

Chemical Industry Services and Solutions

Digital IT/OT Services

A research report comparing provider strengths,
challenges and competitive differentiators

QUADRANT REPORT | MARCH 2024 | NORTH AMERICA

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Executive Summary

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The chemical industry is undergoing a major shift in the usage of technologies to counter growing challenges

The chemical industry encompasses the transformation of various raw materials into a diverse array of products. Chemical products are used in almost all branches of industry and are highly crucial in a few, such as pharmaceutical and automotive. The chemical industry is complex and vital to the economies worldwide. The global chemical industry is amid a challenging year as geopolitical volatility, commodity price fluctuations and overall demand and supply chain issues plague the entire value chain.

Chemical companies face high feedstock and energy costs in Europe and increased competition from lower-cost producers in the U.S. However, the overall production costs in the U.S. may decrease because of falling energy prices. Demand is expected to be positive from

key industries such as automotive, energy and electronics.

Chemical companies also face challenges around energy transition, carbon reduction, adopting new technologies and changes pertaining to the key end customer industries such as automotive, where the shift to electric vehicles (EV) is significant. Manufacturing operations in the chemical industry are asset-intensive and bound by regulations. However, the assets are aging, and the products produced are complex and demand better process control. While IT/OT/IIoT technologies are advancing, securing these legacy assets is a major challenge because of the cost and complexity. Advanced analytics and digital twin implementations need a lot of groundwork. The TCO also deters customers from pursuing this journey at scale. Cybersecurity risks at all levels have increased dramatically as well.

Recently, customer experience has become a key focus area for chemical companies looking to serve end customers directly, and improving CX requires the support of a resilient and responsive supply chain.

Adopting AI, cloud and data analytics technologies can drive innovation in process and materials



Executive Summary

This presents a slew of challenges when chemical companies are building applications or implementing solutions. Change management remains an issue when transitioning to new working methods. This landscape makes it difficult for chemical companies to choose the right solution and find system integrators with implementation experience, long-term support and other capabilities.

Automation, new cloud and analytics technologies and AI influence overall production processes and drive new materials production and development. Producers increasingly use digital technologies to develop new and sustainable materials, reevaluate supply chain structures, analyze portfolio rationalization and optimize processes. Stakeholders and consumers increasingly challenge manufacturers to adopt more sustainable and environment-friendly manufacturing practices across their value chain.

Chemical companies continue to look at technology investments in AI, AR, VR, cloud, digital twin, blockchain and others to reshape key operations and business processes. New technologies such as blockchain, quantum computing and high-performance computing (HPC) also impact digitalization in the industry in areas such as product innovation. However, data management remains a crucial challenge for chemical companies, particularly in R&D, which requires identifying relevant data among large volumes for quality research and ensuring that it can be used meaningfully. Mergers, acquisitions and divestitures also continue to create disparate or disjointed IT landscapes, and organizations must spend time and effort aligning them.

ISG notes the following trends in the global chemical industry for 2024:

Increasing infusion of AI into solutions:

Chemical companies and IT service providers are working across key areas to gain operational

benefits by implementing AI. Lately, GenAI, though at an early stage, has been gaining prominence in areas such as CX, supply chain, R&D and sustainability. While most solutions are at the PoC stage, the potential to scale is immense. AI can help chemical companies predict potential supply chain threats, thus allowing them to make required changes, resolve environment-related issues and prevent future disruptions. With connected operations powered by AI and ML, further facilitated by cloud and 5G networks to move information to the edge, today's chemical plants will likely be transformed into future plants, revolutionizing the ecosystem.

Aging workforce and talent shortage: Like most asset- and energy-intensive industries such as oil and gas and power and utilities, the chemical industry faces an aging workforce and knowledge retention challenges. The median worker age for the chemical industry, per the U.S. Bureau of Labor Statistics, is approximately 44 years, higher than the national average of

42 years. The industry also faces a worker skills shortage in digital and new-age technologies such as AI and ML. Chemical companies in the U.S. may also face disruptions and issues around safety and costs in operations because of the workforce shortage.

