Everest Group®

Everest Group PEAK Matrix® for Intelligent Automation in Healthcare Solutions Providers 2022

Focus on NTT DATA
December 2021

Background of the research
Intelligent Automation in Healthcare 2021

Although healthcare payer and provider enterprises have traditionally relied on outsourcing services and offshoring their delivery footprint to improve their business across multitude of parameters; they have reached a saturation stage and have been looking for other ways to extract additional benefits. Many healthcare enterprises have garnered maximum traction in the past couple of years by employing automation solutions such as cloud, RPA, NLP, AI/ML and more, to improve performance delivery in claims management, patient engagement, risk adjustments, etc. The need for automating processes is now more than ever as the global pandemic has brought to light the glaring inadequacies and inefficiencies of the healthcare systems across the globe. The aim of automation is not to de-humanize the healthcare systems, but rather, to support the working of the stakeholders in the value chain to optimize processes, reduce costs and waste, improve patient care and experience, and enhance business resilience. The scope of integrating intelligent automation with the existing healthcare functions exists in almost all segments of the healthcare value chain and provides ample opportunity to the healthcare payers and providers to upgrade themselves and cater to the growing demand for value-based care.

This report includes the profiles of the following 18 leading ABC service providers featured on the Intelligent Automation in Healthcare PEAK Matrix®:

- **Leaders:** Accenture, Cognizant, Exela Technologies, NTT DATA, Wipro, and Optum
- **Major Contenders:** Access Healthcare, EXL, HCL Technologies, HGS, emids, TCS, Sutherland Global Services, Atos, and Virtusa
- **Aspirants:** AGS Health, GeBBS, and Omega Healthcare

Scope of this report:

Geography
Global

Service providers
18 providers

Services
Intelligent automation in healthcare

Everest Group intelligent automation in healthcare solutions PEAK Matrix® characteristics

Everest Group classified 18 healthcare BPS service providers on the Everest Group PEAK Matrix® into the three categories of Leaders, Major Contenders, and Aspirants.

The PEAK Matrix® is a framework to assess the absolute market success and overall capability of service providers.

Leaders

There are six service providers in the Leaders category – Accenture, Cognizant, Exela Technologies, NTT DATA, Wipro, and Optum

Major Contenders

The Major Contenders category has nine service providers – Access Healthcare, EXL, HCL Technologies, HGS, emids, TCS, Sutherland Global Services, Atos, and Virtusa

Aspirants

AGS Health, GeBBS, and Omega Healthcare are Aspirants on the PEAK Matrix® for intelligent automation in healthcare solutions

Everest Group PEAK Matrix®
Intelligent Automation in Healthcare – Solutions PEAK Matrix® Assessment 2022 | NTT DATA positioned as Leader

