ISG Provider Lens™

Manufacturing Industry Services and Solutions

A research report comparing provider strengths, challenges and competitive differentiators
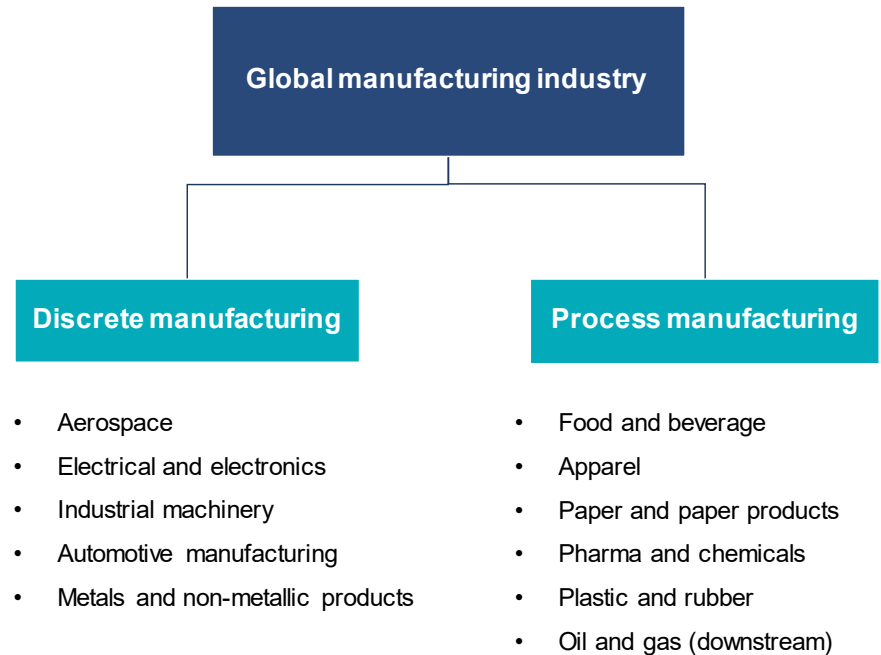
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Manufacturing is experiencing unprecedented change driven by factors such as technological advancements, globalization and sustainability concerns. The industry, which includes various sub-industries, can be divided into discrete (distinct and countable) and process (follows a formula) manufacturing, as shown below:

The manufacturing industry is prioritizing digital transformation, focusing on developing meticulous digital threads to enhance operational efficiency and product quality. This involves linking product information from design through manufacturing to the service lifecycle. Technologies such as digital twins are important for discrete and process manufacturing, enhancing design, optimizing processes and accelerating engineering.

As manufacturing companies pursue digital transformation, product lifecycle management (PLM) will be essential in achieving desired outcomes. PLM supports innovation, the creation of resilient products and supply chains, sustainability practices and the use of data analytics for better decisi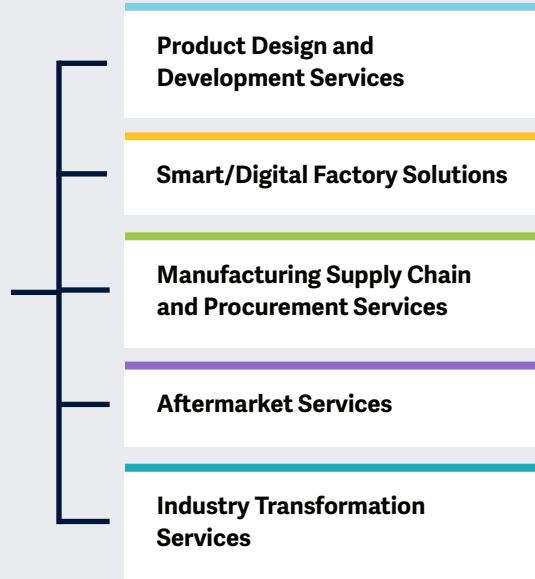on-making. The convergence of IT and OT streamlines asset management, helping organizations address operational issues, minimize downtime and optimize resource utilization.

Sustainability is now a paramount consideration for manufacturing leaders, with environmental, social, and governance (ESG) factors crystallizing as board-level imperatives. Manufacturers must foster collaboration throughout the value chain, pinpointing routine operations where ESG strategies can make a difference.

Global manufacturing industry

Discrete manufacturing

- Aerospace
- Electrical and electronics
- Industrial machinery
- Automotive manufacturing
- Metals and non-metallic products

Process manufacturing

- Food and beverage
- Apparel
- Paper and paper products
- Pharma and chemicals
- Plastic and rubber
- Oil and gas (downstream)

This study highlights key industry challenges and assesses **service provider capabilities** to address the unmet needs of enterprise clients.