Growing cybersecurity threats: The chemical industry faces a wide range of cyber risks as digitalization becomes mainstream. The increasing integration of IT/OT has led to increased data and information security vulnerabilities. Issues with higher cybersecurity risk for the industry include supply chain attacks, increased connectivity and disruptive digital technology, the IoT, malware and ransomware.

Raw material or feedstock price volatility: Due to rising costs and supply chain disruptions because of geopolitical situations, key supply and demand centers are pressing the need for digital technologies to hedge prices and control volatility. In industries such as paints



and coatings, companies are facing cost pressure from increased raw material prices. Chemical companies are also facing operational challenges due to fluctuating commodity prices, logistics and shipping costs and volatility in feedstock prices. Therefore, companies must invest in a trusted supply chain, strong market intelligence and digitalized inventory and order management to overcome the abovementioned challenges.

Tightening industry regulations across geographies: Chemical companies are overwhelmed by increasing scrutiny and rising compliance needs resulting from international standards and frameworks. The companies are looking to dedicate significant resources to reporting and need better and faster analytics to drive decision-making. Environmental, social and governance (ESG) influence is a global phenomenon, and organizations must comply with local laws and global mandates. Managing economies of scale and being carbon neutral is equally crucial but costly.

Sustainability and ESG reporting: Increasing government and investor pressures have forced companies to consider sustainability across the chemical value chain. Global financial institutions and banks want to see their portfolios aligned with chemical organizations that take their sustainability and ESG goals seriously. Moreover, as energy efficiency, circular economy, smart manufacturing technologies and optimization of plant design and operations become critical, integration with sustainability and environment goals is fast becoming the need of the hour. Enterprises are increasingly investing in tracking Scope 1 and Scope 2 emissions necessary to decarbonize their internal value chain. Scope 3 emissions (from the value chain) are the most significant chunk of overall emissions. The emissions from activities outside organizational control can be complex to measure and manage. Companies can reduce their carbon footprint by focusing on the right energy mix.

Challenges in supply chain optimization and logistics: Lack of standardized methodologies and frameworks and the limited influence of suppliers are key challenges. The chemical industry should integrate operations using big data analytics into supply chain management (SCM) to address them. Other challenges include the lack of visibility, process complexity and unpredictability of demand and supply. As a result, the chemical sector should prioritize continuous improvement in technological advancements. Managing logistics is another significant concern due to geopolitical volatility and regulation uncertainties. This was particularly evident with increased delivery difficulties due to the COVID-19 pandemic. Therefore, a well-functioning chemical logistics system is a priority for suppliers, manufacturers and customers. Cybersecurity and sustainability are other challenges that providers assist companies with, as supply chain vulnerabilities can lead to a cyberattack, disrupting warehouse and manufacturing operations and sites.

Green chemistry and circular economy: Chemical companies constantly try to replace traditional processes with optimal alternatives that minimize waste, water usage, emissions, energy consumption and environmental impact. They increasingly focus on recycling and upcycling materials to manage waste. The R&D function is open to leveraging new digital interventions such as cloud, AI, ML and IoT to improve its working process.

Legacy systems and lack of integration: Most industries, such as chemical, don't have the infrastructure to adopt new technologies. The chemical industry is competitive and requires large data and IT infrastructures that increase the CapEx for legacy systems modernization and achieve IT/OT integration. Legacy systems are not yet set up to report the specific metrics needed for ESG analysis and reporting. Converting these systems, adding new sensors, managing disparate data streams and homogenizing data into coherent analytics pose a significant challenge for all enterprises, especially those with high emissions, high risk and direct material usage.



Executive Summary

The high cost of acquiring new technology into the organization and increasing user adoption among the chemical value chain stakeholders is a constant challenge. Companies have moved from IT/OT to IT-OT-Engineering Technology (ET) convergence, creating the need for engineering capabilities to drive factory automation. As manufacturing companies such as chemical producers drive digital transformation initiatives, product lifecycle management (PLM) and digital twins are becoming important for discrete and process manufacturing companies to enable better designs, optimize processes and accelerate engineering.