Everest Group Intelligent Automation in Healthcare – Solutions PEAK Matrix® Assessment 2022[1]
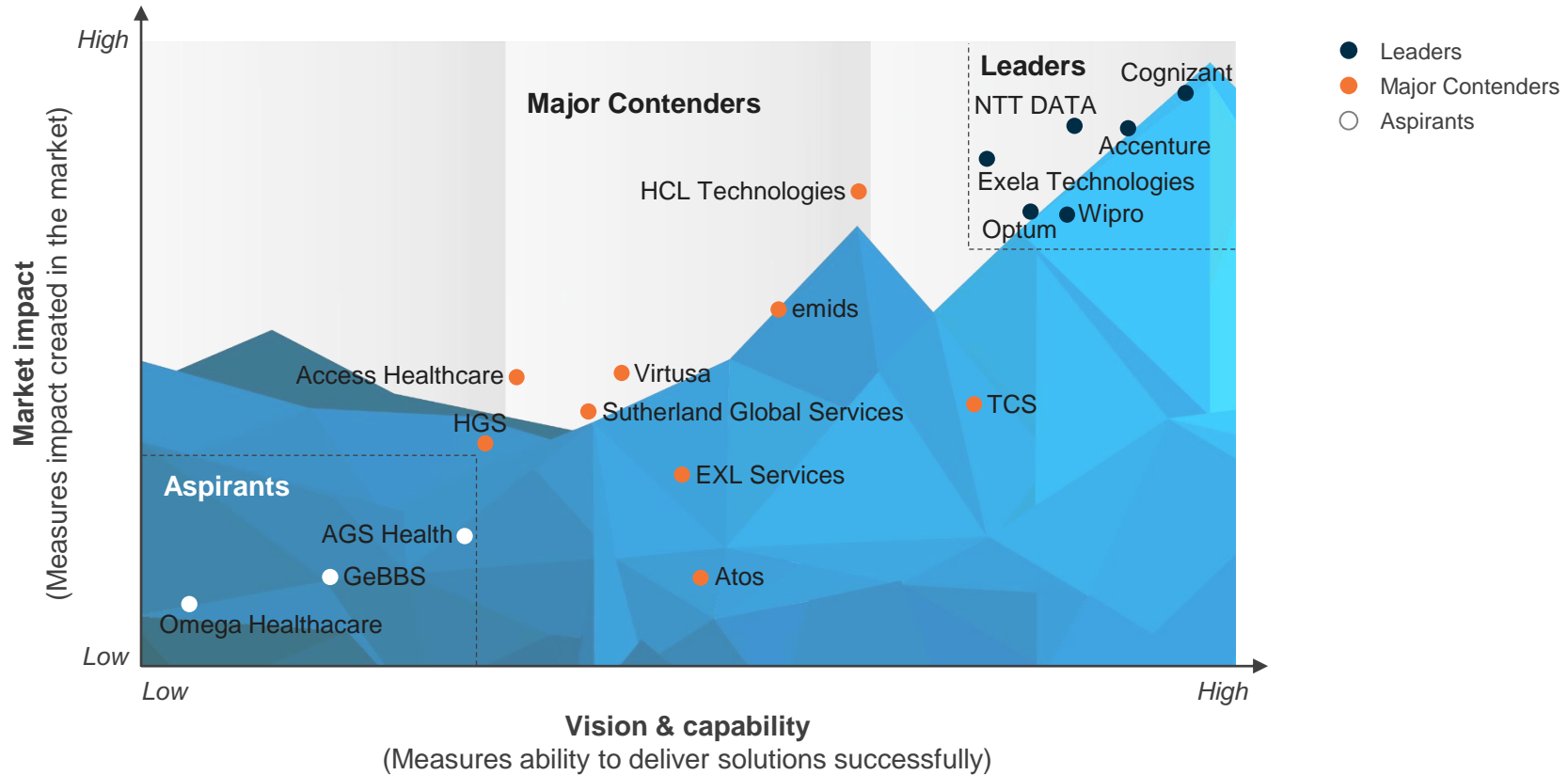
1 Assessments for Sutherland, Atos and GeBBS excludes service provider inputs on this particular study and is based on Everest Group's estimates that leverage Everest Group's proprietary Transaction Intelligence (TI) database, ongoing coverage of the service providers, their public disclosures, and interaction with buyers.

Source: Everest Group (2021).

NTT DATA | IA in healthcare profile (page 1 of 5)
Overview

Company overview

NTT DATA is a global business and IT services provider that offers insights and solutions to clients. It delivers tangible business results by combining industry expertise with applied innovations in digital, cloud, and automation across a portfolio of BPS, consulting, applications, and infrastructure services. NTT DATA has 100,000+ professionals in more than 50 countries and is a part of the NTT Group.

Key leaders

- Mary Edwards, President, Healthcare Provider
- Shashi Yadiki, President, Health Plan
- Greg Betz, EVP, Digital Offerings & Automation

Headquarters: Tokyo, Japan

Website: www.nttdata.com

Recent deals (not exhaustive)

- **2021:** completed the acquisition of Hashmap, a Snowflake premier partner. This acquisition enhances its technical expertise with modern data platforms to support analytics, AI, and ML

- **2021:** partnered with the state of Tennessee and the city of Nashville to open a digital innovation delivery center at Nashville (Tennessee, the US). NTT DATA will invest US$9.9 million to establish this center

- **2020:** set up the healthcare AI R&D center in Tokyo with ~20 global members to engage in basic/applied R&D on AI technology in the healthcare industry and technical support for delivery teams

Adoption and capability overview

Total clients leveraging IA in healthcare	Total size of healthcare-specific IA or technology team (in FTEs)	Total/cumulative RPA robots deployed by clients
495	**~550**	**3,393**

Key locations with IPA FTEs

North America (US)	EU, Africa, and LATAM	Asia Pacific (India and other counties)
~110 FTEs	**~55**	**~405**

Key third-party technology partners: Automation Anywhere (AA), UiPath, Blue Prism, Amelia, IBM Watson, Pega, Softheon, Inc., Microsoft (Dynamics and O365), HL7 (Health Level 7) membership (Spain), InterSystems partnership (Spain), Sharecare partnership (Brazil), Microsoft partnership (global), SAP partnership (global), OutSystems partnership (global), Salesforce (global), Parascript, LLC, ABBYY, NICE, WorkFusion, and MACCESS.

