ISG Provider Lens®

Digital Engineering Services

Analyzing digital engineering capabilities from design to CX

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Transformative impact on engineering, business operations and extended CX

Digital interventions are disrupting the end-to-end value chain, from ideation and conceptualization to engineering, operations and extended CX management. The convergence of advanced technologies is revolutionizing engineering, R&D, operations, manufacturing and extended supply chain management.

VLMs accelerate prototyping by converting sketches or 3D models into detailed specifications, fostering collaborative designs across teams. AI-driven simulations predict product performance and optimize materials and manufacturing methods. Hyperscaler platforms leverage LLMs and VLMs to reduce development and testing costs, increase precision and unlock new digital-to-physical design possibilities. AI and ML enhance predictive analytics and automation, enabling smart product design and optimized operational efficiency. AI systems help predict failures, optimize workflows and support efficient remote operations.

AR and VR facilitate immersive prototyping and remote collaboration, accelerating innovation cycles while reducing costs. Additive manufacturing enables the rapid, flexible production of complex subsystems, shifting traditional manufacturing toward more visible, adaptable, smart, predictable and controllable processes. Integrated digital twin and digital thread technologies provide a real-time, holistic view of product lifecycles and supply chains, enabling end-to-end track and trace, precise monitoring, predictive maintenance and seamless data flow from design through CX.

The critical aspects of CX, such as VoC analytics and robust V&V processes, ensure products and services closely align with evolving customer expectations and stringent quality standards, thereby driving continuous improvement in CX. Platformization further streamlines these capabilities by fostering integrated ecosystems that unify disparate tools and data sources across physical and digital domains, facilitating cross-functional collaboration and scalable deployments.

Collectively, these technologies augment design and R&D, make operations smarter, extend and enrich CX, and enable neutral, scalable platforms, helping organizations enhance agility, reduce time to market, improve operational resilience and deliver superior CX in an increasingly complex and dynamic market.
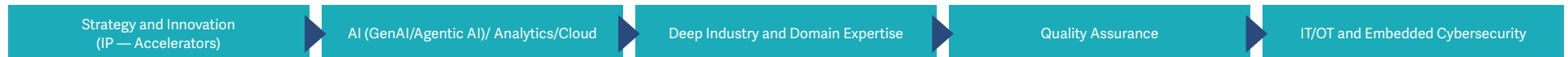
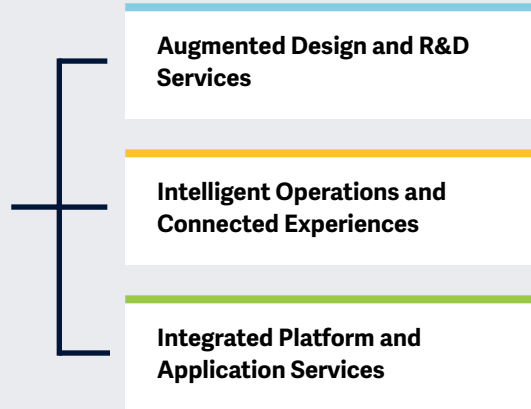# Digital Engineering Services 2026 – Deep View

Quadrant

Areas and Attributes

Augmented Design and R&D Services	AI-driven Design		Development		Digital Product Design Capabilities			Verification and Validation
	Generative Design	Design Automation	Design Approach	Digital Tech Stack	MBSE and DfX Services	Simulation and Prototyping	Testing and Compliance	Digital DFMEA — Product Proving

Intelligent Operations and Connected Experiences	Industry 4.0/5.0				Intelligent Operations				Connected Experiences			
	IIoT	Smart Factory	Edge AI and Orchestration at Edge	Advanced AI and ML — Cobots — Human Coexistence	Asset Management	Operational Digital Twin	IT/OT/NT Solutions	OT Managed Services	UX/CX/DX: Experience Management	After Sales: Voice of Customer	Track and Trace	Digital Thread

Integrated Platform and Application Services	Digital Business Platform Development			Behavioral Intelligence		Cloud and Edge Native Approach			
	Product Strategy	Engineering ADM Capabilities	Physical -> Virtual -> Embedded -> Chip -> Silicon Transition	LLM and GenAI	Predictive ML	ESG	Risk and Governance	Industry Clouds	Sovereign Clouds

