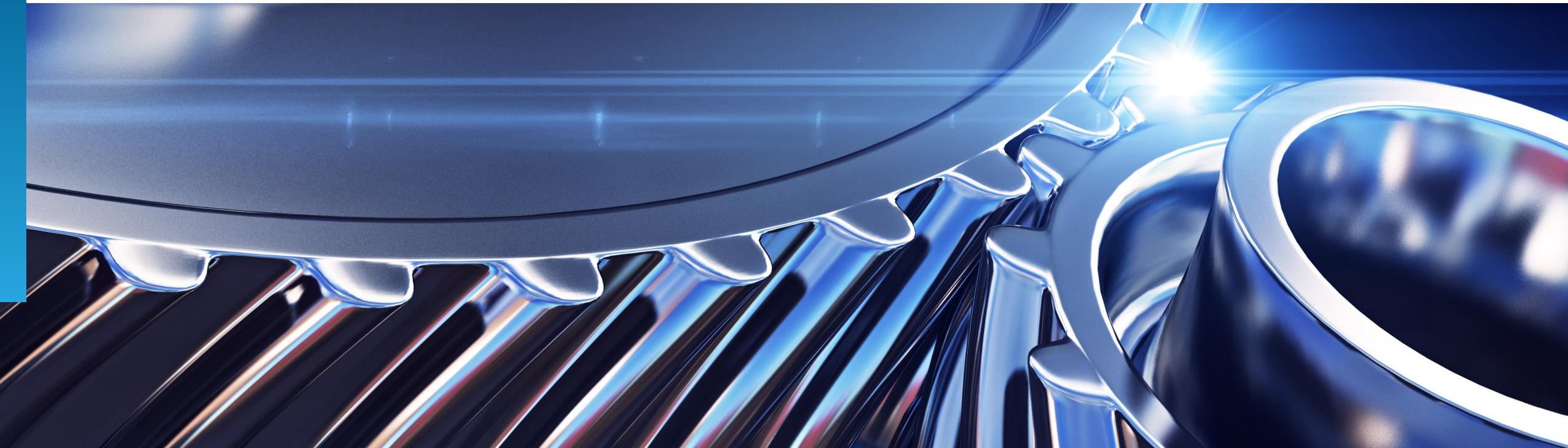


# Digital Product Engineering Service Provider Compendium 2022: Bridging the Chasm between the Physical and Digital Worlds

March 2022: Complimentary Abstract / Table of Contents



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Contract assessment

Peer analysis

Market intelligence

Tracking: providers, locations, risk, technologies

Locations: costs, skills, sustainability, portfolios

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For more information on this and other research published by Everest Group, please contact us:

**Akshat Vaid**, Vice President

**Mayank Maria**, Practice Director

**Nishant Udupa**, Practice Director

**Nitish Dayal**, Analyst

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## Background and introduction of the research

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 the 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 [Digital Product Engineering Services PEAK Matrix® Assessment 2022](#), wherein we have presented an assessment of 30 engineering service providers featured on the PEAK Matrix, along with the sourcing considerations for enterprises. This assessment is based on the RFI responses from service providers, interactions with their digital product engineering leadership, client reference checks, and ongoing analysis of the engineering services market.

**This report includes the profiles of the following 30 leading engineering service providers featured on the Digital Product Engineering PEAK Matrix:**

- **Leaders:** Accenture, Capgemini, Cognizant, HCL Technologies, Infosys, LTTS, TCS, and Wipro
- **Major Contenders:** Bosch Global Software Technologies (BGSW), Cyient, eInfochips, Experion Technologies, GlobalLogic, GS Lab, Happiest Minds, HARMAN DTS, Infinite Computer Solutions, Innominds, Itransition, Mindtree, Mphasis, Sasken, SoftServe, Tech Mahindra, and VVDN Technologies
- **Aspirants:** Accolite Digital, Aspire Systems, Daffodil Software, e-Zest, and Sonata Software

### Scope of this report



**Geography**  
Global



**Providers**  
30 leading engineering service providers



**Services**  
Digital product engineering services

# This report focuses on digital product engineering services and offers insights into the prominent service providers operating in this space

## Digital products

Digital products are physical products that have one or more of the following attributes – connected, smart, intelligent, and autonomous.

## Digital product engineering

Digital product engineering includes all activities that go into the engineering of digital products across the value chain including ideation & design, product development, testing & certification, and product support & maintenance. It also includes both greenfield and brownfield product engineering efforts. Engineering work undertaken across the manufacturing and supply chain components of the value chain (process engineering) does not fall under the scope of this assessment.