Challenges around supply chain, ESG reporting, R&D, price volatility and feedstock availability are forcing chemical companies to adopt modern practices and technologies. Although digital twin, additive manufacturing, AI and ML, and HPC developments are leading to a more robust industry, challenges around new business models, talent and skills remain.





Provider Positioning

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	Digital IT/OT Services	Supply Chain and Logistics	Sustainability and Innovation
Accenture	Leader	Leader	Leader
Atos	Contender	Not In	Not In
Capgemini	Leader	Leader	Leader
CGI	Contender	Contender	Contender
Cognizant	Product Challenger	Product Challenger	Product Challenger
Deloitte	Leader	Leader	Leader
DXC Technology	Product Challenger	Product Challenger	Product Challenger
EY	Product Challenger	Product Challenger	Leader
Fujitsu	Product Challenger	Product Challenger	Product Challenger
Genpact	Product Challenger	Rising Star ★	Product Challenger





Provider Positioning

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	Digital IT/OT Services	Supply Chain and Logistics	Sustainability and Innovation
HCLTech	Leader	Leader	Leader
Hitachi Digital Services	Product Challenger	Contender	Contender
IBM	Leader	Leader	Leader
Infosys	Leader	Leader	Leader
KPMG	Contender	Market Challenger	Market Challenger
Kyndryl	Rising Star ★	Product Challenger	Product Challenger
LTIMindtree	Product Challenger	Product Challenger	Product Challenger
NTT DATA	Product Challenger	Product Challenger	Product Challenger
PwC	Leader	Leader	Leader
TCS	Leader	Leader	Leader





	Digital IT/OT Services	Supply Chain and Logistics	Sustainability and Innovation
Tech Mahindra	Product Challenger	Product Challenger	Rising Star ★
Wipro	Leader	Leader	Leader
YASH Technologies	Contender	Contender	Contender



Understand
key industry
challenges
and **assess**
service provider
capabilities to
address the
unmet needs of
enterprise clients.



Simplified Illustration Source: ISG 2024

Definition

The ISG Provider Lens™ Chemical 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 the information from these reports to evaluate their current vendor relationships and potential engagements.



Scope of the Report

In this ISG Provider Lens™ quadrant report, ISG covers the following three quadrants for services/solutions: Digital IT/OT Services, Supply Chain and Logistics, Sustainability and Innovation.

This ISG Provider Lens™ study offers IT-decision makers:

- Transparency on the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments
- Focus on Global market

This ISG Provider Lens™ study offers IT-decision makers: Our study serves as the basis for important decision-making in terms of positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their existing provider.

Provider Classifications

The provider position reflects the suitability of providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the service requirements from enterprise customers differ and the spectrum of providers operating in the local market is sufficiently wide, a further differentiation of the providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between \$20 million and \$999 million with central headquarters in the respective country, usually privately owned.

- **Large Accounts:** Multinational companies with more than 5,000 employees or revenue above \$1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

- **Number of providers in each quadrant:** ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).





Provider Classifications: Quadrant Key

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/ services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not in means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.





Digital IT/OT Services

Digital IT/OT Services

Who Should Read This Section

This quadrant is relevant to chemical enterprises in North America evaluating digital IT/OT service providers.

In this quadrant, ISG highlights the current market positioning of digital IT/OT service providers in North America and how they address the key challenges faced by enterprises in the region.

North America is witnessing significant development in IT/OT solutions and services as chemical companies are transforming themselves into smart digital enterprises to improve efficiency and productivity. The chemical industry is increasingly moving toward value-based business models, which has resulted in enterprises focusing on enhancing their operational capabilities and significantly evaluating future business models by leveraging advanced AI, IoT, cloud and data analytics technologies. There has also been an increased focus among enterprises to deploy integrated IT/OT systems and build robust cybersecurity components.

Enterprises are looking for service providers to help them in shaping the digital landscape along the chemical value chain. They are focusing on achieving robust business continuity and operational excellence with the desired cost benefits.

Service providers in North America are working toward solidifying their domain or industry knowledge and localized expertise. They are also investing in implementing cloud-based solutions to streamline distributed asset management for clients to strengthen their relevance and drive accelerated value creation.



