



Everest Group Digital Twin Services PEAK Matrix[®] Assessment 2023

Focus on Capgemini
October 2023



Introduction

As enterprises aim to become business resilient and competitive in a post-pandemic era, they are increasingly focusing on becoming digitally unified. This enterprise requirement, along with the advances in next-generation technologies, has given rise to the concept of digital twin. This technology is defined as a virtual replica of physical products, processes, and systems that leverages the physical entity's real-time data for decision-making and prediction. digital twin is aiding firms in reducing downtime, better tracking and tracing of products, and better monitoring of asset conditions by simulating multiple scenarios. While industrial verticals are at the forefront of its adoption, digital twin is also finding interest among consumer-facing industries, that are increasingly experimenting with the technology.

The need for accelerated time-to-market of digital twins, smoother IT/OT integration efforts, increased data and infrastructure security, and talent crunch across the various enabling technologies require enterprises to partner with providers that can aid them in overcoming these challenges while facilitating end-to-end digital twin implementations.

In this research, we present an assessment of 21 digital twin service providers featured on the [Digital Twin Services PEAK Matrix® Assessment 2023](#). Each service provider profile offers insights into the strengths and limitations across themes such as investments, vision, strategy, and case studies. The assessment is based on Everest Group's annual RFI process for calendar year 2022, interactions with leading digital twin service providers, client reference checks, and an ongoing analysis of the digital twin services market.

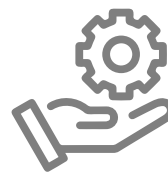
The full report includes the profiles of the following 21 leading digital twin service providers featured on the digital twin services PEAK Matrix:

- **Leaders:** Accenture, Capgemini, Eviden, HCLTech, IBM, TCS, and Wipro
- **Major Contenders:** Apexon, Cognizant, Cyient, Hitachi, Infosys, LTI Mindtree, LTTS, NTT Data, Sopra Steria, and Tech Mahindra
- **Aspirants:** Brillio, DXC Technology, Happiest Minds, and Harman International

Scope of this report



Geography
Global



Providers
21



Services
Digital twin

Digital Twin Services PEAK Matrix® characteristics

Leaders

Accenture, Capgemini, Eviden, HCLTech, IBM, TCS, and Wipro

- Leaders exhibit a futuristic vision for digital twin that is aimed at achieving operational efficiency and establishing an intelligent enterprise
- Leaders are focusing on forging a strong partnership ecosystem that goes beyond the hyperscalers and IoT platform providers to include specialist digital twin providers to strengthen their digital twin services portfolio
- Leaders' strong and well-balanced capabilities in providing engineering as well as IT services is instrumental in scaling digital twin initiatives for customers

Major Contenders

Apexon, Cognizant, Cyient, Hitachi, Infosys, LTI Mindtree, LTTS, NTT Data, Sopra Steria, and Tech Mahindra

- Major Contenders are aiming to educate enterprise customers on the concept of digital twin through thought leadership and CoEs
- Most Major Contenders have a strong portfolio of clients across all major geographies and fast-growing verticals such as manufacturing, energy and utilities, and automotive
- Some Major Contenders are aiming to differentiate self from peers by investing in vertical-specific digital twin solutions that will accelerate implementation for clients

