cognizant
November 2023



Introduction

Enterprises aiming to embrace digital transformation are exploring cutting-edge next-generation technologies to gain a competitive edge, drive business model innovation, and expand their operational boundaries. However, to achieve the desired benefits without disrupting existing operations, it is imperative to implement comprehensive Quality Engineering (QE) processes for these next-generation technologies. To support enterprises in their journey toward quality transformation with the adoption of next-generation technologies, service providers are channeling investments into innovation and enhanced capabilities in areas such as cloud, AI, IoT, blockchain, extended reality.

In this research, we present an assessment of 35 next-generation QE service providers featured on the [Next-generation Quality Engineering \(QE\) Services PEAK Matrix® Assessment 2023](#). Each provider profile provides a comprehensive picture of its service focus, key Intellectual Property (IP) / solutions, domain investments, and case studies. The assessment is based on Everest Group's annual RFI process for the calendar year 2023, interactions with leading quality engineering service providers, client reference checks, and an ongoing analysis of the quality engineering services market.

The full report includes the profiles of the following 35 leading next-generation quality engineering service providers featured on the PEAK Matrix®:

- **Leaders:** Accenture, Capgemini, Cognizant, HCLTech, Infosys, Qualitest, TCS, and Wipro
- **Major Contenders:** a1qa, Aspire Systems, Cigniti, Coforge, eInfochips, Eviden, GlobalLogic, Indium Software, Infogain, Marlabs, Mphasis, Nous Infosystems, PwC, QualityKiosk, QualiZeal, Tech Mahindra, TestingXperts, Trigent, ValueMomentum, Virtusa, and Zensar
- **Aspirants:** 3i Infotech, Daffodil Software, Dexian IT Solutions, SLK Software, Testhouse, and TO THE NEW

Scope of this report



Geography
Global



Providers
35 leading next-generation QE
service providers



Services
QE services

Next-generation Quality Engineering (QE) Services PEAK Matrix® characteristics

Leaders

Accenture, Capgemini, Cognizant, HCLTech, Infosys, Qualitest, TCS, and Wipro

- Leaders have a superior vision for next-generation QE services and have gained significant mindshare among enterprises due to the depth and breadth of their service portfolio and delivery capabilities spread across high-growth markets
- Leaders in this category have a strong delivery capability and a proven track record of delivering successful next-generation QE projects across different industries and geographies. They have well-defined delivery models, processes, and tools to ensure efficient and effective project execution. They also have a strong partner ecosystem to leverage the latest technologies and accelerate innovation

Major Contenders

a1qa, Aspire Systems, Cigniti, Coforge, eInfochips, Eviden, GlobalLogic, Indium Software, Infogain, Marlabs, Mphasis, Nous Infosystems, PwC, QualityKiosk, QualiZeal, Tech Mahindra, TestingXperts, Trigent, ValueMomentum, Virtusa, and Zensar

- Major Contenders are making continued investments in developing the talent and partnerships required to accelerate time-to-market for their clients; their leadership commitment and commercial flexibility act as strong differentiators
- They have exhibited strong industry credentials for delivering next-generation QE engagements, making them strong contenders to Leaders
- While these service providers have developed meaningful solutions to deliver next-generation QE services, their service portfolios and delivery capabilities are not as comprehensive and balanced as those of Leaders

Aspirants

3i Infotech, Daffodil Software, Dexian IT Solutions, SLK Software, Testhouse, and TO THE NEW

- Aspirants have a limited market presence but are expanding their footprint and capabilities. They are looking to grow and diversify their customer base and continuously improve their services to meet client needs
- They need to invest in enhancing their partnerships with technology providers and focus on talent development initiatives to build a strong resource pool with advanced skill sets