Digital leaders such as CDIO (chief digital and information officer) should read this report to understand how next-gen IT/OT solutions providers would fit their digital transformation initiatives within the chemical ecosystem.

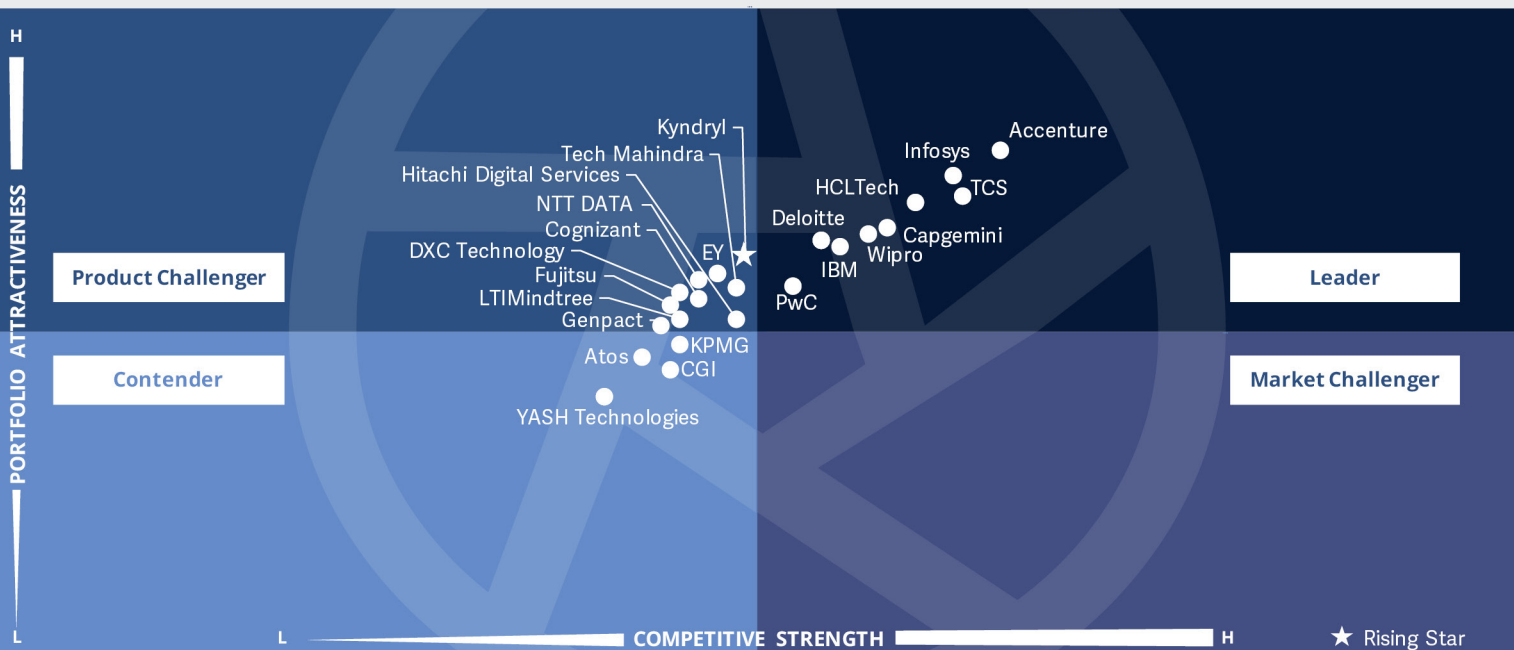


Technology leaders such as CIOs and CTOs should read this report to focus on building and developing industry-ready solutions by leveraging GenAI and industry cloud.



Strategy leaders such as the chief strategy officer should read this report to understand how next-gen IT/OT solutions across the chemical value chain affect enterprises' existing use of legacy systems.





The quadrant assesses providers offering services to assist chemical companies in **digital transformation, streamlining IT/OT operations** and encompassing offerings such as asset management, ERP and process and quality management solutions.

Swadhin Pradhan

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

- * Plant asset management and operation services
- * Predictive and prescriptive maintenance
- * Cybersecurity (IT and OT security)
- * Cloud and data analytics

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

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.