Aspirants

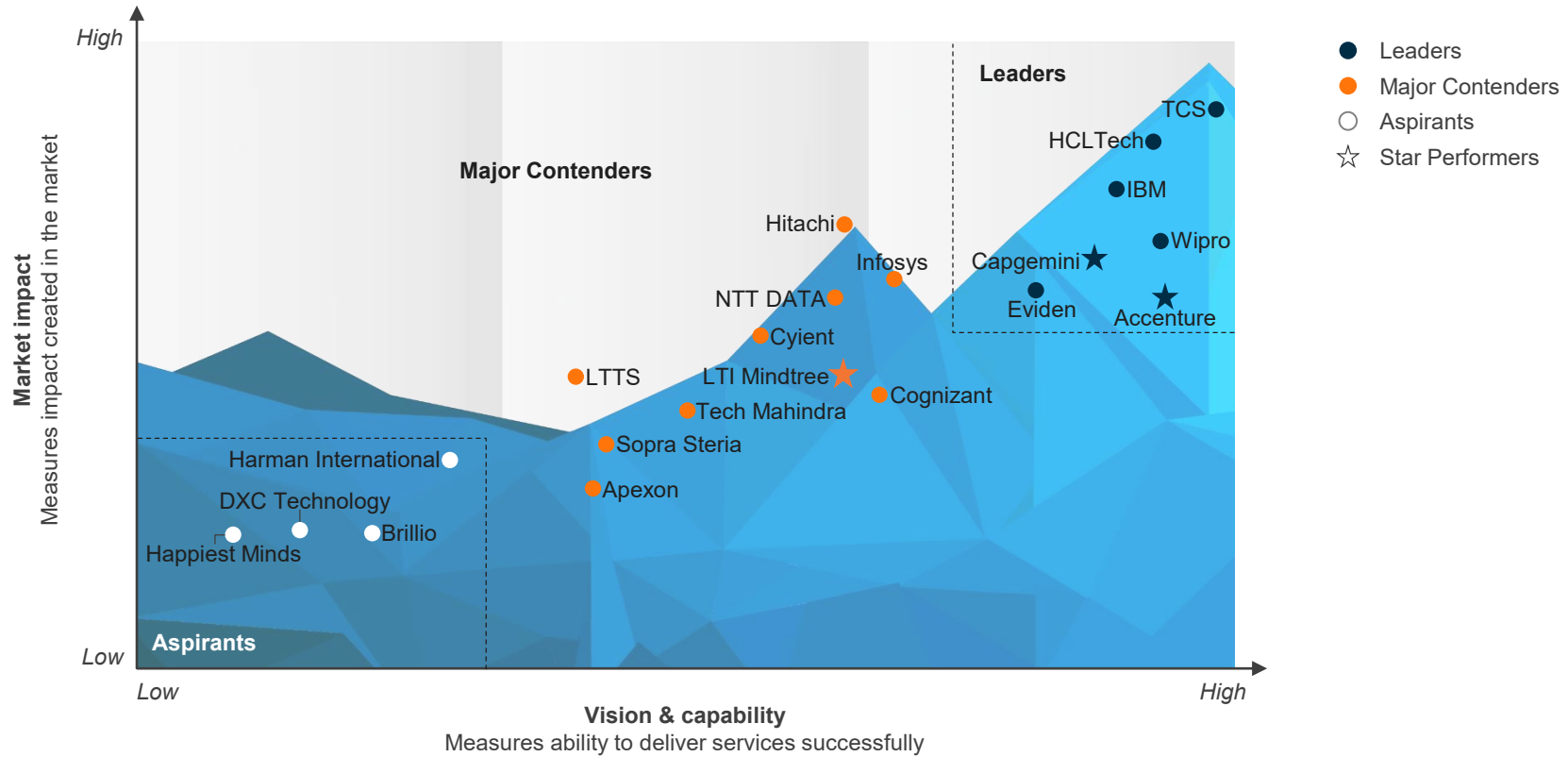
Brillio, DXC Technology, Happiest Minds, and Harman International

- Aspirants are at a relatively nascent stage in their digital twin offerings and exhibit limited focus on investing in digital twin-specific solutions
- Aspirants are currently focusing on one or two service functions across the digital twin value chain

Everest Group PEAK Matrix®

Digital Twin Services PEAK Matrix® Assessment 2023 | Capgemini is positioned as a Leader and a Star Performer

Everest Group Digital Twin Services PEAK Matrix® Assessment 2023¹



¹ Analysis for Brillio, Cognizant, DXC Technology, Eviden, Happiest Minds, Harman International, Hitachi, Infosys, LTTS, NTT DATA, and Sopra Steria excludes service provider inputs on this study and is based on Everest Group's estimates that leverage its proprietary Transaction Intelligence (TI) database, ongoing coverage of the service provider, and public disclosures
 Confidentiality: Everest Group takes its confidentiality pledge very seriously. Any information that is contract-specific will be presented back to the industry only in an aggregated fashion
 Source: Everest Group (2023)

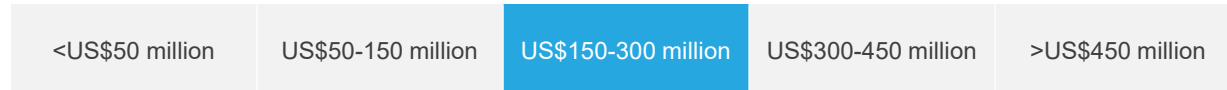
Capgemini profile (page 1 of 5)

Overview

Company mission/vision statement for digital twin services

Capgemini aims to drive value generation and foster ecosystem expansion through a range of services. Among these offerings, its digital twin services form an integral part of the digital continuity portfolio. These services facilitate collaboration across various business processes, enabling the creation of various business models and unlocking opportunities in new markets.