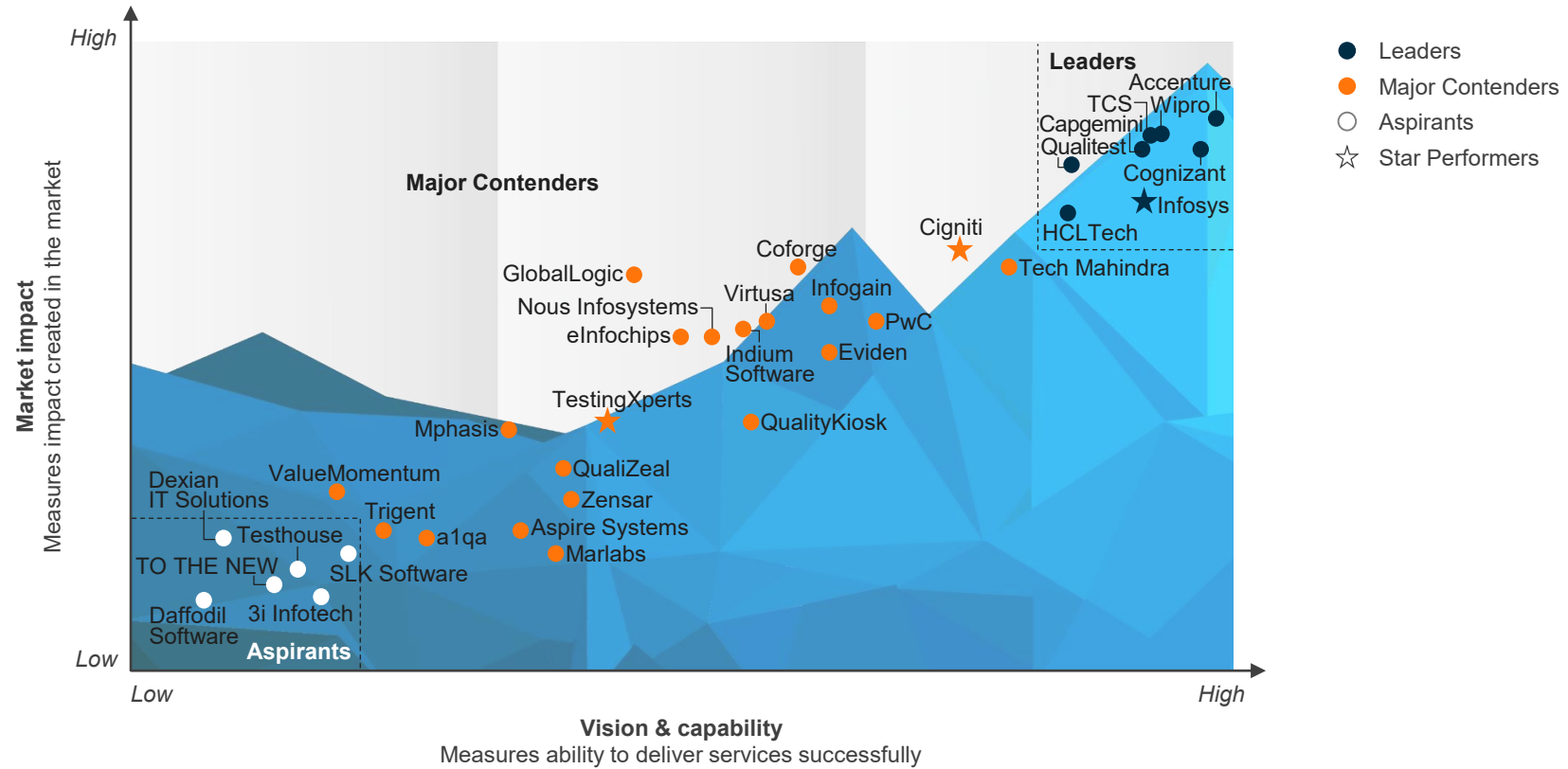


Everest Group PEAK Matrix®

Next-generation Quality Engineering (QE) Services PEAK Matrix® Assessment 2023 |

Cognizant is positioned as a Leader

Everest Group Next-generation Quality Engineering (QE) Services PEAK Matrix® Assessment 2023¹



¹ Assessment for Eviden and Virtusa includes partial inputs from the service provider, and is based on Everest Group's estimates that leverage its proprietary data assets, service provider public disclosures, and interactions with buyers
Source: Everest Group (2023)

Cognizant profile (page 1 of 5)

Overview

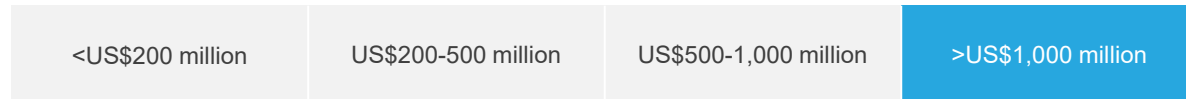
Vision

Cognizant places strong emphasis on quality, employing a forward-thinking engineering approach to ensure optimal quality on the first attempt for enterprises. This dedication is evident as it aims to modernize its core structures, create novel business models, and revolutionize customer interactions to excel in both digital and physical realms.

