

Chemical Industry Services and Solutions

A research report comparing provider strengths, challenges and competitive differentiators



Introduction	3	Contacts for this Study	12
About the Study		Advisor Involvement	
Quadrants Research	5	Advisor Involvement - Program	
Definition	6	Description	13
Quadrants by Regions	9	Advisory Team	13
Schedule	10	Invited Companies	14
Client Feedback Nominations	11	About our Company & Research	15

Introduction

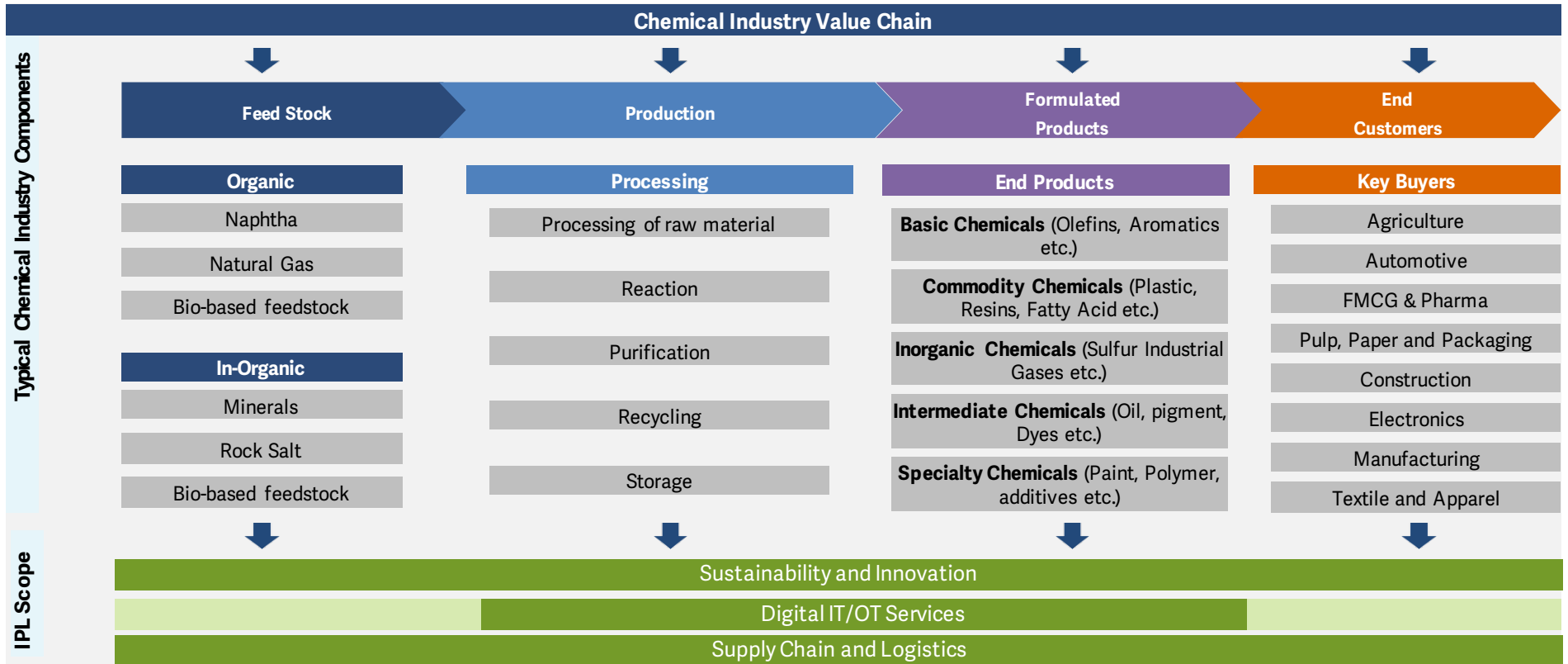
The chemical industry encompasses the transformation of various raw materials into a diverse array of products. The industry is complex and vital to the economies worldwide. The global chemical industry is amid a challenging year as geopolitical tensions, commodity price fluctuations and overall demand and supply issues plague the entire industry value chain. The industry also faces challenges around energy transition, carbon reduction, adoption of new technologies and changes pertaining to key end customer industries such as automotive, where the shift to electric vehicles (EV) is significant.