Cornerstone

Strategy and Innovation (IP — Accelerators) ▶ AI (GenAI/Agentic AI)/ Analytics/Cloud ▶ Deep Industry and Domain Expertise ▶ Quality Assurance ▶ IT/OT and Embedded Cybersecurity

Key focus areas of **Digital Engineering** 2026 study

Simplified Illustration Source: ISG 2025

- **Augmented Design and R&D Services**
- **Intelligent Operations and Connected Experiences**
- **Integrated Platform and Application Services**

Definition

The ISG Provider Lens® Digital Engineering Services 2026 study offers the following to business and IT decision-makers:

- Transparency on the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments on their competitive strengths and portfolio attractiveness
- Focus on different markets, including Europe and the U.S.

Our study serves as an important decision-making basis for positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their current vendor relationships and potential engagements.

Large Providers are those with revenues exceeding $2 billion and a workforce of more than 100,000 employees. They cater to multiple verticals, often spreading their resources across a broad range of industries. Their primary focus lies in serving large enterprises, often engaging in large transformation projects that require

deep expertise, extensive resources and the ability to manage complex, enterprisewide innovations. Their deep industry experience, broad service capabilities and strategic partnerships with technology giants position them as key players in the global digital services landscape.

Midsize Providers, on the other hand, generate less than $2 billion in revenue and typically specialize in 3-4 verticals where they hold strong capabilities and significant revenue share. With a lean workforce of less than 100,000 employees, these providers adopt an agile and flexible approach, making them well-suited to serve both large enterprises and midmarket clients with tailored, industry-specific solutions. They also have strong inherent capabilities and heritage in Digital Engineering services. This combination of domain expertise, flexibility and a strong focus on innovation positions them as effective partners for businesses seeking to implement cutting-edge technologies with a faster, more agile approach.

Augmented Design and R&D Services

Definition

This quadrant assesses providers' ability to deliver advanced, AI-enabled design and R&D services across the full product and service innovation lifecycle. It emphasizes generative design, behavioral intelligence and cloud-native engineering to accelerate ideation, simulation, prototyping and validation. Providers enable agile, data-driven, model-based engineering using digital twins to simulate real-world conditions.

The services in scope support smart, sustainable and hyperpersonalized products and experiences. Key capabilities include digital design failure mode and effects analysis (DFMEA), virtual validation, GenAI and LLMs to automate design and testing, accelerate time to market, improve quality and strengthen early-stage quality assurance. V&V is prioritized, with virtual prototyping tools addressing extreme test cases via GenAI.

The quadrant also covers AR/VR/MR, additive manufacturing, design for manufacturing and digital twins for collaborative design, rapid iteration and predictive simulation. Providers are expected to show maturity in managing complex engineering and adopting responsible, sustainable innovation practices.

Eligibility Criteria

1. Supporting **digital product development across both physical and virtual R&D** and **design strategies for new products, services and business models,** including integration and scaling across enterprise environments

2. Applying **design thinking, requirements analysis** and **iterative design** to drive creativity and innovation in product and service development while exploring thousands of options through iterative, parametric and sensitivity analyses to identify the optimal solution for each context

3. Delivering **human-centric design** through persona-based journey mapping, storyboarding, UI/UX, and industrial, service and interaction design, with GenAI-powered hyperpersonalization (for example, digital avatars as service assistants)

4. Enabling **model-based systems engineering (MBSE), digital twin, rapid prototyping and autonomous testing** using platforms and PLM tools, supported by data- and model-driven engineering

5. Integrating **AR/VR/MR, additive manufacturing** and **3D printing** to support immersive and extended reality-based design and validation

6. Demonstrating success stories in leveraging **GenAI** for design automation, simulation and product experience management, with a focus on **responsible and sustainable design**

Intelligent Operations and Connected Experiences

Definition

This quadrant evaluates providers that deliver standardized, intelligent, connected and adaptive operations across industries, enabling seamless CX and UX. It merges traditional operational intelligence with modern experience orchestration, reflecting backend efficiency and frontend engagement, extending value beyond the enterprise firewall. Providers support Industry 4.0 and 5.0 paradigms, including smart factories, IIoT, digital twins and edge computing, while integrating GenAI and behavioral analytics to optimize workflows, predict failures and enhance service delivery.