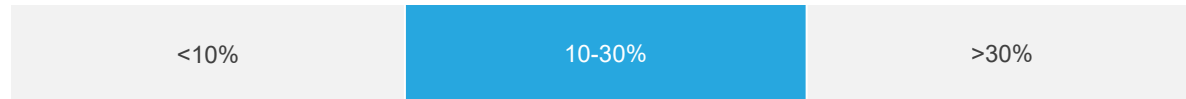
Scope of services:

Cognizant’s scope of services includes business process assurance, system modernization assurance, cloud and platform assurance, continuous automation and testing, robotic test automation, SMART verification and validation, and customer experience assurance. It provides functional, non-functional, crowdsourced, and on-demand testing services for QE advisory and assurance of the quality, compliance, and experience of custom build, COTS, digital, and phygital next-generation technologies.

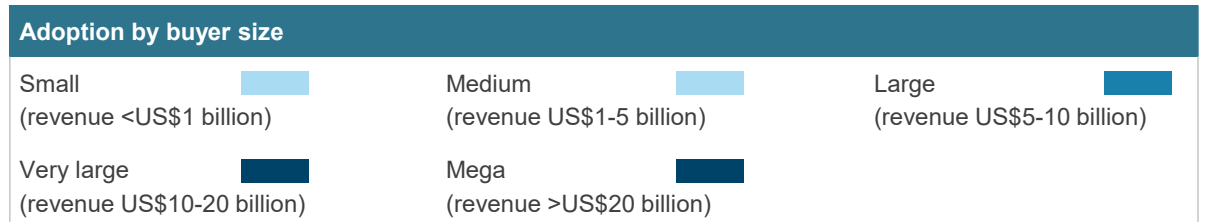
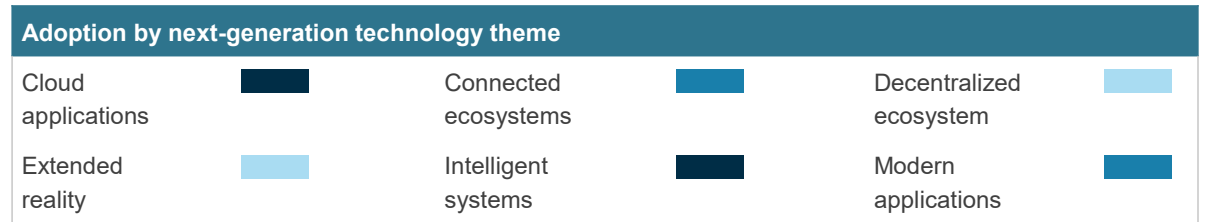
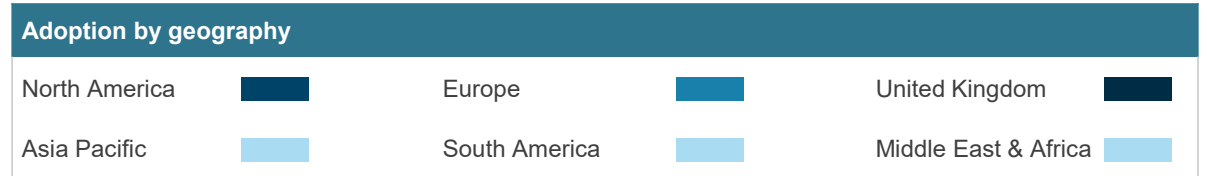
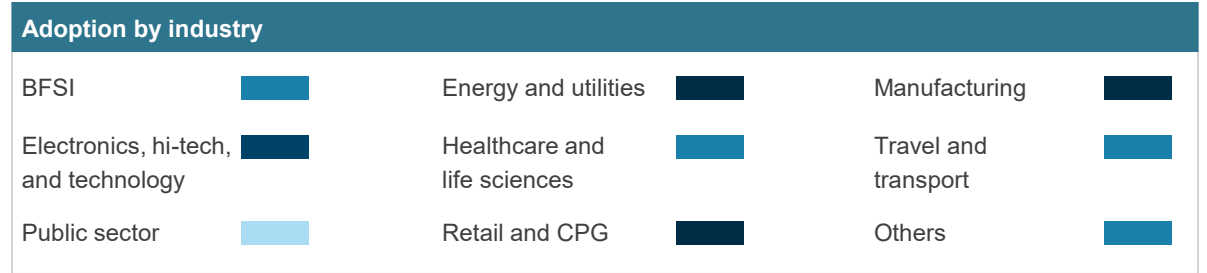
QE services revenue



