Manufacturing Industry Services and Solutions

A research report comparing provider strengths, challenges and competitive differentiators
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The manufacturing industry has undergone a dramatic transformation over the years and more so recently. The industry, which includes various other sub-industries, can be broken down primarily into discrete (distinct and countable) and process (follows a formula) as shown on the right.

Rising inflation, regional conflicts, supply chain issues and talent management (attracting and retaining employees) are some pressing issues the industry faces. Thus, companies increasingly embrace digital transformation initiatives, particularly in smart manufacturing, supply chain and aftermarket services. A recent ISG study on smart manufacturing reveals that productivity improvements, cost savings and supply chain resilience are the biggest motivators for smart manufacturing initiatives. Modern manufacturing firms also need a well-defined aftermarket sales and service strategy to drive CX and operational efficiency by integrating aftermarket offerings into core business processes.

Several manufacturing companies continue to make technology investments in AI, AR/VR, cloud, digital twin, blockchain and so forth to reshape key operations and business processes. With a surge in supply chain issues in the post-COVID-19 scenario, companies have also begun shifting their manufacturing base closer to home (nearshoring and reshoring) to drive competitive advantages and reduce and mitigate supply chain issues.

For 2023 and beyond, the global manufacturing industry emphasizes sustainability and net zero as key focus areas. Manufacturers are also increasingly challenged by their stakeholders and consumers to adopt more sustainable and environment-friendly manufacturing practices across their value chain.
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 the 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 the information from these reports to evaluate their current vendor relationships and potential engagements.
Agile Product Development and Design Services

Definition

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

Eligibility Criteria

1. Ability to support product/service combinations, digital business platform development strategy, and new product/service/business design and development capabilities

2. Proven experience in ideation, innovation and engineering of digital value offerings through design thinking capabilities and market feedback/research

3. Ability to provide offerings and services in at least one or more of the following areas, but not limited to:
   - PLM
   - Product strategy
   - Product design
   - CX design
   - CRM/product configurator
   - Embedded software development
   - Control systems
   - Data management and analytics
   - Cybersecurity
   - Electronic Design Automation (EDA)
   - Risk and regulatory management

4. Ability to support agile, continuous and rapid development, CI/CD, and continuous testing unit and integration processes

5. Ability to demonstrate digital technology and capabilities, covering new products, services and experience design using digital twins, rapid prototyping, autonomous and continuous testing, and quality management through platforms/solutions/testbeds, PLM, and data and model-driven engineering

6. Expertise in applying next-generation technologies, including automation, analytics, IoT, AI, cybersecurity, cloud, AR/VR/MR additive manufacturing, 3D printing, and blockchain

7. Potential to demonstrate strong partnerships with industry associations, regulatory bodies, technology firms and startups specializing in the manufacturing industry

8. Capability to offer referenceable case studies from key manufacturing industries served
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 includes solutions facilitating ideas and concepts of Industry 4.0, virtual factories and model plants. These solutions embrace technologies such as 5G, robots, AI, digital twins, cybersecurity, IoT, computer vision and edge to facilitate 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.

With a growing focus on sustainability and energy management, manufacturing companies are increasingly looking for solution partners to manage energy efficiency and costs.

Eligibility Criteria
1. Ability to drive stakeholder engagement and analyze data, leveraging deep OT and IT expertise
2. Ability to apply best practices and solutions from various manufacturing industries
3. Provision of examples that align supply chain and factory operations with clients’ smart manufacturing initiatives to drive operational agility
4. Ability to provide offerings and services in at least one or more of the following areas, but not limited to:
   - 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
5. Expertise in applying next-generation technologies, including automation, analytics, IoT, AI, cybersecurity, cloud, AR/VR/MR, additive manufacturing, 3D printing and blockchain
6. Potential to demonstrate strong partnerships with industry associations, regulatory bodies, technology and OT firms, and startups specializing in the manufacturing industry
7. Capability to offer referenceable case studies from key manufacturing industries served
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, material and order management. These solutions use technologies such as blockchain to expand the companies' capabilities. Several manufacturing organizations also increasingly invest in automation, AI and intelligent workflows, ecosystems and sustainability to optimize supply chain operations.