■ Offered   ■ Not offered

Commercial model		Healthcare IA offering structures	
Fixed price model	■	IA as part of broader deal	■
Input-/FTE-/T&M-based	■	Product licenses + associated IA services	■
License-/IP-based	■	Stand-alone IA services	■
Outcome-based	■	Stand-alone product licenses	■
Transaction-based	■		

NTT DATA | IA in healthcare profile (page 2 of 5)
Capabilities and client mix

Split of healthcare IA FTEs
Total FTEs (100%) = Not disclosed
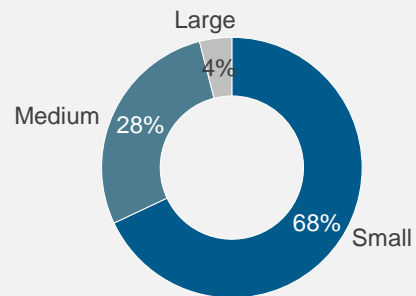
By function

Product development 25%

Services 75%

By automation type

Cognitive automation 30%

RPA 70%

By healthcare market type

Payer 38%
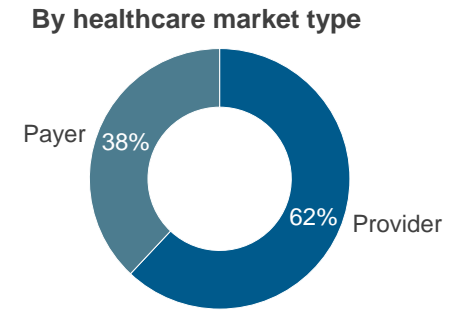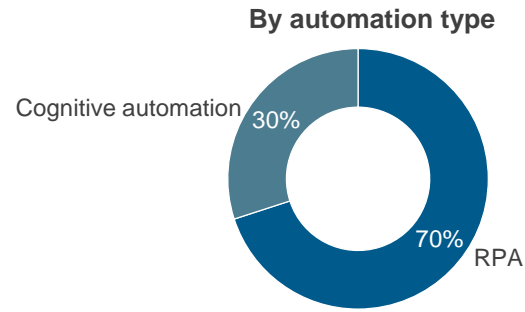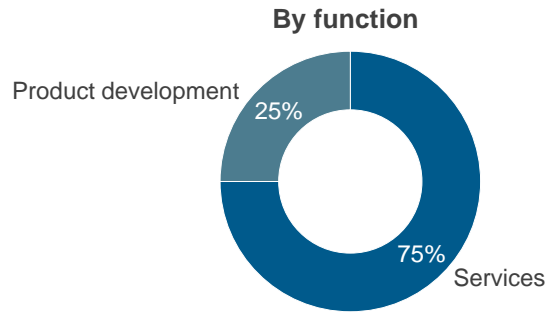
Provider 62%

Split of IA clients mix

Payer market IA client mix by buyer size[1]
Number of clients (100%) = 38

Small 32%

Large 68%
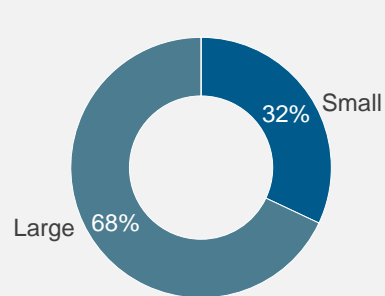
Provider market IA client mix by buyer size[1]
Number of clients (100%) = 457

Large 4%

Medium 28%

Small 68%
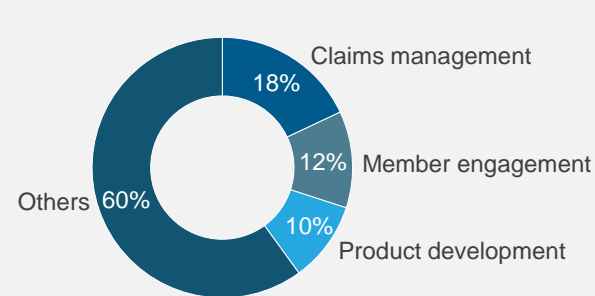
Split of total IA bots deployed across value chain processes