Next-generation QE services focus



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



Cognizant profile (page 2 of 5)

Offerings

Proprietary solutions for next-generation QE services (representative list)

Solution name	Details
Cognizant Continuous Testing Platform (CCTP)	This platform is an overarching IP for continuous testing that delivers integrated, intelligent, and inclusive end-to-end QE powered by zero-touch automation.
AILA	It is a platform for assuring AI, which enables end-to-end assurance encompassing data, model, process, security, and performance for AI-based applications.
Smart V&V	It is an AI-driven platform to deliver real-time regulatory compliance for all IT systems and products falling under life sciences regulations and other regulatory industries. It enables continuous software delivery with continuous compliance by leveraging automation and AI technologies.
Robotic test automation	This solution enables seamless testing of phygital systems such as IoT, using Cognizant's partnerships with industry leading Collaborative Robots (COBOTs) such as ABB, Sawyer, and Eva. It is also underpinned by deep industry expertise, IP, accelerators, end-to-end automation, and digital assurance labs.
Quality insight bots	It enables intelligent and automated QE using AI, ML, and NLP techniques. It optimizes QE by analyzing data across the SDLC and deriving insights, predicting and triaging defects, generating and maintaining automation scripts, and optimizing regression test suites.

Next-generation QE services partnerships (representative list)

Partner name	Details
Tricentis	Partnered with Tricentis to develop joint solutions and go-to-market for SAP testing, Salesforce testing, load and performance testing; it aims to address the needs of modern applications and cloud applications in next-generation themes.
Delphix	It partnered with Delphix to offer joint solutions for test data management and virtualization. It supports the requirements of modern and cloud applications.
ABB Robotics, Automata, and Rethink Robotics	Leverage collaborative robots for business lifecycle automation that require physical and digital interactions. Provider partnership aids joint solutioning, go-to-market, and client PoC's, and skilling/training programs
Various other partnerships	Partnered with emerging providers such as Appvance for autonomous testing and SeaLights, which helps with end-to-end visibility of quality risks across the delivery pipeline. Other established partners are Saucelabs, Keysight, Lambdatest, Cyara, Veracode, Microfocus (Opentext), Applitools, Leapwork, UIPath, Worksoft, and Dynatrace.

Cognizant profile (page 3 of 5)

Offerings

Next-generation QE services investments (representative list)

Investment name/theme	Details
Digital labs and studios	Invested in digital assurance labs for next-generation technology such as IoT, drones, digital twins, 5G, OTT, virtual reality, AR, and blockchain labs across global locations. Its softvision studios provide a space to create tailored client programs and immersive experiences designed to break down silos and accelerate results. Its investment focus is on Robotic Test Automation (RTA), offering 16+ robotics labs with phygital devices such as collaborative robots, vision systems and ML models, repository of industry use cases for ease of market adoption, specialist robotic test engineers, and well-rounded training curriculum to train next-generation phygital skills.
Next-generation QE solutions	Invested in its in-house solutions and accelerators offering pioneer QE solutions for emerging market trends – generative AI, QI bots, verification and validation platform, adoption of collaborative bots, solutions for big data, reality box to test for AR-VR, design studios, and innovation labs for R&D and client PoCs.
Skilling investments	Invested in its flagship skilling program of QA to QE to next generation technologies to have a pool of qualified quality engineers to meet emerging needs. Its skilling programs have been winners of Brandon Hall Awards for best learning program for three years in a row. Communities of Practice (CoPs) for digital skills such as AI, cloud, IoT, SRE, and SAP where the ecosystem includes partnerships with hyperscalers for certification, cloud-hosted labs for hands-on skilling, in-person SME-led sessions, and an online intra-community collaboration platform.

Cognizant profile (page 4 of 5)

Case studies

Case study 1

Transformed IoT assurance and smart meter testing for a leading energy provider

Client: a British multinational energy and services company

Business challenge

The client wanted to transform its quality organization into a best-in-class QA and to achieve significant cost savings through efficient and optimized test processes. The client faced longer time-to-market and struggled with health and safety hazards due to high radiation in its SMART lab.