The quadrant also covers experience management: UX/CX/DX orchestration, VoC integration and hyperpersonalized support via digital avatars and conversational AI. The scope includes CX management, agile supply chains, self-healing systems and remote operations, with an emphasis on sustainability, automation and real-time responsiveness. Providers must deliver intelligent, scalable and controllable operations with manual interventions aligned with Industry 5.0, tightly coupled with customer visibility, feedback and experience data.

Eligibility Criteria

1. Having proven experience in **design, implementation and operation of technologies and processes** aligned with Industry 4.0 and 5.0, including smart production, intelligent supply chains, CX (physical and digital) and service operations

2. Delivering **connected operations** across diverse industries, with regional relevance and scalability

3. Integrating **IT/OT/ET environments,** covering data, security and workforce aspects, supported by robust OT solutions

4. Having capabilities in **asset performance monitoring, predictive maintenance** and **lifecycle optimization** using AI, ML and digital threads

5. Using **GenAI** for predictive analytics, process optimization, documentation automation and quality control

6. Delivering **experience management** through UX/CX/DX orchestration, real-time feedback loops and VoC integration

7. Supporting **remote operations, business continuity** and **self-healing systems** using AR, VR, drones and digital avatars

8. Using **conversational AI, NLP/NLU/NLG** and virtual agents for intelligent customer support and knowledge curation

9. Showcasing success in **hyperpersonalization, targeted content delivery** and **feedback-driven operations improvement** using GenAI

Integrated Platform and Application Services

Definition

This quadrant evaluates providers' ability to design, build and manage digital platforms and applications that serve as the foundation for scalable, secure and intelligent enterprise operations, covering lifecycle management for both physical and virtual aspects of the product. The focus is on modular, cloud-native and API-driven architectures that enable rapid innovation, seamless integration and consistent UX.

Providers in this quadrant are expected to deliver platform-as-a-product capabilities, orchestrate digital ecosystems, and support microservices, containerization and behavioral intelligence. The quadrant also covers real-time experience management, multi-platform integration and the use of GenAI for content development, knowledge curation and platform augmentation.

The goal is to assess how providers help enterprises shift from product-centric to platform-centric models, enabling plug-and-play operations, simplified maintenance and enhanced reliability across the value chain.

Eligibility Criteria

1. Using **digital ecosystem orchestration platforms** to build and operate common platforms that reduce complexity and accelerate time to market

2. Delivering **integrated digital technology platforms** that connect systems, hardware and software across multi-disciplinary, cross-functional enterprise environments

3. Having the ability and implement **API strategies, microservices and containerized solutions** for scalable platform engineering

4. Using **cloud-native platforms** and **digital-native design** to support smart and connected product development

5. Applying **behavioral intelligence** and **predictive analytics** to real-time data from users and devices

6. Synchronizing **UX** across platforms in real time to ensure consistency and responsiveness as a feedback loop for continuous improvement across the value chain

7. Delivering **ADM capabilities** for platform and app modernization, including DevSecOps and CI/CD

8. Demonstrating experience in **multi-platform integration, code capability** and reusable module development running in parallel and in close sync with physical product platforms to support the iterations and product variants

9. Proven success in using **GenAI** for platform augmentation, content development and intelligent knowledge curation in customer-centric use cases

Quadrants by Region

As a part of this ISG Provider Lens® quadrant study, we are introducing the following three quadrants in the Digital Engineering Services 2026 report:

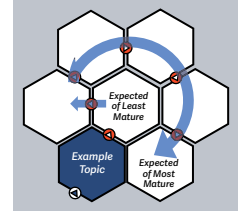| Quadrant	Europe		U.S.	
	Large	Midsize	Large	Midsize
Augmented Design and R&D Services	✔	✔	✔	✔
Intelligent Operations and Connected Experiences	✔	✔	✔	✔
Integrated Platform and Application Services	✔	✔	✔	✔

ISG's Digital Engineering Services Framework

Key characteristics of the proprietary framework:

- Encapsulates what enterprises are doing across the Digital Engineering Services market and helps connect them to the digital solutions
- Represents the entire value chain of supply and demand within the market
- Inner tiles represent themes of enterprise objectives
- Outer tiles represent initiatives
- Behind each outer tile is a specific set of capabilities, with unique market-leading providers and solutions
- Green tiles represent where ISG Software Research will produce a Buyer's Guide in 2026