Digital twin services revenue



1 All the revenue components add up to a total of 100%

2 Heavy industry includes the likes of aerospace, heavy machinery, etc.

Low (<10%) Medium (10-25%) High (>25%)

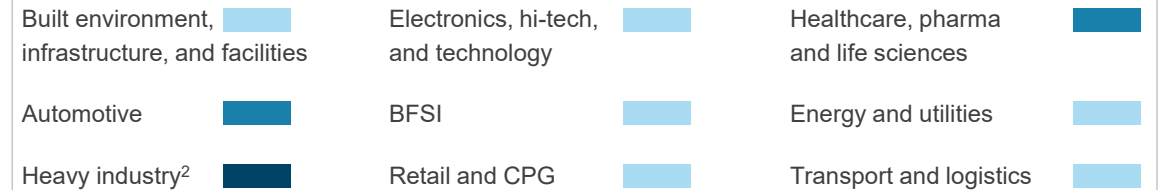
Revenue by function



Revenue by buyer size¹



Adoption by industry¹



Revenue by geography¹



Revenue by scale of digital twin implemented¹



Capgemini profile (page 2 of 5)

Case studies

Case study 1

Digital twin solution for production sites

Business challenge

The client was challenged with long time-to-market and product diversity. These challenges pertained to the difficulties encountered in introducing new products to the market within the expected timeframe, while also addressing the diverse requirements, and preferences of its customer base.

Solution

Capgemini offered a solution for industrial systems digital twins. It integrated 10 technological components, including IoT, virtual commissioning, and 3D simulations. Services provided included predictive capabilities, end-to-end integration of digital twin services, 3D modeling, real-time data management, capacity and production adaptation, and connecting DMU with IoT. The solution enabled efficient industrial operations through digital modeling, analysis, and adaptive decision-making.

Impact

Capgemini's solution implemented industrial systems digital twins, predictive capabilities, and end-to-end integration, reducing time-to-market and enhancing product diversity. It optimized industrial operations through advanced digital modeling and analysis, enabling efficient decision-making and adaptive processes.

Case study 2

Enhanced operational efficiency and cost-savings for air pump assets

Business challenge

The client faced challenges while maintaining profitability due to high operating costs associated with the production of this product. The client wanted a solution to identify and implement strategies to reduce operating expenses while maintaining product quality and meeting customer demands.

Solution

Capgemini implemented an innovative solution using digital twin technology for air pump assets. The solution integrated predictive analytics and Digital Mock-Up (DMU) capabilities, while also incorporating reengineering processes. The aim was to enhance operational efficiency, minimize downtime, and achieve significant cost savings. By leveraging the power of digital twins, Capgemini enabled proactive maintenance, real-time monitoring, and optimized performance for air pump assets, resulting in improved overall operations and substantial financial benefits.

Impact

Capgemini's solution helped the client reduce operating costs and improve profitability by leveraging digital twin technology, predictive analytics, and reengineering. It enhanced operational efficiency, minimized downtime, and achieved significant cost-savings while maintaining product quality and meeting customer demands.

Capgemini profile (page 3 of 5)

Solutions, partnerships, and investments

Proprietary solutions (representative list)

Solution name	Details
I4SSM	It includes manufacturing process modeling, OPCUA translation, dynamic equipment mapping, data capture, transformation, and aggregation at the source, as well as automatic deployment of security certificates.
Refler IOD	It provides a data model that integrates 3D, IoT, and geographical information. It serves as a single source of truth, offering support for these data types.
Open Cascade	It drives digital transformation across various stages of industrial businesses, including plant operations, technological processes, digital products/services, and sales/after-sales.
X-IoT	It offers device provisioning, firmware/software updates, health monitoring, and edge data processing capabilities. It supports multiple wireless protocols such as LORA, Sigfox, Zigbee, Bluetooth, and 3GPP; also integrates with multiple cloud platforms including AWS, Azure, Google, and private clouds.

