

Everest Group Connected Product Engineering Services PEAK Matrix® Assessment 2024

Focus on HCLTech May 2024



Introduction

The recent advances in technology have led to a massive digital wave in the engineering world, wherein physical products are being enhanced by making them smarter, connected, autonomous, and intelligent. To cater to the evolving customer needs and provide a rich customer experience, enterprises are making significant investments in next-generation technologies such as AI/ML, AR/VR, 5G, blockchain, IoT, and cybersecurity, which serve as the backbone of digital products. However, the rapid pace of innovation and the need to stay ahead of market trends in this current space necessitates the need to establish a compelling partnership ecosystem that can help enterprises accelerate time-to-market. To cater to this growing demand from enterprises, engineering service providers are actively enhancing their capabilities and offerings to unlock the potential of data from connected products, integrate multiple technologies for better user experience, and ultimately engineer technologically sound digital products.

This research is the first edition of Everest Group's Connected Product Engineering Services PEAK Matrix® Assessment 2024, wherein we have presented an

assessment of 21 engineering service providers featured on the PEAK Matrix, along with the sourcing considerations for enterprises. This assessment is based on the RFI responses from providers, interactions with their digital product engineering leadership, client reference checks, and ongoing analysis of the engineering services market.

The full report includes the profiles of the following 21 leading engineering services providers featured on the Connected Product Engineering Services **PEAK Matrix:**

- Leaders: Accenture, Akkodis, Capgemini, Cognizant, HCLTech, LTTS, and TCS
- Major Contenders: Apexon, Cyient, eInfochips, Infosys, Randstad Digital, Softdel, Tata Elxsi, Tech Mahindra, UST, VVDN Technologies, and Wipro
- Aspirants: GS Lab | GAVS, N-iX, and **Onward Technologies**

Scope of this report

Geography: Global

Industry: 21 leading engineering

service providers

Services: Connected product

engineering services

Connected product engineering services PEAK Matrix® characteristics

Leaders

Accenture, Akkodis, Capgemini, Cognizant, HCLTech, LTTS, and TCS

- The Leaders segment comprises both pure play as well as broad-based IT-heritage firms that have developed dominant capabilities in offering multi-disciplinary connected product engineering services across engineering and design, embedded and network engineering, and connected platform engineering
- Leaders have been able to successfully grow organically by forming partnerships with hardware, embedded, and software vendors and making investments in developing labs, CoEs, and innovation centers in next-generation technologies such as AR/VR, IoT, analytics, AI/ML, 5G, semiconductor engineering, and ASIC design
- Their global delivery presence has helped them achieve the right balance of client proximity and cost advantages in servicing large-scale engagements
- These providers are extensively focusing on putting their skin in the game and shifting beyond traditional pricing models toward emerging commercial constructs such as outcome-based, revenue sharing, and risk-reward models

Major Contenders

Apexon, Cyient, eInfochips, Infosys, Tata Elxsi, Tech Mahindra, Randstad Digital, Softdel, UST, VVDN Technologies, and Wipro

- Major Contenders also comprise both IT-heritage firms as well as pure-play engineering service providers
- These providers are actively making investments in establishing labs and CoEs and developing IP and solutions in areas such as AI/ML, testing, analytics, IoT, cybersecurity, and embedded systems
- Although they have strong partnerships across connected product engineering, some of their strategic partnerships/alliances in the areas of embedded and hardware engineering are yet to mature at par with the Leaders

Aspirants

GS Lab | GAVS, N-iX, and **Onward Technologies**

- Aspirants offer capabilities mostly across the software engineering part of the value chain and have a limited portfolio of services required to develop hardware and embedded products
- Although Aspirants are actively training and upskilling their engineering talent, their investments in labs, CoEs, partnerships, and IP are limited

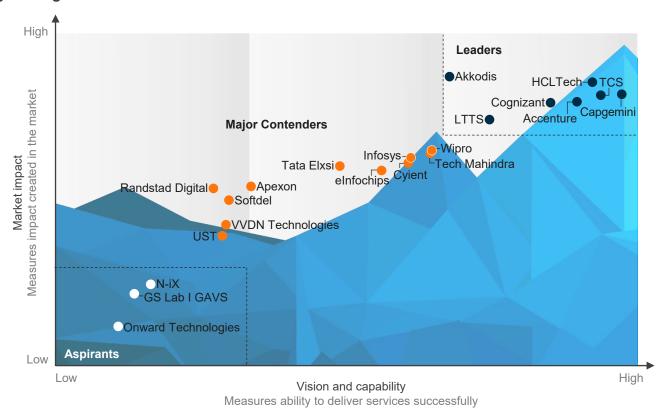


Everest Group PEAK Matrix®

Connected Product Engineering Services PEAK Matrix® Assessment 2024 | HCLTech is positioned as a Leader

Everest Group Connected Product Engineering Services PEAK Matrix® Assessment 2024^{1,2}