Observations

The competitive nature of the chemical industry necessitates the requirement for companies to maintain a large data and IT infrastructure, which may lead to high spending on legacy systems modernization to achieve IT/OT integration. To drive digital transformation efforts, chemical companies work closely with IT/OT partners. They also focus on improving energy efficiencies, reducing the overall environmental footprint and optimizing operational efficiencies and throughput by adopting new business models and technologies.

The operations in the chemical industry are asset-intensive and governed by regulations. As assets age and new product development becomes complex, the demand for better process control rises. Thus, advanced analytics and digital twin implementations are gaining prominence to manage costs and reduce risks.

Service providers in the chemical industry are focused on developing operating models and architecture to improve and optimize common

production imperatives such as production yields, manufacturing workflow, and equipment utilization and uptime. They also want to drive solutions around key Industry 4.0 enablers such as IIoT, digital twin, AI, cloud, additive manufacturing, automation, sustainability and circularity.

The providers are entering into strategic partnerships with cloud hyperscalers and other technology players such as Siemens, Dassault, PTC, Rockwell and Hexagon to expand solutions and service offerings around IoT and cloud manufacturing solutions.

From the 35 companies assessed for this study, 23 qualified for this quadrant, with nine being Leaders and one a Rising Star.



Accenture brings deep digital transformation expertise with its Industry X capabilities to help chemical companies in product innovation, asset reliability and engineering by applying technologies based on data and AI to reinvent manufacturing.



Capgemini leverages digital platforms to increase collaboration and provide insights across the chemical industry value chain. The firm uses its consulting capabilities and large engineering practice to help clients manage operations, improve efficiency and predict maintenance.



Deloitte is focused on helping digital energy and chemicals organizations adopt the latest technologies and business processes. Its labs, CoEs and engineering-focused acquisitions further facilitate solutions development.



HCLTech provides chemical companies with solutions in digital, engineering, IT/OT and business processes. The company is investing in expanding partner ecosystems, technologies such as GenAI, and products, solutions and other IP to expand capabilities.



Digital IT/OT Services



IBM provides unique value to chemical companies looking to transform their manufacturing operations and systems. It uses its software portfolio, deep consulting and industry knowledge to provide differentiated end-to-end offerings.



Infosys' chemical industry services enhance enterprise productivity, improve product quality and process efficiency, and sustain competitive advantage. The solutions are driven by its cloud, engineering and digital capabilities, complemented by its consulting.



PwC's digital manufacturing practice in the chemical industry is driven by its end-to-end business transformation capabilities and solutions. The firm is setting up digital manufacturing managed services for IoT platforms and analytics to expand its assets and solutions.



TCS is continuously innovating and investing in developing cutting-edge solutions for the chemical industry while improving traditional solutions by adding new technologies such as AI, cloud and IoT.



Wipro is ready to deploy platforms and solutions integrated with partner and new-age technologies such as GenAI to help chemical companies around plant-level visibility, quality, reliability and productivity monitoring in the digital IT/OT space.



Kyndryl (Rising Star) is embracing Industry 4.0 concepts, virtual factories and technologies such as 5G, AI and IoT to drive its digital manufacturing capabilities for the chemical industry. It emphasizes co-creating solutions and fostering long-term partnerships with clients.



Infosys



Leader

"Infosys has a strong portfolio of chemical industry solutions, from consulting to implementation, focused on digital transformation."

Swadhin Pradhan

Overview

Infosys is headquartered in Bengaluru, India. It has more than 328,700 employees across 274 offices in 56 countries. In FY23 the company generated \$18.2 billion in revenue, with Financial Services as its largest segment. Manufacturing, which includes the chemical industry, is the second biggest vertical for Infosys. The company's chemical practice covers the entire value chain and key product subsegments through solutions such as the Infosys Topaz AI platform, Infosys TradeEdge supply chain platform and Infosys Cobalt for AgriChem. Infosys has more than 20 years of experience in the chemical industry and has engaged with over 45 chemical companies globally.