The chemical industry faces high feedstock and energy costs in Europe and increased competition from low-cost producers in the U.S., Middle East and China. In the U.S., demand for chemicals started declining from the start of 2022 and chemical sector output is expected to fall by 1.6 percent in 2023. Production costs may decrease because of low energy prices. The U.S. Energy Information Administration (EIA) forecasts the Henry Hub spot price to average around \$3.20 per metric million British thermal units (MMBtu) in November 2023, down from

almost \$5.50 per MMBtu a year earlier. Demand is expected to be positive from key industries such as automotive, energy and electronics.

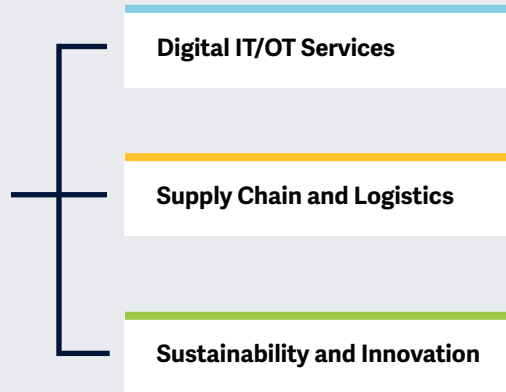
Automation, new technologies around cloud and analytics, and AI influence the overall production processes and drive the production and development of new materials while helping chemical companies reduce emissions. Producers increasingly use digital technologies to develop new and sustainable materials, reevaluate supply chain structures, analyze portfolio rationalization and optimize processes. New technologies such as blockchain, quantum computing and high-performance computing (HPC) also impact digitization in the industry.





Key focus areas for **Chemical Industry – Services and Solutions 2024**

Simplified Illustration Source: 2023



Scope of the report

The ISG Provider Lens™ Chemical Industry — Services and Solutions 2024 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.



Definition

Around half of the chemical industry adopted digital transformation by the end of 2022, and more than 60 percent of the companies undertaking digital transformation claim to generate positive returns. Investing in digital transformation is crucial for the chemical industry to decrease manufacturing inefficiencies. Besides improving operational efficiency, such transformation aids companies in achieving various goals, including enhancing workplace safety, meeting sustainability targets and addressing labor shortages.

This quadrant assesses service providers offering chemical industry clients technology and operations management services that are driven by automation, digital transformation, AI, cloud, data management, asset optimization, asset management analytics, IT/OT integration, ERP services and solutions and infrastructure services (data center, cloud, network, workplace and cybersecurity). These services enable chemical industry companies to improve efficiency and productivity in daily operations and enhance decision-making.

Eligibility Criteria

1. Ability to **offer a combination (if not all) of the following operational IT and business services** to companies across the chemical industry value chain, with local expertise in the assessed region or country:
 - Digital transformation advisory and consulting services
 - Applications development and maintenance
 - Infrastructure services, such as data centers, network operations centers, cloud and cybersecurity solutions
 - ERP-related services
 - IT/OT services
2. Showcase **extensive domain or industry knowledge** and support for compliance with local or regional regulatory requirements
3. **Expertise in applying the latest technologies**, including automation, analytics, IoT, AI, cybersecurity, cloud, AR, VR, mixed reality (MR) and extended or immersive reality, additive manufacturing and blockchain
 - Plant asset management and operation services
 - Predictive and prescriptive maintenance
 - Cybersecurity (IT and OT security)
 - Cloud and data analytics
4. **Demonstrate strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in the chemical industry
5. Offer **referenceable chemical industry case studies** for various services and solutions across the value chain.



Definition

The chemical supply chain has undergone significant changes in recent years, primarily driven by inadequate risk management and a lack of resilience in global supply chains. Chemical producers have invested significant time and resources in supply chain initiatives. However, there is considerable room for improvement, owing to the industry's legacy infrastructure, growing market and increasing product complexity.

This quadrant focuses on solutions that help companies manage functions such as procurement, warehousing, inventory, fulfillment, transportation and logistics. Supply chain and logistics operations services emphasize helping chemical industry clients achieve resilient, adaptive, connected, data-driven and sustainable supply chains and logistics to mitigate global disruptions and instability. Transforming supply chain and logistics operations will transform businesses, reduce operational costs and increase service levels.