- Leaders
- Major Contenders
- Aspirants



¹ Assessments for GS Lab I GAVS, Infosys, Onward Technologies, and Wipro exclude provider inputs and are based on Everest Group's proprietary Transaction Intelligence (TI) database, provider public disclosures, and Everest Group's interactions with buyers 2 Assessment of GS Lab I GAVS covers the capabilities of the combined entity formed by merging GS Lab and GAVS Source: Everest Group (2024)



HCLTech profile (page 1 of 6)

Overview

Vision and strategy

HCLTech envisions becoming a digital transformation partner for its customers by providing expertise in connected product engineering across the product life cycle. It aims to facilitate the transformation of enterprises with the advent of emerging technologies such as generative AI, AR/VR, IoT, and 5G. HCLTech aspires to be a strategic partner to deliver differentiated offerings, fast-track GTM strategy, and foster collaboration. To achieve this, HCLTech aims to leverage its client base spread across categories and global footprint to drive innovation and technology advances.

Connected product engineering services revenue (CY 2022)

<us\$50 million="" million<="" th="" us\$50-100=""><th>US\$100-200 million</th><th>>US\$200 million</th></us\$50>	US\$100-200 million	>US\$200 million
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YoY growth rate in connected product engineering services revenue (CY2022)

<25%	25-50%	50-75%	>75%

Low (<15%)</p> Medium (15-30%) High (>30%) Revenue of connected product engineering by value chain functions Testing and Product support Ideation Product certification and maintenance and design development Revenue by connected product engineering segments Connected platform Engineering and design Embedded engineering engineering Revenue by connected product engineering verticals Aerospace and defence Consumer electronics Automotive Energy and utilities Industrial products Medical devices Telecom Retail Semiconductor Others Revenue by connected product engineering geographies United Kingdom North America Europe China Japan India Rest of Asia Pacific Middle East and Africa South America Others

HCLTech profile (page 2 of 6)

Case studies

CASE STUDY 1

Business challenge

The client, a sustainable energy provider, was experiencing high failure rate of its wind turbine drivetrains on field, leading to increased downtime, maintenance, and warranty costs for the turbine fleet. It was facing various challenges in identifying the root cause of these frequent failures, which was impacting the wind turbine performance, availability, and safety, consequently resulting in revenue loss.

Solution

HCLTech developed a product digital twin platform using an advanced technology stack to remotely monitor, simulate, and predict performance of wind turbines. The solution combined end-to-end horizontal engineering, design, manufacturing, and operational processes. It assisted in aggregating and normalizing the operational data gathered by IoT sensors to produce a virtual replica of the physical assets (wind turbine drivetrains). Additionally, it combined operational data with field conditions and superimposed the output on virtual simulation models to recreate field behavior. This helped in identifying the root causes of equipment failures and validating them against product specifications, resulting in improved efficiency, less downtime, and increased productivity.

[NOT EXHAUSTIVE]

CASE STUDY 2

Business challenge

The client, a commercial equipment manufacturer, required an IoT-enabled digital platform that was fully integrated in the ecosystem across products, could help the customer to meet market needs, and drive and improve customer satisfaction.

Solution

HCLTech developed an IoT platform for new generation of connected products encompassing multiple product brands of the client with end-to-end ownership, including device connectivity, gateway, edge, developing the cloud platform, data lake, analytics engine, mobile app, and web portal. This helped the customer to monetize and create a new data-driven service revenue stream, in addition to improved organic sales growth.

HCLTech profile (page 3 of 6)

Solutions

[REPRESENTATIVE LIST]

[NOT EXHAUSTIVE]

Proprietary solutions

Solution	Details
AION™	An ML-based platform that provides customers with the capacity to build prototypes to solve business problems
Al Force	A dynamic suite of generative AI-powered solutions designed to inject intelligence into every facet of engineering workflows
Connected Assets in Regulated Environment (CARE)	A platform that focuses on faster development of software and services for medical devices
Cloud Bridge Suite	A suite of independent solution accelerators built on agile, DevOps, and low-code/no-code principles, which helps customers drive end-to-end cloud transformation
eDAT™	A framework for automated testing of electronic devices that reduces testing costs, time-to-market, and defect leakage
PICASSO™	A platform that enhances capabilities in developing and implementing digital service platforms and a connected ecosystem of assets
PLATFORM – X	A platform that enables brands to improve consumer loyalty and drive conversions through personalized omnichannel marketing
Optics	A cloud cost optimization solution powered by advanced recommendation rule engine, with up to 25% cost saving in cloud services spend
iDORAN™	An intelligent software framework that enables automatic images and documents correction, extraction, validation, enrichment, classification, and analysis of unstructured data using re-usable modular components to uncover critical business insights

HCLTech profile (page 4 of 6)

Partnerships

[REPRESENTATIVE LIST] [NOT EXHAUSTIVE]