Solution

Cognizant implemented transformative shifts in quality, tools, and technology, redefining the client's role from being quality custodians to quality designers. The solution featured zero-touch QA, offshore smart meter assurance via robotic automation, and an advanced IoT lab. The approach involved streamlined test infrastructure, agile DevOps, end-to-end automation, and analytics-driven CI/CD pipelines. Outcomes included seamless cloud migration, key platform assurance, legacy modernization, and bolstered production resilience. The solution showcased AI and ML testing, virtual reality validation, global device testing via TEBOT, EV charger testing, low-code automation with Copado, and self-healing via Healenium. This unwavering innovation commitment elevated quality across the SDLC.

Impact

- Improved time-to-market
- Reduced release cycle by 50%
- Saved cost up to US\$1.5 million through next-generation automation
- Established IoT assurance on connected smart home testing including device testing and firmware testing
- Established user-based bootcamps and mentoring IoT assurance on smart home testing

Case study 2

Enabled low-code automation and AI-assisted self-healing, network connectivity testing, and microservices testing for a leading telecom provider

Client: an Australian telecommunications company

Business challenge

The client strategically focused on driving significant cost-out of operations while increasing its customer engagement. This requires a significant digitization of its business and replacement/uplift of several legacy systems to more modern systems. Frequent enhancements of AFL application resulted in increase in maintenance efforts of existing scripts.

Solution

Cognizant QE team implemented self-heal solution by incorporating multiple identifiers for each web element with retry capability. This resulted in 60% less script failure and higher success rate of the scripts. It helped to onboard the client's first customer and improved the E2E SLA from 10 days to 90 minutes. It helped the product and technology group to strategize the workflows and streamline the DevOps style of testing maturity. Cognizant performed network connectivity testing where it conducted functional, accessibility, and automation testing in this space. ServiceNow testing with integrations and microservices.










Impact

- Reduced IRs through enterprise release from over 80% to less than 20%
- Reduced Mean Time To Detect (MTTD) of IRs by more than 30%
- Improved customer engagement
- Improved build and release cycles for microservices by driving high levels of test automation, contract testing, and self-service TDM portal

Cognizant profile (page 5 of 5)

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

- Cognizant is recognized by clients for the innovative engagement in brings into its models such as the on-demand models with zero volume commitment and risk reward models
- Clients have emphasized Cognizant's consultative approach and its commitment to ensuring delivery to be noteworthy
- Cognizant maintains a strong and diverse mix of technology partners, including niche partners for test automation and phygital device testing. It has earned awards for innovation, which provides enhanced visibility and credibility for the firm's offerings in the QE space
- Cognizant has invested in digital assurance labs for next-generation technologies such as IoT, digital twin, 5G, AR/VR, and blockchain to ensure continuous innovation for addressing the challenges of clients