Payer market bots mix by processes
Number of bots deployed (100%) = 1,327

Claims management 18%

Member engagement 12%

Product development 10%

Others 60%

Provider market bots mix by processes
Number of bots deployed (100%) = 2,066

Patient access 6%

Medical billing 15%

A/R management 46%

Claims management 33%
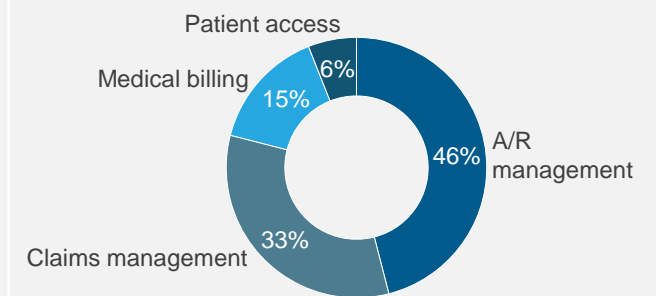
1   Buyer size is defined as large (>US$5 billion in revenue), medium (US$1-US$5 billion in revenue) and small (<US$1 billion in revenue)

NTT DATA | IA in healthcare profile (page 3 of 5)
Solutions portfolio

	RPA	Intelligent document processing	Intelligent virtual agents	AI advisor tools	Classic process mining	Desktop Process Mining (DPM)	Workflow/ orchestration
Third-party solutions vendor	Automation Anywhere (AA), UiPath, BluePrism	ABBYY, Parascript	Amelia, Uniphore	Uniphore	Celonis, QPR, Minit, Software AG	Antworks, Automation Anywhere, UiPath, FortressIQ, Kryon, Pega	Pega, Softheon, MACESS
Proprietary solutions offered	Nucleus Smart RPA Platform (formerly AFTE), RPA BOT Reusables, WinActor	Nucleus Intelligent Document Processing (formerly D'Reap), Dolffia	BOT Portability, EVA	NTT DATA Heuri, Lean BOT, ezyCode	B.R.U.C.E (Broker Commission)	N/A	Nucleus Workflow (formerly DBPMS), Virtual Resource Monitoring (VRM), Nucleus RPA Command Center
Solutions developed jointly with technology vendors	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Customizations/wrappers created for third-party solutions	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of active clients	82	5	6	3	10	5	60

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NTT DATA | IA in healthcare profile (page 4 of 5)
Key IA solutions

Top healthcare-specific IA solutions	Value chain process area served	Year launched	Development type	Description	No. of clients
Nucleus for Healthcare - Advocate AI Services	Care management, diagnostics, treatment & monitoring	2019	Proprietary	Developed the advocate AI service that aggregates data at scale, anonymizes studies, and reports for analysis without impacting patient care or reflecting on prior diagnostic decisions related to specific patients, thus avoiding risks in third-party evaluation or liability to specific patients studies.	3+
Chronic Disease Progression Prediction (CDP) / Patient Treatment Optimization (PTO) AI engine for next-generation Chronic Disease Care Management	Care management	2018	Proprietary	Developed an explainable AI-based chronic disease prediction and intervention solution for personalized care management. NTT DATA's proprietary CDP/PTO AI engine tracks health condition prevalence, severity and progression in member populations across multiple stages – from data ingestion to curation and harmonization, to chronic disease progression prediction and results visualization – to enable health systems to make timely decisions and drive better outcomes.	2 pilot implementations underway
Medi-cost Manager (MCM)	Claims management	2016	Proprietary	It is a next-generation and a high-performance solution developed with concepts derived from exposure to health plans & provider markets. The solution delivers transformational outputs by providing business insights to the health plan's payment integrity at an enterprise level by bringing a holistic or unified view of high value data products. It is interoperable, compatible, and integrated through EDI, FHIR, API's, BOTS, etc.	3+
NTT DATA HEURI	Medical billing, claims management	2017	N/A	A data intelligence platform and prediction engine which reads, analyzes the historical claim data, and infers multiple patterns/scenarios to predict whether a claim would be accepted or denied before it gets submitted to an individual payer, thereby preventing denial factors in different stages of revenue cycle management. Heuri uses AI technologies, machine learning, and deep learning neural networks for analysis and prediction. Additionally, the system provides interactive, preemptive guidance to associates across various entities and processes under revenue cycle management, such as demo entry, medical coding, charge entry, and billing.	3+
ehCOS SmartICU	Electronic Health Record (EHR) specific for ICU units	2015	Proprietary	A tool to improve the care given to critically-ill patients. It is an easy-to-use and intuitive solution for ICU professionals, as it simplifies the visualization of all patient's data in a single screen, improving the efficiency and productivity of the work. ehCOS SmartICU collects data to improve quality of care and patient safety, while reducing hospital costs.	3+