Partnerships (representative list)

Partner name	Details
Schneider Electric	Capgemini and Schneider Electric recently announced a partnership to accelerate the adoption of digital twins in the energy industry. The partnership helps utilities and other energy companies create and deploy digital twins of their assets and operations.
Dassault Systèmes	The partnership combines Capgemini's expertise in digital transformation and Dassault Systèmes' leadership in 3DEXPERIENCE platform to help manufacturers create and deploy digital twins of their products, processes, and operations.
Microsoft	The partnership is focused on the development and deployment of a cloud-native, serverless, Azure-based digital twin platform called ReflectIoD.
SAP	The partnership is focused on the development of a digital twin platform for SAP S/4 HANA.
Siemens	The partnership is focused on the deployment of a digital twin platform for Siemens Xcelerator.
IBM	Development and deployment of a cloud-native, serverless Azure-based digital twin platform called ReflectIoD
ServiceNow	The partnership helps organizations to improve their asset reliability, reduce operating costs, and optimize energy efficiency.

Capgemini profile (page 4 of 5)

Solutions, partnerships, and investments










Other investments (representative list)

Investment name	Details
Development initiatives	<ul style="list-style-type: none">• MBSE hub: It is a central vision for a more connected and effective engineering and manufacturing digital ecosystem• Ontology platform: It provides a structured and meaningful representation of information systems, enabling a deeper understanding of their semantics and knowledge• API between 3D platform and IoT: connect, control, and exchange data for better experiences and IoT device integration• AI layer/Predictive models: enabling data-driven decision-making and improved future outcomes• Industrial metaverse: It enhances the impact of virtual and mixed reality in customer-facing sectors
Other investments in the space of digital twins	<ul style="list-style-type: none">• Acquisition: acquired knowledge expert SA helped to expand and strengthen digital customer experience transformation services throughout Europe• CoE PLM/Data: It is a diverse and highly skilled team of experts in Europe, catering to a wide range of industries such as aerospace and defense, automotive, transportation, consumer packaged goods, and health and life sciences• Lab digital twin: virtual replica for real-time analysis, optimization, and predictive maintenance of lab• Metaverse lab: virtual reality lab enabling collaborative research and experimentation• Digital twin steering worldwide: coordination and management of digital twin technology implementation and advances

Capgemini profile (page 5 of 5)

Everest Group assessment – Leader and Star Performer

Measure of capability:  Low  High

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

Strengths

- Capgemini offers comprehensive end-to-end solutions leveraging its years of industry experience and is expanding capabilities into new sectors such as metaverse and supply chain management
- Clients value Capgemini for its commitment to innovation, responsiveness, and the ability to efficiently implement a wide range of client propositions
- It possesses a robust portfolio of proprietary solutions and tools that play a crucial role in expediting digital twin implementation for clients