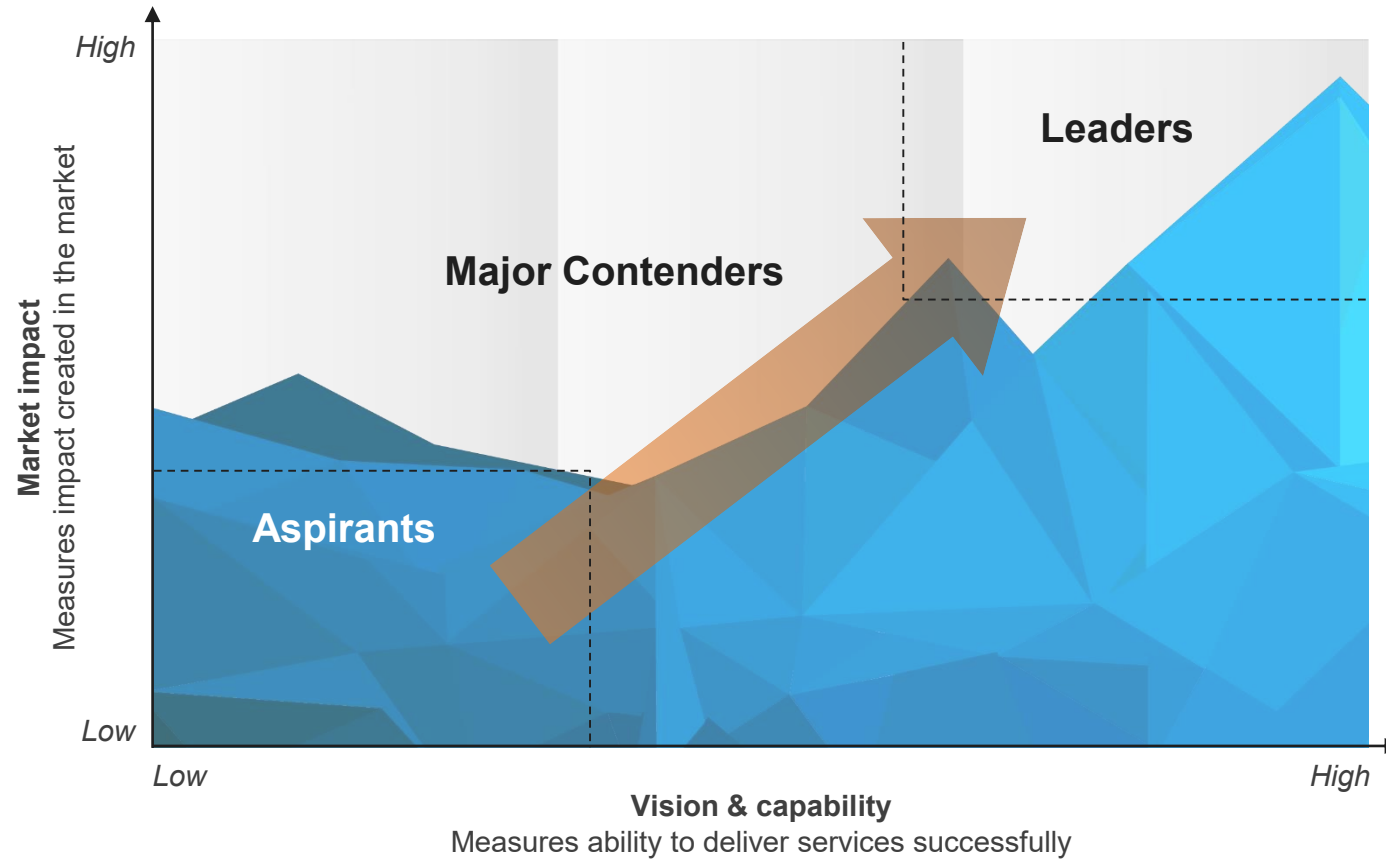
Limitations

- Clients expect a more product-based approach to help them take their business to the next level
- Clients have emphasized the importance of enhancing the domain knowledge of their existing resources to foster increased innovation and deliver greater value