Understanding the Mosaic

Expected of Least Mature

Example Topic

Expected of Most Mature

Digital Engineering Framework

EOL Management & Circular economy

Regulatory Compliance

Customer Experience Management

Remote Diagnosis & Virtual Support (using AR/VR)

IoT enabled monitoring

Aftermarket Services (Field Service Management & Warranty Claims)

Lifecycle Management & sustenance

Cybersecurity & Data governance

Composable architecture

AI/ML & GenAI/ Agentic AI Services

LC/NC Development platforms

Digital Thread and Digital Integration platforms

Platform & Connected experience

Cloud infrastructure

Production planning & factory simulation

Design For Manufacturing Optimization

Voice of Customer

Application development

Concept Development

Risk Analysis & early validation

Digital Customer Platforms (GenAI/ AI)

ALM and PLM integration

Manufacturing Enablement & handover

Intelligent and connected operation enablement

Product Iterations

Concept & Ideation

Requirements engineering

Technology Assessment

Customer Relationship Management

Digital Thread Continuity Across Engineering and Shop Floor

Virtual Prototyping

Design & Develop New products

Market Intelligence

Design Thinking & Innovation Workshops

Regulatory Compliance

Simulation & Testing

Design & Development

Mechanical Design (CAD, CAE)

CI/CD software

Automated QA/QC

CAE Simulations

Systems Architecture

Design for Manufacturability and Assembly (DFM/DFA)

Model based System Engineering

Virtual Prototyping

Digital Twin Development & validation

Verification & Validation

Simulation & Prototype

iSG Provider Lens®

The research phase falls between November and January 2026. During this period, survey, evaluation, analysis and validation will take place. The results will be presented to the media in April - May 2026.

Milestones	Beginning	End
Survey Launch	Nov 03, 2025	
Survey Phase	Nov 03, 2025	Jan 09, 2026
Sneak Preview	February 2026	April 2026
Press Release & Publication	April 2026	May 2026

Collecting client testimonials via the Star of Excellence Program requires early client referrals (no official reference needed) because CX scores have a direct influence on the provider's position in the IPL quadrant and the awards.

Please refer to the link to view/download the ISG Provider Lens® 2025 research agenda.

Access to Online Portal

You can view/download the questionnaire from here using the credentials you have already created or refer to the instructions in the invitation email to generate a new password. We look forward to your participation!

Buyers Guide

ISG Software Research, formerly "Ventana Research," offers market insights by evaluating technology providers and products through its Buyer's Guides. The findings are drawn from the research-based analysis of product and customer experience categories, ranking and rating software providers and products to help facilitate informed decision-making and selection processes for technology.

In the course of the Digital Engineering Services IPL launch, we want to take advantage of the opportunity to draw your attention to related research and insights that ISG Research will publish in 2026. For more information, refer to the Buyers Guide research schedule.

Research Production Disclaimer:

ISG collects data for the purposes of conducting research and creating provider/vendor profiles. The profiles and supporting data are used by ISG advisors to make recommendations and inform their clients of the experience and qualifications of any applicable provider/vendor for outsourcing the work identified by clients. This data is collected as part of the ISG FutureSource™ process and the Candidate Provider Qualification (CPQ) process. ISG may choose to only utilize this collected data pertaining to certain countries or regions for the education and purposes of its advisors and not produce ISG Provider Lens® reports. These decisions will be made based on the level and completeness of the information received directly from providers/vendors and the availability of experienced analysts for those countries or regions. Submitted information may also be used for individual research projects or for briefing notes that will be written by the lead analysts.

ISG Star of Excellence™ — Call for nominations

The Star of Excellence™ is an independent recognition of excellent service delivery based on the Voice of the Customer concept. ISG has designed the Star of Excellence program to collect client feedback about service providers' success in demonstrating the highest standards of client service excellence and customer centricity.

The global survey is all about services that are associated with IPL studies. In consequence, all ISG Analysts are continuously provided with information on the customer experience of all relevant service providers. This information comes on top of existing first-hand advisor feedback that IPL leverages in its practitioner-led consulting approach.