Simplified Illustration Source: ISG 2024

Product Design and Development Services

Smart/Digital Factory Solutions

Manufacturing Supply Chain and Procurement Services

Aftermarket Services

Industry Transformation Services

Scope of the report

The ISG Provider Lens™ Manufacturing Industry Services and Solutions 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 North America and Europe

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.

Product Design and Development Services

Definition

This quadrant focuses on solutions that help manufacturing companies with the manufacturing process, design, material identification, determination of operating conditions, quality management and compliance/testing. It elaborates on partnering with OEMs, original design manufacturers (ODMs), semiconductor manufacturers and ISVs to facilitate the design of new products and PoCs. The quadrant also covers PLM, rapid prototyping, adoption of digital twins and software testing.

Product lifecycles are becoming shorter due to changing customer preferences, technological advancements and market demand. These factors require product design and development companies to be more adaptable and responsive in their strategies to accelerate the development cycle. Additionally, there is a need for effective collaboration among stakeholders across design, engineering, manufacturing and production. Companies should consider using digital twins to create virtual models of physical assets, enabling better monitoring, simulation and analysis.

Eligibility Criteria

1. **Ability to support product/service combinations**, develop digital business platforms and enhance capabilities for new product/service/business design and development

2. **Experience in innovating digital value offerings** through design thinking, new product/service strategies and market research

3. **Offerings/services** in areas including, but not limited to:
   - PLM
   - Product strategy
   - Product design
   - CX design (UI/UX, industrial, service and interaction)

   - CRM/product configurator
   - Embedded software
   - Control systems
   - Data management and analytics
   - Cybersecurity
   - Electronic design automation (EDA)
   - Risk and regulatory management
   - Quality management

4. **Support for agile, continuous and rapid development,** CI/CD, and continuous testing unit and integration

5. Expertise in **digital technology**, including digital twins, rapid prototyping, autonomous and continuous testing, and quality management through platforms/solutions/testbeds, PLM, and data- and model-driven engineering

6. **Integration of next-gen technologies**, including automation, analytics, IoT, AI/GenAI, cybersecurity, cloud, AR/VR/MR, additive manufacturing, 3D printing and blockchain

7. **Strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in manufacturing

8. **Referenceable case** studies from key manufacturing industries

Smart/Digital Factory Solutions

Definition

This quadrant focuses on solutions that help manufacturing companies drive their digital transformation journey, including asset management, manufacturing execution systems (MES) and quality management. It also covers solutions that facilitate Industry 4.0 concepts, virtual factories and model plants. These solutions leverage technologies such as 5G, robotics, AI, digital twins, cybersecurity, IoT, computer vision and edge computing to optimize shop floor or factory operations. Smart manufacturing solutions help companies improve efficiency, manage costs, make better and faster decisions, monitor production performance and predict maintenance.

Digital or smart manufacturing solutions help companies implement their strategies from the boardroom to the shop floor. As manufacturing companies navigate challenges such as obsolete networks and infrastructure, disjointed OT and IT layers, data silos, and lack of collaboration between IT and operations, a clear smart manufacturing strategy can streamline shop floor operations.

Eligibility Criteria

1. Ability to **drive stakeholder engagement and analyze data**, leveraging OT and IT expertise

2. **Application of best practices and solutions** in various manufacturing industries

3. Provision of examples that **align supply chain and factory** operations with clients' smart manufacturing initiatives to drive operational agility

4. Offerings/services in areas including, but not limited to:
   - Manufacturing operations management (MOM) systems
   - Fulfillment execution systems
   - Shop floor incident reporting systems
   - Shop floor analytics
   - Predictive maintenance
   - Connected assets
   - Asset performance management
   - Private 5G networks
   - Remaining useful life estimation
   - Failure impact prediction
   - OT cybersecurity services

5. **Integration of next-gen technologies**, including automation, analytics, IoT, AI/GenAI, cybersecurity, cloud, AR/VR/MR, additive manufacturing, 3D printing and blockchain

6. **Strong partnerships** with industry associations, regulatory bodies, technology and OT firms, and startups specializing in manufacturing

7. **Referenceable case studies** from key manufacturing industries

Manufacturing Supply Chain and Procurement Services

Definition

This quadrant focuses on solutions that help companies manage procurement, warehousing, inventory, fulfillment and transportation/logistics. Other solutions may include managing supplier relationships, contracting, and material and order management. These solutions use technologies such as blockchain to expand companies' capabilities. Many manufacturing organizations also increasingly invest in automation, AI/GenAI, intelligent workflows, partner ecosystems and sustainability to optimize supply chain operations.