### Digital product engineering includes

Engineering of the digital components of digital products (e.g., infotainment systems, telematics, and digital cockpits)

Engineering of purely digital products (e.g., smart wearables, smart TVs, smart speakers, and smart plugs)

Software platform engineering work that is critical to the functioning of a digital product (e.g., remote patient monitoring app and device tracking app)

### It does not include

Engineering of products that are not digital in nature (e.g., powertrain, chassis, aerostructures, and surgical instruments)

Stand-alone software platform engineering work (e.g., B2B/B2C e-commerce app, mobile banking app, and OTT app)

## Digital product engineering services value chain:

NOT EXHAUSTIVE

### Ideation & design

- Requirements gathering and analysis
- Market research and user surveys
- Product design (3D modeling, CAD/CAM design, simulation-based design, AI-enabled design, etc.)
- UI/UX design
- Design validation and engineering
- Prototype creation

### Product development

- Embedded, hardware, and software engineering support
- Cognitive product development
- Edge analytics
- Voice user interface development
- Sensor integration
- 3D printing and virtual prototyping
- Value engineering
- Reengineering and reverse engineering

### Testing & certification

- Product performance and safety testing
- Product compliance and certification
- Test environment setup
- Virtual lab access
- Mechanical component, software product, and embedded systems testing
- Data-driven simulation and validation
- Security testing
- Network testing

### Product support & maintenance

- Operations and maintenance engineering support
- Predictive maintenance and asset monitoring
- Technical support and troubleshooting (on-field technical service, AI-powered virtual assistants, etc.)
- Product upgrades
- Critical defect fixing

# The digital product engineering service provider compendium report has profiles and buyer case studies for 30 leading engineering service providers

Digital Product Engineering Service Provider Compendium 2022: Bridging the Chasm between the Physical and Digital Worlds

## Provider | digital product engineering services profile (page 1 of 4) Everest Group assessment –



### Strengths

- Service Provider has a credible inorganic growth strategy across multiple domain areas such as connected and analytics (TQS Integration and Zenith Textile).
- It demonstrates strong technical expertise that includes IP, CoEs, innovation spaces, and labs in areas such as blockchain.
- Clients appreciate Service Provider's commitment to high-quality deliverables, its ability to deliver high-quality results, and its ability to deliver high-quality results.

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Digital Product Engineering Service Provider Compendium 2022: Bridging the Chasm between the Physical and Digital Worlds

## Provider | digital product engineering services profile (page 2 of 4) Overview

### Vision & strategy

Service Provider envisions to build digital products and enhance its disciplinary approach by leveraging capabilities in areas such as knowledge, and next-generation technologies. Service Provider provides product sustenance, embedded software development, IoT partner for digital product engineering services and help its clients either via development of new products or streamlining their existing products.

### Revenue by geography



Source: Everest Group (2022)

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Digital Product Engineering Service Provider Compendium 2022: Bridging the Chasm between the Physical and Digital Worlds

## Provider | digital product engineering services profile (page 3 of 4) Case studies and solutions

### Case study 1: Helping a US-based telecom and develop a connected home device

#### Business challenge

The client was looking for a partner to create a scalable so services controlled by a centralized cloud platform.

#### Solution and impact

Service Provider developed a connected home platform of IoT services leveraging the existing client infrastructure. The centralized management of the gateway features and micro B2B interfaces. The solution minimized the field support via development of a mesh architecture to offer greater coverage.

### Case study 2: Helping a Japan-based automotiv connected car application

#### Business challenge

The client was looking for a partner to develop a connected car application. The client included revamping the existing application in the North America and also the upgradation of safety and security features. The client also wanted to integrate the application with Apple watch, android wearab

#### Solution and impact

Service Provider developed a multi-featured application on android operating systems, which provided singular access to various features for the end-customers. The mobile application was having functionalities such as door lock/unlock, HVAC turn on/off, start/stop. Service Provider developed over 60 screens for various functionalities.