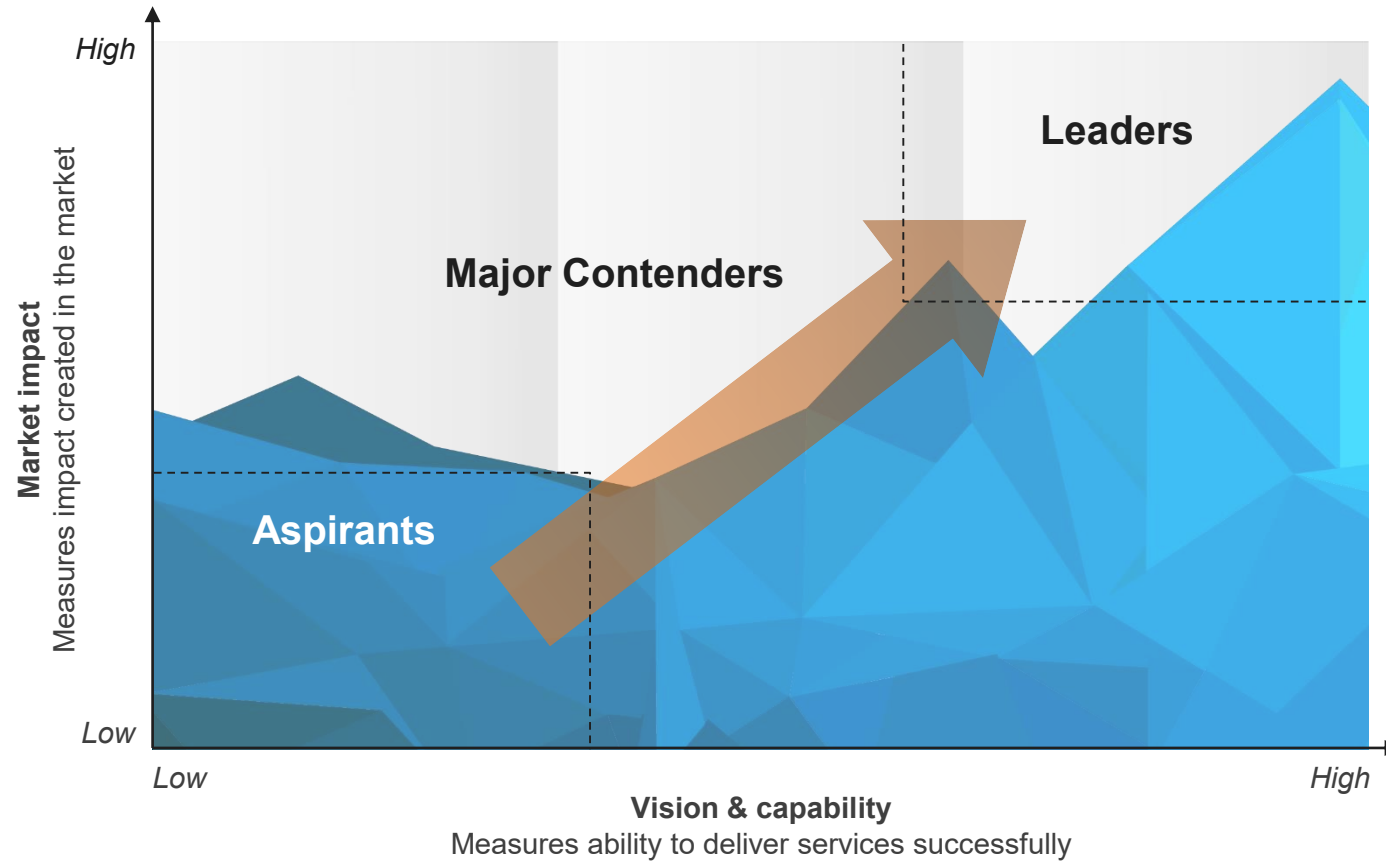
Limitations

- Clients in customer-facing industries, such as retail and healthcare, may experience slower implementation of digital twin due to the absence of industry-specific solutions and tools developed by Capgemini for these domains
- It has a strong client base consisting of mid-sized and large-sized companies, although small-sized clients may not find the solution to be the most optimal in terms of cost and scope
- Capgemini has room to expand its onshore and nearshore presence, as well as scale its talent reskilling and upskilling initiatives