Appendix

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

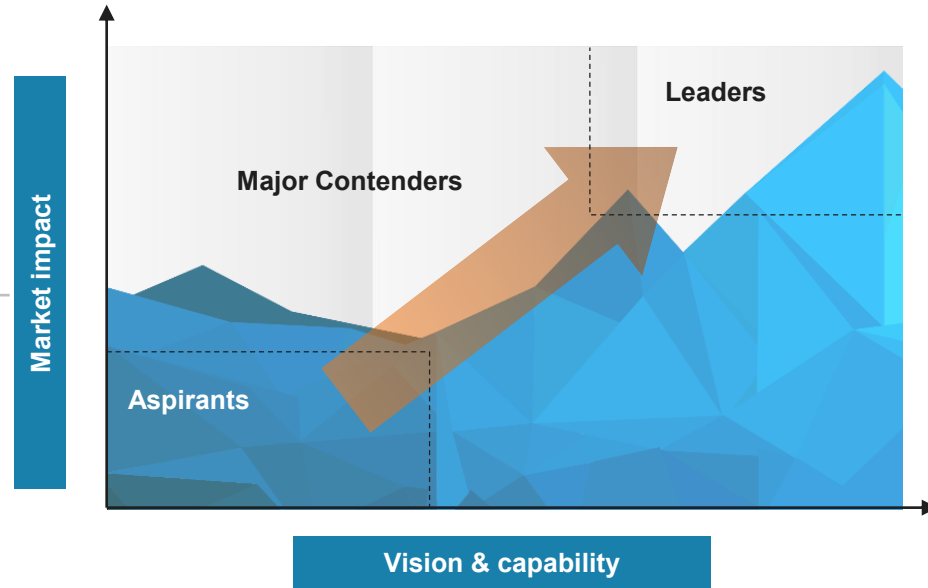
Everest Group PEAK Matrix



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



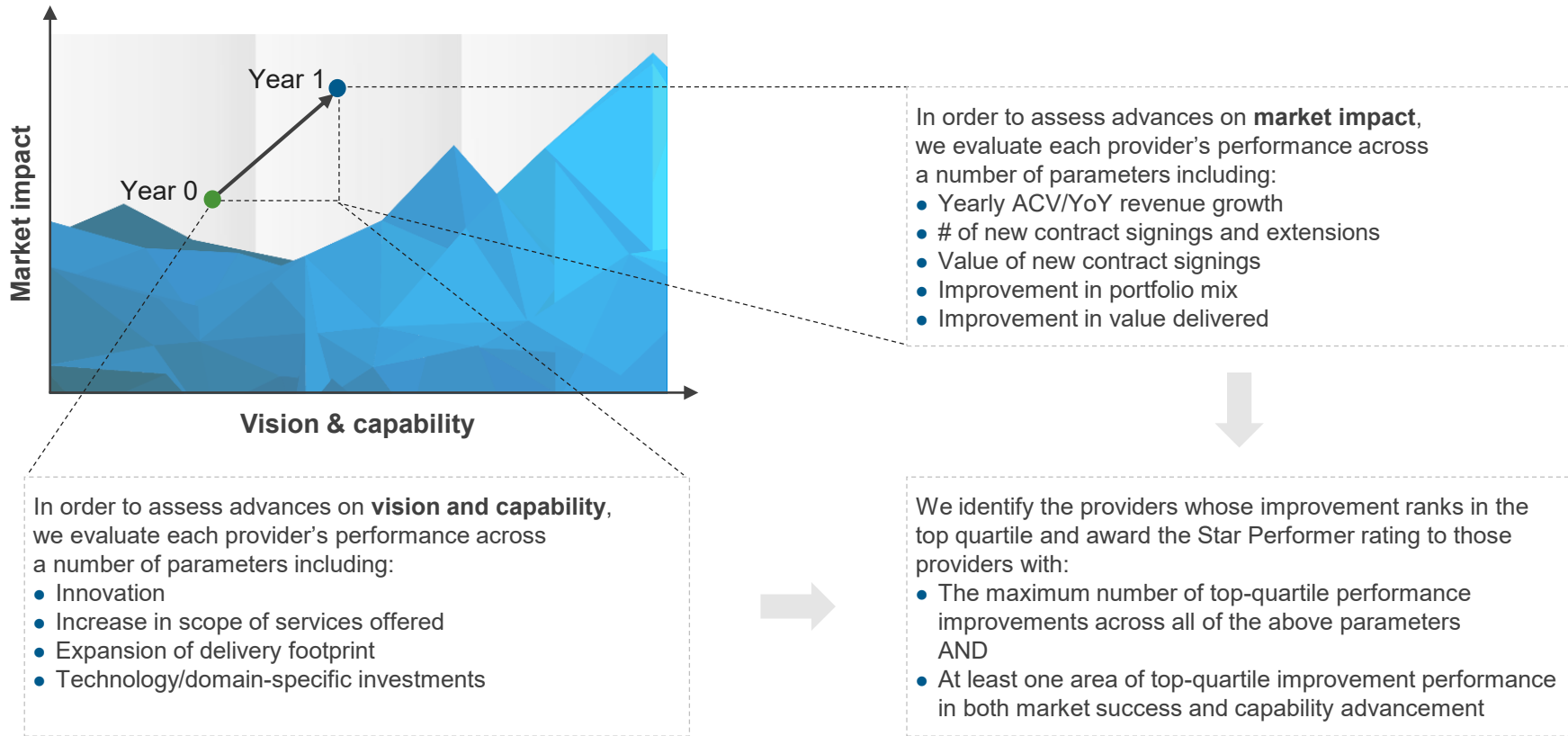
Measures ability to deliver services successfully. This is captured through four subdimensions

- 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.

Stay connected

Dallas (Headquarters)
info@everestgrp.com
+1-214-451-3000

Bangalore
india@everestgrp.com
+91-80-61463500

Delhi
india@everestgrp.com
+91-124-496-1000

London
unitedkingdom@everestgrp.com
+44-207-129-1318

Toronto
canada@everestgrp.com
+1-214-451-3000

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