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Digital Product Engineering Service Provider Compendium 2022: Bridging the Chasm between the Physical and Digital Worlds

## Provider | digital product engineering services profile (page 4 of 4) Investments and partnerships

### Key alliances and partnerships (representative list)

| Company   | Details  |
|---|--|
| Allegro PCB, OrCAD Capture, and Xpedition       | A strategic partnership to enable electronics design and development for PCB design  |
| Automotive Research Association of India (ARAI) | An alliance to work on autonomous vehicle technologies; a prototype of the autonomous vehicle was developed, which had features such as lane keeping, signal and signage reading, and obstacle detection |
| AWS   | A Premium Consulting Partner with a joint focus on offering cloud solutions to organizations   |
| Azure IoT                                       | A partnership to offer solutions spanning areas such as mobility, virtualization, and cloud computing  |
| Carnegie Mellon University, MIT, and IIT Madras | A partnership with academic institutions to develop new IP and conduct research on next-generation technologies  |
| Google  | A Global Systems Integrator (GSI) for the Google for Work™ service. Google for Work™ includes products such as, Google Apps™ service, Google Cloud™, Google Maps™, and Google Enterprise™ Search         |
| MathWorks                                       | A collaboration to create tool and simulation environment creation for various product developments  |

### Recent digital product engineering services investments/acquisitions (representative list)

| Investment/target         | Details  |
|---------------------------|--|
| Brilliant Service         | Acquisition to expand digital service offerings in the APAC region and bolster capabilities in areas such as digital strategy, IoT, and product design and engineering                           |
| Digital innovation spaces | Investment to set up technology labs in areas such as connected devices, big data, mobility, automation, and SDN/NFV   |
| ESG Mobility              | Acquisition to provide services across the automotive software stack with key focus on areas such as electrical and electronics systems, digital systems, and autonomous vehicle technology      |
| Measure                   | Acquisition to deepen its capabilities in advanced data analytics and software development and offer services to enterprise customers looking to generate insights from data collected by drones |
| Netcentric                | Acquisition to offer digital experience solutions to clients and expand delivery presence in the European region   |
| Zone                      | Acquisition to bolster Service Provider's already existing digital interactive capabilities in areas such as experience design, human science-driven insights, and analytics                     |

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# Research calendar

## Engineering Services

■ Published
 ■ Planned
 ■ Current release

### Flagship reports

### Release date

|   |                   |
|---|-------------------|
| Driving Next-generation Mobility Experiences: ACES Mobility Automotive Engineering Services State of the Market Report 2022   | December 2021     |
| Envisioning the Connected Future: 5G Engineering Service Provider Compendium 2022   | December 2021     |
| Envisioning the Connected Future: 5G Engineering Services State of the Market Report 2022                                     | March 2022        |
| Digital Product Engineering Services PEAK Matrix® Assessment 2022: Bridging the Chasm between the Physical and Digital Worlds | March 2022        |
| <b>Digital Product Engineering Service Provider Compendium 2022: Bridging the Chasm between Physical and Digital Worlds</b>   | <b>March 2022</b> |
| Industry 4.0 Services PEAK Matrix® Assessment 2022  | Q2 2022           |
| Connected Medical Devices PEAK Matrix® Assessment 2022  | Q2 2022           |
| Software Product Engineering Services PEAK Matrix® Assessment 2022  | Q2 2022           |

### Thematic reports

### Release date

|  |               |
|--|---------------|
| Industry 4.0 Trailblazers: Top Start-ups Impacting the Industry 4.0 Value Chain                                      | February 2022 |
| Engineering R&D (ER&D) in 2022: Key Macroeconomic and Technological Trends that Will Shape the ER&D Industry in 2022 | February 2022 |
| Environmental, Social, Governance (ESG) Adoption in the Engineering Landscape  | March 2022    |
| Engineering Services Provider of the Year Award 2022   | March 2022    |
| Engineering Services Enterprise Pulse: Are Engineering Enterprises Truly Happy with Their Service Providers?         | Q2 2022       |
| Engineering Services Top 50  | Q2 2022       |
| Trends in the Top 200 Engineering Research & Development (ER&D) Enterprises  | Q2 2022       |

Note: For a list of all of our published Engineering Services reports, please refer to our [website page](#).



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### Dallas (Headquarters)

[info@everestgrp.com](mailto:info@everestgrp.com)  
+1-214-451-3000

### Bangalore

[india@everestgrp.com](mailto:india@everestgrp.com)  
+91-80-61463500

### Delhi

[india@everestgrp.com](mailto:india@everestgrp.com)  
+91-124-496-1000

### London

[unitedkingdom@everestgrp.com](mailto:unitedkingdom@everestgrp.com)  
+44-207-129-1318

### Toronto

[canada@everestgrp.com](mailto:canada@everestgrp.com)  
+1-647-557-3475

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