NTT DATA | IA in healthcare 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	Technology capability	Innovation and investments	Services capability	Engagement and commercial model	Overall
●	◕	◔	◕	◔	◑	◔	◔	●	◕

Strengths

- NTT DATA is among the few service providers that have a strong presence in BPS, IT, as well as digital space across both payer and provider side of the market and has achieved significant scale of deployments over the years in healthcare automation
- Since most of the solutions are deployed on the hybrid cloud, NTT DATA can effectively optimize their operations through cost savings and increased flexibility by not only reaping the benefits of speed and flexibility of the cloud, but also maintaining on-premise data centers
- It is among the few service providers that have successfully tried and implemented transaction-based pricing model for their solution offerings
- Universal bot portability Framework of NTT DATA allows it to port bots between various RPA platforms, which enables quicker migration from one RPA platform to another; additionally, it helps to retain the benefits of existing in-production bots while moving to a platform with better features and automation capabilities
- The ongoing pandemic has led to a significant increase in the automation capabilities of NTT DATA with respect to telemedicine and remote care-delivery programs
- The launch of Nucleus for Healthcare, a single platform for data integration, automation, and AI helps to enable end-to-end patient care journey by integrating the unique capabilities of strategic vendors with robust analytics and automation
- The Healthcare AI R&D Center established in Tokyo in April 2020 is a step in the right direction to engage and collaborate with various global members on R&D around AI technology in the healthcare industry

Limitations

- While NTT DATA has been able to achieve significant success while catering to more traditional parts of the value chain, it can be a good prospect to leverage newer areas like risk & compliance to develop alternate sources of clients and revenue to augment its future growth potential in the automation space
- While NTT DATA caters to many large and mega clients on the payer side, it has potential to increase its scalability on the provider side to cater to larger-sized clients

Appendix

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

Everest Group PEAK Matrix
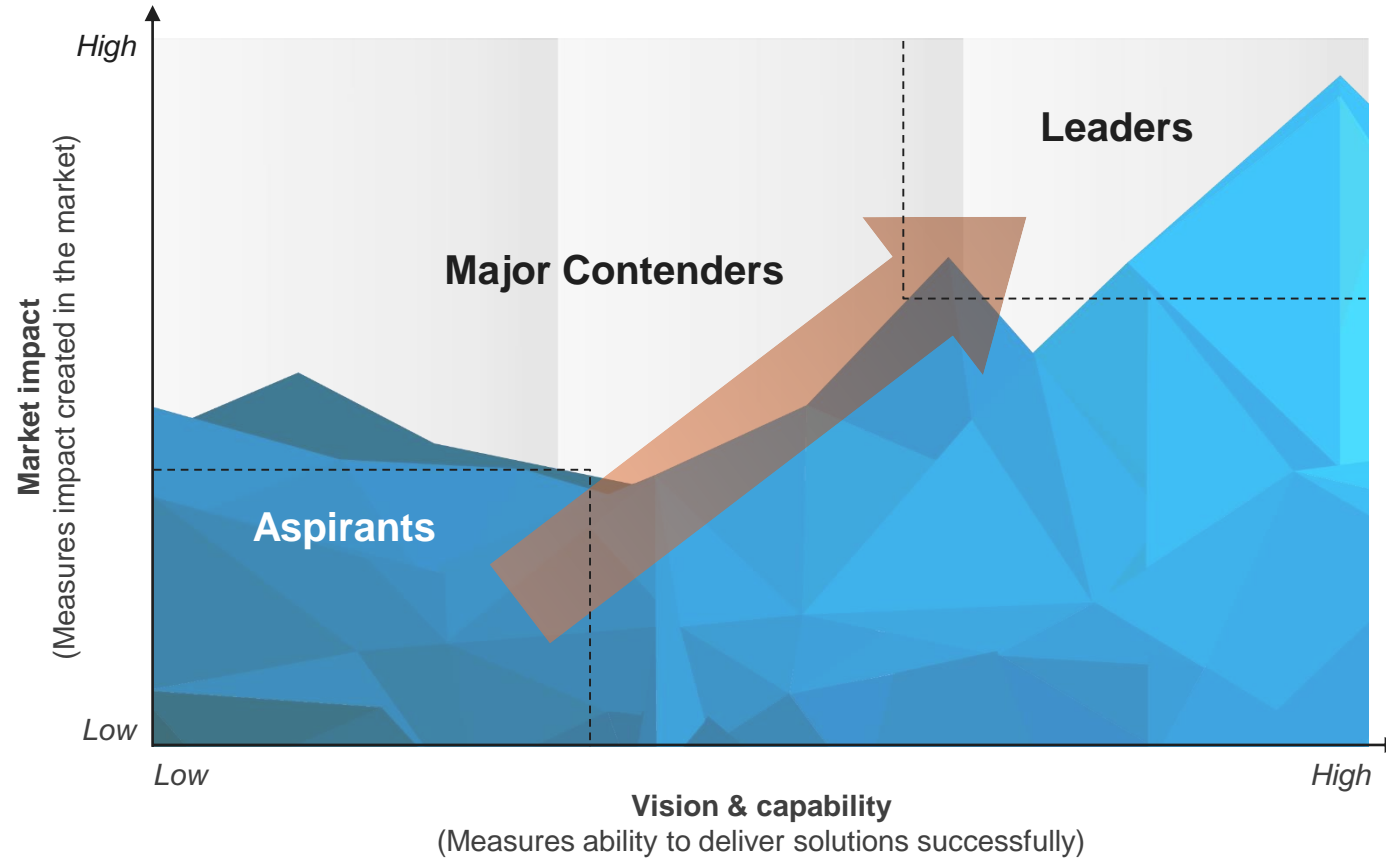
Solutions PEAK Matrix® evaluation dimensions