Supply chain disruptions continue to trouble manufacturers, impacting production and inventory. Manufacturers are increasingly prioritizing automation in supply chain and procurement processes. Additionally, reliability and sustainability have emerged as critical requirements alongside security concerns. The increase in attacks on OT is prompting more discussions around OT security.

Eligibility Criteria

1. Expertise in **providing IT and business strategy and consulting services** to help companies reduce supply chain complexities, either independently or through partners

2. Proficiency in **defining the roadmaps and helping with the design, implementation and maintenance of IT systems**, as well as managing back-office processes

3. **Offerings/services** in areas including, but not limited to:

   - Warehouse management
   - Logistics and transportation management systems

- Purchasing
- Shipping
- Traceability
- Scheduling
- Order management
- Control tower
- Forecasting
- Demand planning
- Materials management
- Third-party risk management
- Supply chain and procurement optimization
- Supply chain segmentation
- Supply chain planning and BPO

- Sustainability solutions in procurement and supply chain

4. **Integration of next-gen technologies**, including automation, analytics, IoT, AI/GenAI, cybersecurity, cloud, AR/VR/MR and blockchain

5. **Strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in manufacturing

6. **Referenceable case studies** from key manufacturing industries

Aftermarket Services

Definition

This quadrant includes solutions and services that help manufacturers offer a wide range of offerings beyond finished goods, whether standalone or bundled. These offerings include spare parts, software, field operations, end-of-life services, and warranty and guarantee services. The solutions also focus on digitalizing various aftermarket activities by leveraging AI and RPA, helping companies maintain the feedback loop for product enhancements.

With rapid technological advancements, the manufacturing industry is experiencing the rise of new business models, such as service lifecycle management and subscription services.

Manufacturing companies need to optimize the use of AI and ML to enhance personalized customer services, improve decision-making and drive end-to-end digitalization, thereby augmenting user and customer experiences across online and mobile channels.

Eligibility Criteria

1. Provision of examples of **work with various manufacturing industries** to design aftermarket solutions

2. Ability to **define key metrics that help companies** align with business outcomes

3. **Offerings/services** in areas including, but not limited to:

   - Controls management

   - Warranty management

   - Analytics and reporting

   - Field management services

   - Inventory optimization

   - Spare parts and sales network optimization

   - Pricing management

   - Contract management

   - CX/UX

   - Service information systems

   - Remote troubleshooting tools

   - PLM services

   - Reverse logistics

4. **Expertise in applying next-gen technologies**, including automation, analytics, IoT, AI/GenAI, cybersecurity, cloud, AR/VR/MR, 3D printing and blockchain

5. **Ability to demonstrate strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in manufacturing

6. **Referenceable case studies** from key manufacturing industries

Industry Transformation Services

Definition

Manufacturing companies must modernize and transform their IT infrastructure to streamline operations, improve efficiency and support business transformation initiatives. Business transformation efforts in asset-heavy manufacturing industries are mainly driven by improving efficiency and productivity, enhancing customer experience, accelerating innovation, gaining competitive advantages, and achieving cost savings and sustainability goals.

Companies aim to achieve transformation by simplifying and reengineering processes, utilizing automation and AI, and exploring options such as ITO and BPO. They also reorganize IT operating models to meet changing business demands, such as leveraging global capability centers (GCCs). Manufacturers strive to improve revenues, optimize costs, achieve operational excellence and enhance business process efficiency through extensive reengineering and automation across business processes. This includes adopting digital tools and methodologies that align with their strategic objectives.

Eligibility Criteria

1. Provision of examples of **work with various manufacturing industries** to develop a highly integrated model for driving transformation through broad-based solutions

2. Ability to drive initiatives around **business and operations strategy, change management and end-to-end transformation**

3. Ability to **reorganize IT operating models** to align with changing business demand (GCCs/nearshoring/offshoring, agility and more)

4. **Offerings/services** in areas including, but not limited to:

   • Digital strategy development

   • IIoT

   • Big data analytics

   • Infrastructure and cloud (multicloud and hybrid cloud)

   • Cybersecurity (SOCs and SIEM)

   • Service management

   • Vendor management

   • New-age ERP systems

   • Sustainability reporting

   • Cost optimization

   • Mobility solutions

   • Workforce enablement

   • Digital technology integration

   • Digitization/digitalization

   • Workplace of the future

5. **Expertise in next-gen technologies**, including automation, analytics, IoT, AI/GenAI, cybersecurity, cloud, AR/VR/MR, 3D printing and blockchain