Strengths

Focused offerings and solutions: Infosys continues to use its strong IT capabilities around system integration, cloud, AI and other new-age technologies to integrate with its OT competence and provide the latest solutions for the chemical industry. Infosys' chemical industry solutions leverage its deep technology offerings to drive process optimization and productivity for chemical companies. Some solutions include Infosys Cobalt for AgriChem, digital agriculture solutions and SAP CATALYST, a chemical industry template.

Robust coverage of the chemical industry: Infosys's capabilities encompass the whole chemical industry value chain, such as R&D, processing and storage, manufacturing, advisory and customer care. The company

provides Industry 4.0 consulting and implementation services to various chemical customers. Some solutions include the Industry 4.0 industry maturity index, Infosys Cobalt Agri-Chem, KRTI 4.0, Infosys Robotic Platform, and AR and VR solutions.

Strong partner ecosystem: Infosys has a robust partner ecosystem comprising enterprise platforms (Oracle, SAP, Maximo®) and hyperscalers. The company also has multiple academic collaborations with universities such as Cornell, Purdue and Stanford. Infosys has built solutions focused on connected operations on the cloud and co-innovation solutions built with AWS and Azure.

Caution

Infosys should look to drive its integrated Domain + Software + Services capabilities to double down on its digital transformation strategy for clients. It should also look to penetrate the SMB space in the sector by integrating its digital consulting and technology solution portfolios.





Appendix

Methodology & Team

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

Study Sponsor:

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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 March 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.

The study was divided into the following steps:

1. Definition of Chemical Industry Services and Solutions market
2. Use of questionnaire-based surveys of service providers/ vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities & use cases
4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)
5. Use of Star of Excellence CX-Data
6. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.
7. Use of the following key evaluation criteria:
 - * Strategy & vision
 - * Tech Innovation
 - * Brand awareness and presence in the market
 - * Sales and partner landscape
 - * Breadth and depth of portfolio of services offered
 - * CX and Recommendation



Author & Editor Biographies



Lead Analyst

Swadhin Pradhan
Senior Manager and Principal Analyst

Swadhin Pradhan brings more than two decades of technology, business and market research experience and expertise to ISG clients. He has rich experience executing market/competitive intelligence (MI/CI) and quasi-consulting projects in the manufacturing, energy and resources industry.

Prior to ISG, Swadhin worked with MI/CI and thought leadership organizations of large tech and consulting firms such as IBM and Deloitte. At ISG, He focuses on ISG Provider Lens™.

His research and analysis for ISG clients concentrates on Energy, Resources and Manufacturing market development, disruption and change. He currently contributes to ISG's Provider Lens™ global research studies as a lead analyst.

Swadhin holds an MBA in Marketing and Finance from the Institute for Integrated Learning in Management (IILM), New Delhi, and an engineering degree in Electronics and Telecom.



Research Analyst

Varsha Sengar
Senior Research Analyst

Varsha Sengar is a senior research analyst at ISG and is responsible for supporting ISG Provider Lens™ studies on Workday, Retail & CPG, Manufacturing and Chemicals Services and Solutions. She has over 7 years of experience in technology research and consulting. At ISG, she is responsible for delivering enterprise' perspective for IPL and collaborates with analyst, advisors, and enterprise clients on various research requests which include primary and secondary research.

She supports the lead analysts across multiple regions in the research process and authors the global summary report. Prior to this role, she has carried out multiple ad-hoc projects and competitive benchmarking reports delivering industry level actionable insights and recommendations Her area of expertise lies across various technologies like IoT, Artificial Intelligence, Smart Homes, and Autonomous Driving.



Author & Editor Biographies



Study Sponsor

Iain Fisher
Director, Research

Iain leads ISG's Future of Work, Customer Experience and ESG solutioning redefining business models and operating models to drive out new ways of working with a CX and ESG focus. He joins up end to end value chains across a number of markets and advises clients on where digital and technology can be used to maximize benefit. A regular Keynote speaker and online presenter, Iain has also authored several eBooks on these subjects.



IPL Product Owner

Jan Erik Aase
Partner and Global Head – ISG Provider Lens™

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor.

Now as a partner and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.



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](#).

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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.





MARCH, 2024

REPORT: CHEMICAL INDUSTRY SERVICES AND SOLUTIONS