Providers are invited to nominate their clients to participate. Once the nomination has been submitted, ISG sends out a mail confirmation to both sides. It is self-evident that ISG anonymizes all customer data and does not share it with third parties.

Our vision for the Star of Excellence is to become acknowledged as the leading industry recognition for client service excellence and serve as the benchmark for measuring client sentiments.

To ensure your selected clients complete the feedback for your nominated engagement, please use the "Nominate (for Providers)" section on the Star of Excellence™ website.

We have set up an email where you can direct any questions or provide comments. This email will be checked daily, please allow up to 24 hours for a reply.

Here is the email address:
star@cx.isg-one.com

ISG Star of Excellence

Methodology & Team

The ISG Provider Lens® 2026 – Digital Engineering Services study analyzes the relevant software vendors/service providers in the global market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

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The research and analysis presented in this report includes research from the ISG Provider Lens® program, ongoing ISG Research programs, interviews with ISG advisors, briefings with service providers and analysis of publicly available market information from multiple sources. The data collected for this report represent information that ISG believes to be current as of November 2025 for providers that actively participated and for providers that did not. ISG recognizes that many mergers and acquisitions may have occurred since then, but this report does not reflect these changes.

All revenue references are in U.S. dollars ($US) unless noted otherwise.

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Project Manager

ISG Provider Lens® Advisors Involvement Program

ISG Provider Lens® offers market assessments incorporating practitioner insights, reflecting regional focus and independent research. ISG ensures advisor involvement in each study to cover the appropriate market details aligned to the respective service lines/technology trends, service provider presence and enterprise context.

In each region, ISG has expert thought leaders and respected advisors who know the provider portfolios and offerings as well as enterprise requirements and market trends. On average, three consultant advisors participate as part of each study's quality and consistency review process. The consultant advisors ensure each study reflects ISG advisors' experience in the field, which complements the primary and secondary research the analysts conduct. ISG advisors participate in each study as part of the consultant advisors' group and contribute at different levels depending on their availability and expertise.

The consultant advisors:

- Help define and validate quadrants and questionnaires,
- Advise on service provider inclusion, participate in briefing calls,
- Give their perspectives on service provider ratings and review report drafts.

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Invited Companies

If your company is listed on this page or you feel your company should be listed, please contact ISG to ensure we have the correct contact person(s) to actively participate in this research.

* Rated in previous iteration

Accenture*	Bemind	Endava	Infinite Computer Solutions*
Accion Labs*	Bertrandt*	Engineering Industries eXcellence*	Infosys*
Accso	Birlasoft*	EPAM Systems*	Innova Solutions
Actemium*	Blackthorn Vision	Eviden (Atos Group)*	ITC Infotech*
adesso	Bosch SDS*	FEV*	Jit Team*
AFRY	Capgemini*	Fortude	Kongsberg IT
Akkodis*	Ciklum	Gart Solutions	KPIT*
All For One	Coforge*	GlobalLogic*	LTIMindtree*
Alten	Cognizant*	Globant	LTTS*
Amantya Technologies	Cyient*	Happiest Minds*	Mastek
AND Digital	DataArt	HARMAN*	MHP
ANODA	DXC Technology	HCLTech*	Microland
Artkai	EDAG*	Hexaware*	Motherson Technology*
AVL	eInfochips*	IAV*	Nagarro
Axiscades	Encora*	Imaginary Cloud	Ness Digital Engineering*

Invited Companies

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* Rated in previous iteration

Netguru	Sigma Software	Valcon
Neurealm	SII Group	Virtusa*
N-iX	Softdel*	VVDN Technologies*
NTT DATA*	SUE	Wipro*
Persistent Systems*	Synoptek	Xoriant*
PlatformEngineers.io	Syntax	Zensar Technologies*
Prodapt	Systema*	Zühlke
Publicis Sapient*	Tata Elxsi*	
Qualitest*	Tata Technologies	
Quest Global*	TCS*	
R Systems	Tech Mahindra*	
Randstad Digital*	ThoughtWorks	
Safran Engineering Services	Tietoevry	
Segula Technologies	Unique Devs	
Siemens Advanta	UST*	

ISG Provider Lens®

The ISG Provider Lens® Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners.
ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens® research, please visit this webpage.

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ISG

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