Key alliances and partnerships

Partner name	Details				
Adobe	A partnership to strengthen capabilities in solutions pertaining to digital experience in connected product engineering				
AWS	A dedicated AWS business unit to help enterprises accelerate their cloud transformation journey				
Google Cloud Platform (GCP)	A partnership to help customers experience the speed, scalability, and innovation that GCP offers				
IBM	An alliance to deliver digital application modernization, integrated application infrastructure autonomics and orchestration, and mainframe transformation to customers				
Intel	A partnership that enhances expertise in continuous modernization to help enterprises accelerate their cloud business transformation journey and help build focused, innovative, and industry-tailored solutions for clients				
Microsoft	A strategic partnership to help enterprises leverage generative AI and develop joint solutions to enable businesses to achieve better outcomes and enhance business transformation				
VMWare	A partnership to drive innovation, enable cloud infrastructure and business mobility, and accelerate digital transformation journey of customers				
Tableau	A partnership to enable actionable data-driven business insights for enterprises across verticals and geographies				
SAP	A strategic services partnership to enable complex SAP transformation programs				

HCLTech profile (page 5 of 6)

Investments

[REPRESENTATIVE LIST] [NOT EXHAUSTIVE]

Recent connected product engineering services investments/acquisitions

Investment/target	Details			
ASAP	Acquisition to enhance capabilities around autonomous driving, e-mobility, and connectivity			
Quest Informatics	Acquisition to enhance capabilities around cloud-enabled aftermarket ERP, field service management, digital parts catalog product suites, and presence expansion in the digital aftermarket space			
Starschema	Acquisition to enhance capability in data engineering and expand presence in the European region.			
Lab/CoE	Investments in setting up 100+ engineering labs and 20+ CoEs to enhance capabilities across AR, VR, generative AI, and 5G			

HCLTech profile (page 6 of 6)

Everest Group assessment – Leader

Measure of capability: Low





Market impact

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

Strengths

- HCLTech has made significant investments in building its connected product engineering competencies through an extensive suite of IP, labs, and strategic acquisitions across subsegments
- The acquisitions of Starschema and ASAP have enhanced HCLTech's digital engineering and connected mobility capabilities and helped expand its presence in Germany
- HCLTech has made significant investments on generative AI Proof of Concepts (PoCs), datadriven accelerators, value-driven frameworks, and Al-infused offerings to boost capabilities around connected product engineering services
- Clients appreciate HCLTech for its technical expertise, ability to bring innovative ideas to engagements, and end-to-end offerings across the value chain of connected product engineering services
- HCLTech has a good spread of service offerings around all three subsegments engineering and design, embedded engineering, and connected platform engineering

Limitations

 Clients expect HCLTech to regularly update the progress made by staffed resources (especially offshore FTEs) and better communicate project KPIs

Vision and capability

- Clients have also highlighted that the firm should upskill its resources around the understanding (build and run) of the IP solutions being utilized during engagements to lower the issue resolution time and optimize the service delivery; they also expect HCLTech to manage overall attrition better
- Peers are investing to boost capabilities in connected product engineering in the industrial products and telecom verticals. HCLTech has limited presence in these verticals compared to peers

Appendix

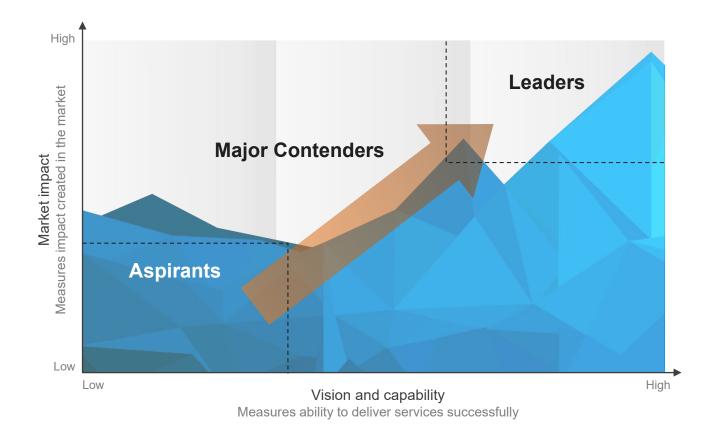
PEAK Matrix® framework

FAQs



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

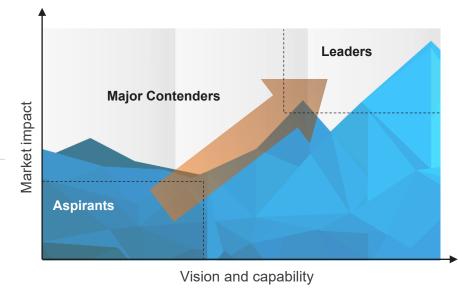
Number of clients, revenue base, YoY growth, and deal value/volume

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



FAQs

Q: Does the PEAK Matrix® assessment incorporate any subjective criteria?

A: 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.

Q: Is being a Major Contender or Aspirant on the PEAK Matrix, an unfavorable outcome?

- A: 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.
- Q: What other aspects of the PEAK Matrix assessment are relevant to buyers and providers other than the PEAK Matrix positioning?
- A: 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.
- Q: What are the incentives for buyers and providers to participate/provide input to PEAK Matrix research?
- A: 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 in included in our research reports

Q: What is the process for a provider / technology vendor to leverage its PEAK Matrix positioning?

- A: 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

Q: Does the PEAK Matrix evaluation criteria change over a period of time?

A: 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.

Stay connected

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

Website Blog everestgrp.com

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

everestgrp.com/blog

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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