Eligibility Criteria
1. Proven expertise in providing leading ERP and supply chain management (SCM) packages
2. Ability to provide IT and business strategy and consulting services to help companies reduce supply chain complexities either on their own or through partners
3. Ability to define the roadmap and help in the design, implementation and maintenance of IT systems and manage back-office processes
4. Ability to provide offerings and services in at least one or more of the following areas, but not limited to:
   - Warehouse management
   - Logistics and transportation management systems
   - Purchasing
   - Shipping
   - Traceability
   - Scheduling
   - Order management
5. Sustainability solutions in procurement and supply chain
6. Expertise in applying next-generation technologies, including automation, analytics, IoT, AI, cybersecurity, cloud, AR/VR/MR and blockchain
7. Potential to demonstrate strong partnerships with industry associations, regulatory bodies, technology firms and startups specializing in the manufacturing industry
8. Capability to offer referenceable case studies from key manufacturing industries served
Definition

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

With rapid technological strides, the manufacturing industry is witnessing the rise of new business models, such as service lifecycle management and subscription services. This would require providers with specific capabilities to help companies change their approach and drive sophistication, facilitating a smooth adoption of various technologies.

Eligibility Criteria

1. Provision of examples of working with various manufacturing industries to design aftermarket solutions and offerings
2. Ability to define key metrics for companies to help them align with business outcomes
3. Ability to provide offerings and services in at least one or more of the following areas, 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
4. Reverse logistics
5. Expertise in applying next-generation technologies, including automation, analytics, IoT, AI, cybersecurity, cloud, AR/VR/MR, 3D printing and blockchain
6. Potential to demonstrate strong partnerships with industry associations, regulatory bodies, technology firms and startups specializing in the manufacturing industry
7. Capability to offer referenceable case studies from key manufacturing industries served
As a part of this ISG Provider Lens™ quadrant study, we are introducing the following four quadrants on Manufacturing Industry Services and Solutions 2023:

<table>
<thead>
<tr>
<th>Quadrant</th>
<th>North America</th>
<th>Europe</th>
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<tr>
<td>Agile Product Development and Design Services</td>
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<td>Digital Factory/Manufacturing Solutions</td>
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<td>Manufacturing Supply Chain and Procurement Services</td>
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<td>Aftermarket Services</td>
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The research phase falls in June and August 2023, when survey, evaluation, analysis and validation will take place. The results will be presented to the media in November 2023.

## Milestones

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<th>Milestone</th>
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<td>Survey Launch</td>
<td>June 07, 2023</td>
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<td>Survey Phase</td>
<td>June 08, 2023</td>
<td>July 08, 2023</td>
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<td>Sneak Previews</td>
<td>September 2023</td>
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<td>Press Release &amp; Publication</td>
<td>November 2023</td>
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Please refer to the link to view/download the ISG Provider Lens™ 2023 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
Contacts For This Study

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Varsha Sengar
Senior Research Analyst – North America & Europe

Swadhin Pradhan
Lead Analyst – North America & Europe

Greeshma A C
Project Manager
Advisor Involvement - Program Description

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

- Gaurav Gupta
  Partner & Global Head, Digital Engineering
- Matteo Gallina
  Digital Engineering Solutions Lead, Americas
- John Lytle
  Director, Manufacturing Industry Lead
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.

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Perficient  
Persistent  
Prolifcs  
Publicis Sapient  
PwC  
Quest Global  
R Systems  
Sasken  
Shift5  
Sonata Software  
Sopra Steria  
Synoptek  
SYSTEMA  
Tata Technologies  
TCS  

Tech Mahindra  
Tietoevery  
T-Systems  
Unisys  
UST  
Virtusa  
VOLANSYS  
Vysus Group  
Wipro  
YASH Technologies  
Zensar
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™ 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.

ISG offers research specifically about providers to state and local governments (including counties, cities) as well as higher education institutions. Visit: Public Sector.

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Founded in 2006, and based in Stamford, Conn., ISG employs more than 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.