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** to design, implement and maintain 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. Expertise in **applying next-generation technologies**, including automation, analytics, IoT, AI, cybersecurity, cloud, AR, VR, mixed reality (MR) and blockchain
 6. Potential to **demonstrate strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in the chemical industry
 7. Capability to **offer referenceable case studies** from chemical and related industries
- Control tower
 - Forecasting
 - Demand planning
 - Materials management
 - Third-party risk management
 - Supply chain optimization
 - Supply chain segmentation
 - Supply chain planning and BPO
 - Sustainability solutions in the supply chain



Definition

One of the biggest challenges facing the chemical industry is reducing its environmental impact. Chemical production processes generate large amounts of waste and consume significant amounts of energy, contributing to carbon emissions. The industry also faces a challenge to ensure the safety of workers and local communities. On the innovation front, the industry requires intensive research on a day-to-day basis to create value in the dynamic environment. The traditional methodology for innovation in the chemical industry requires digital transformation and agility. The innovation approach needs the advances in digital and materials science technology, collaborating with ecosystem partners and focusing on business model transformation.

This quadrant will focus on providers who help chemical industry players from strategy to execution, tackling sustainability and innovation challenges and delivering value that can bring competitive advantage at scale. It focuses on how the providers are helping in developing and managing sustainability strategy and

value chain, net zero transitions, reporting and analytics, worker safety, R&D, lab management and data management.

Eligibility Criteria

1. Ability to **offer a combination (if not all) of the following sustainability and innovations** to companies across the chemical industry value chain, with local expertise in the assessed region or country:
 - Sustainability strategy and planning
 - Implementation of green chemistry
 - Worker safety and monitoring
 - Connected or digital labs
 - Chemistry as a service
 - Data management and reporting
 - Circular ecosystem
 - Sustainable procurement
2. Showcase **extensive domain knowledge** and support for local or regional regulatory requirements compliance
3. **Demonstrate strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in the chemical industry
4. Offer **referenceable chemical industry case studies** for various services and solutions across the value chain.



Quadrants by Region

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

Quadrant	North America	Europe
Digital IT/OT Services	✓	✓
Supply Chain and Logistics	✓	✓
Sustainability and Innovation	✓	✓



The research phase falls in the period between November 2023 and January 2024, during which survey, evaluation, analysis and validation will take place. The results will be presented to the media in May 2024.

Milestones

	Beginning	End
Survey Launch	November 29, 2023	
Survey Phase	November 29, 2023	December 22, 2023
Sneak Previews	March 2024	April 2024
Press Release & Publication	May 2024	

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

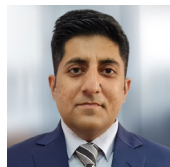


Contacts For This Study



Swadhin
Pradhan

**Lead Analyst —
North America**



Mohd Aves
Malik

**Lead Analyst —
Europe**



Varsha
Sengar

**Senior Research
Analyst — North America
and Europe**



Laxmi Sahebrao
Kadve

**Data Analyst — North
America and Europe**



Sonam
Khanna

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



Brad
Thompson

Partner — Energy & Utilities, US



Dale
Hearn

Partner — Energy & Utilities, US



John
Christner

Director, US



Ola
Chowning

Partner, North Europe



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.

ABS Group	Deloitte	LeverX	Tech Mahindra
Accenture	DXC Technology	LTIMindtree	T-Systems
Akkodis	Evoke Technologies	LTTS	UNITY
All for One	EY	Merino	valantic
Arvato Systems	Fujitsu	Nagarro	Wipro
Asseco	Genpact	NTT DATA	YASH Technologies
Atos	HCLTech	Perficient	Zensar
BCG	Hitachi Digital Services	Persistent Systems	
BearingPoint	IBM	Prolifics UK	
Birlasoft	Infosys	PwC	
Capgemini	Ingenics	SGS Maine Pointe	
Coforge	Intellias	Sopra Steria	
Cognizant	lternal Technologies	Stork	
Computacenter	KPMG	Synoptek	
Cyient	Kyndryl	TCS	



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.

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

For more information about iSG Research™ subscriptions, please email contact@isg-one.com, call +1.203.454.3900, or visit research.isg-one.com.

iSG

iSG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 900 clients, including more than 75 of the world's top 100 enterprises, iSG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis.

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.





NOVEMBER, 2023

BROCHURE: CHEMICAL INDUSTRY SERVICES AND SOLUTIONS