Measures impact created in the market – captured through three subdimensions

Market adoption

Size and growth of deployments across the solution portfolio

Portfolio mix

Solution footprint across geographies, industries, and buyer size segments

Value delivered

Value delivered to the client based on customer feedback and other measures

Market impact

Leaders

Major Contenders

Aspirants
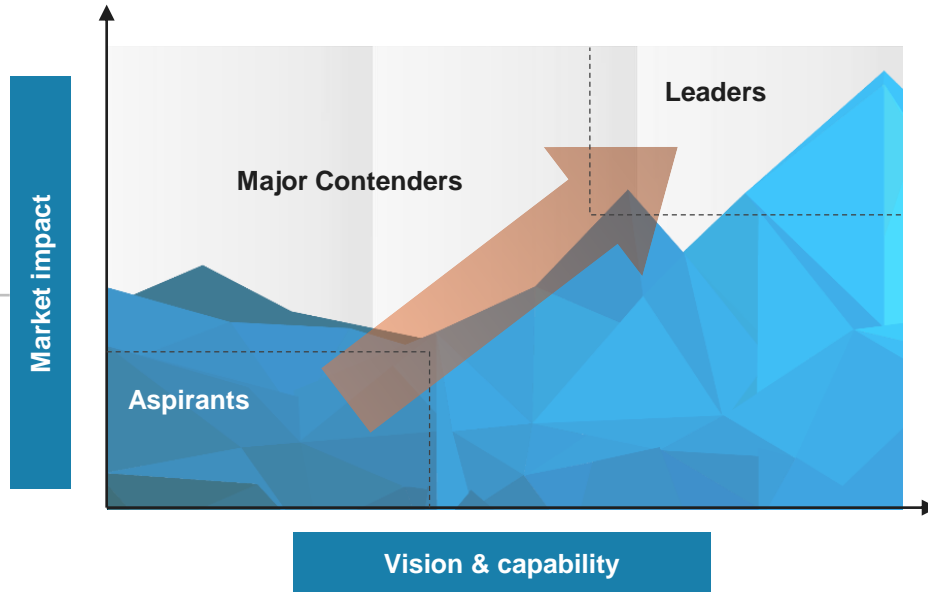
Vision & capability

Measures ability to deliver solutions successfully. This is captured through five subdimensions

Vision and strategy	**Technology capability**	**Services capability**	**Innovation and investments**	**Engagement and commercial model**
Vision for the client and itself; future roadmap and strategy	Technical sophistication and breadth/depth across the technology suite	Effectiveness and breadth/depth of services portfolios across the services suite	Innovation and investment in the solution suite	Progressiveness, effectiveness, and flexibility of engagement and commercial models

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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