Appendix

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

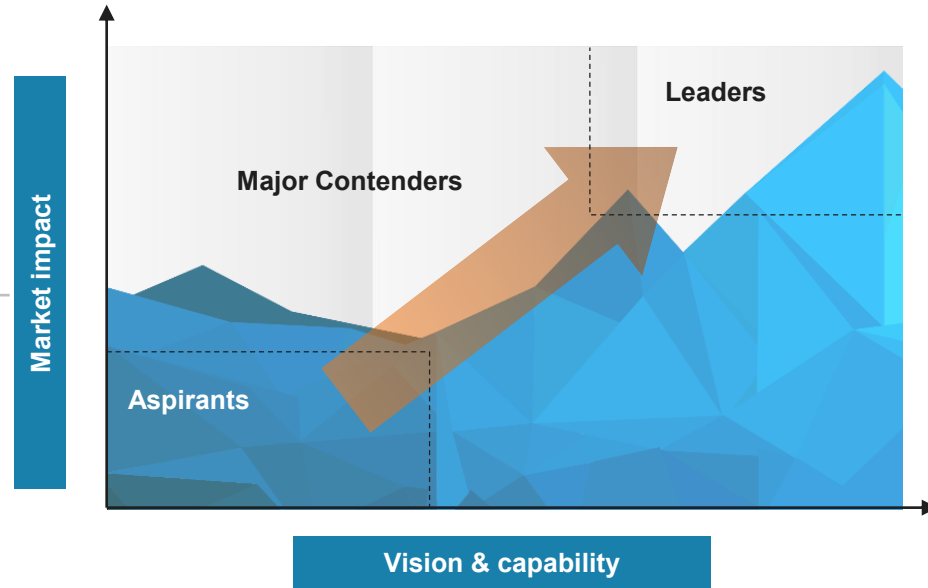
Everest Group PEAK Matrix



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



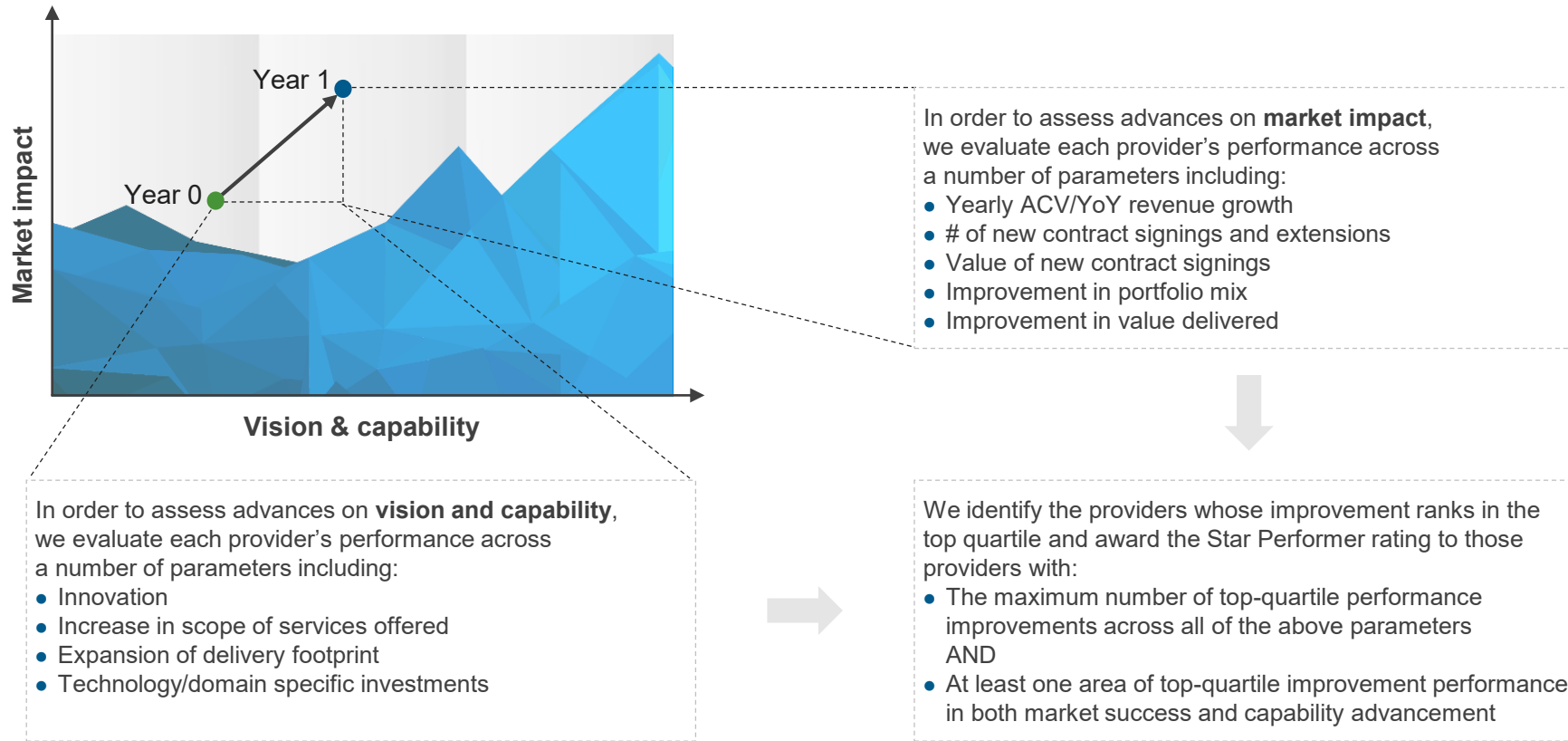
Measures ability to deliver services successfully. This is captured through four subdimensions

- 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.

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