6. **Strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in manufacturing

7. **Referenceable case studies** from key manufacturing industries

Key characteristics of the proprietary framework:

- Encapsulates what enterprises are doing across the Manufacturing industry 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 an ISG Software Research will produce a Buyers Guide in 2025

Quadrants by Region

As a part of this ISG Provider Lens™ quadrant study, we are introducing the following five quadrants on Manufacturing Industry Services and Solutions 2024:

Quadrant	Europe	North America
Product Design and Development Services	✔	✔
Smart/Digital Factory Solutions	✔	✔
Manufacturing Supply Chain and Procurement Services	✔	✔
Aftermarket Services	✔	✔
Industry Transformation Services	✔	✔

Schedule

The research phase falls in the period between July and August 2024, during which survey, evaluation, analysis and validation will take place. The results will be presented to the media in December 2024.

Milestones	Beginning	End
Survey Launch	July 9, 2024	
Survey Phase	July 10, 2024	August 12, 2024
Sneak Previews	November 11, 2024	
Press Release & Publication	December 2024	

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™ 2024 research agenda.

Access to Online Portal

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

Research Production Disclaimer:

ISG collects data for the purposes of writing 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 concept of "Voice of the Customer." The Star of Excellence™ is a program, designed by ISG, 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 will be 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 context of 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.

It is our vision that the Star of Excellence™ will be recognized 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 Client nomination 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:
ISG.star@isg-one.com

ISG Star of Excellence

Methodology & Team

The ISG Provider Lens 2024 – Manufacturing Industry Services and Solutions research study analyzes the relevant software service providers in the Europe and North America market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

Study Sponsor:
Iain Fisher

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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 services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of July 2024, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

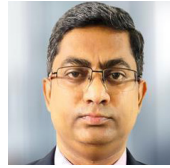All revenue references are in U.S. dollars ($US) unless noted.

Contacts For This Study

Study Sponsor

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Director

Swadhin Pradhan
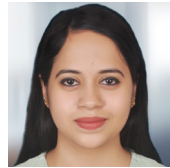Assistant Director and Principal Analyst – North America

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Manager and Principal Analyst – Europe

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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 advisors participate as part of each study's quality and consistency review team (QCRT). The QCRT ensures 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 QCRT group and contribute at different levels depending on their availability and expertise.

The QCRT 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.

ISG Advisors to this study

Dorotea Baljevic

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**Director, Manufacturing
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Ravichandran

Consulting Manager

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*	CIMData	EXL Service	Inspirage
AFRY	CMIT Solutions	EY	Intellias
Akkodis	CMS IT Services	FORCAM*	Intelizign
All For One	Coforge	Fujitsu	ITC Infotech*
Allied Digital*	Cognisys	Genpact*	KPIT
ALTEN	Cognizant*	Globant	KPMG
amplimind	Computacenter*	Happiest Minds	Kyndryl*
Belcan	Cyient*	HARMAN DTS*	LatentView
Bertrandt	Datamatics Global Services	HCLTech*	LeverX
BIP Group	Deloitte	Hexaware*	LTIMindtree*
Birlasoft*	DXC	Hitachi Digital Services*	LTTS*
BlueBinaries	EDAG	IBM*	Mastek
Capgemini*	eInfochips*	Infogain	Meriplex
CGI	EPAM	Infosys*	Metafyre
Cigniti	Eviden/Atos*	Innova Solutions	Motherson Technology Services*

Invited Companies

Movate

Mphasis

NEC

Ness

NOYNIM IT Solutions

Ntiva

NTT DATA*

Orange Business Services

Perficient*

Persistent Systems

Prescient Solutions

Publicis Sapient

PwC

Qualitest

Quest Global*

Randstad

Rockwell

Sasken

SII

Softtek

Sonata Software

Sopra Steria

Stefanini

Synoptek

TCS*

Tech Mahindra *

Tietoevry

T-Systems

UST*

Virtusa

Wipro*

WNS

Zensar Technologies*

About Our Company & Research

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, while 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.

iSG Research™

ISG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. ISG Research™ delivers guidance that helps businesses accelerate growth and create more value.

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iSG

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Founded in 2006, and based in Stamford, Conn., ISG employs 1,600 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data.

For more information, visit isg-one.com.

ISG Provider Lens™

JULY, 2024

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REPORT: MANUFACTURING INDUSTRY SERVICES AND SOLUTIONS