

Manufacturing Digital Services 2026 Market Insights™

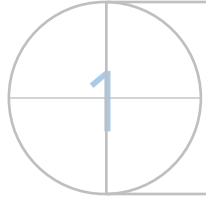
Reengineering manufacturing with
AI-first, resilient operations

June 2026

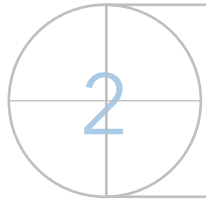
Table of contents

• About the Manufacturing Digital Services 2026 Market Insights report	3
• Executive summary	4
• Demand-side trends	9
• DXC profile	15
• About RadarView	19
• Key contacts	23

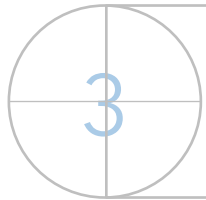
About the Manufacturing Digital Services 2026 Market Insights report



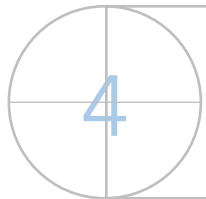
Manufacturing enterprises are navigating rising tariff pressures that are driving supply chain reconfigurations, while labor shortages continue to accelerate automation investments. At the same time, rapidly maturing AI-enabled production is transforming plant operations, resulting in increased capital reallocation, factory redesign, and workforce restructuring.



The industrial automation landscape is evolving from rule-based workflows to agentic systems capable of planning, decision-making, and execution. As humanoid and collaborative robots move into production environments, manufacturers are scaling investments from pilot projects to enterprise-wide deployments.



Avasant's ongoing interactions with industry leaders indicate that organizations are modernizing production architectures through investments in edge computing, connected OT, and digital twins. They are enabling real-time visibility, tightly integrated physical and digital operations, and more agile execution across increasingly distributed production networks.



The *Manufacturing Digital Services 2026 Market Insights* report can help enterprises craft a robust strategy based on industry outlook, best practices, and digital transformation. This report also highlights key market trends and our viewpoint on the direction of the industry over the next 12 months.



Executive summary

Definition and scope: Manufacturing digital services (1/2)

The report focuses on digital services delivered to enterprise customers across the following industry segments:

Subindustries	Description	Enterprise examples
Process manufacturing	Process manufacturers are those who add value to the production process by mixing, separating, forming, or chemical reaction. Examples include manufacturers of chemicals, oil and gas, building materials, packaging materials, textiles, containers, steel, glass, leather, paper products, wood products, and other process-manufactured goods.	
Discrete manufacturing	Discrete manufacturers are those who add value to the production process by fabricating or assembling individual (discrete) units. Examples include manufacturers of industrial machines and equipment, and auto parts, among other products.	

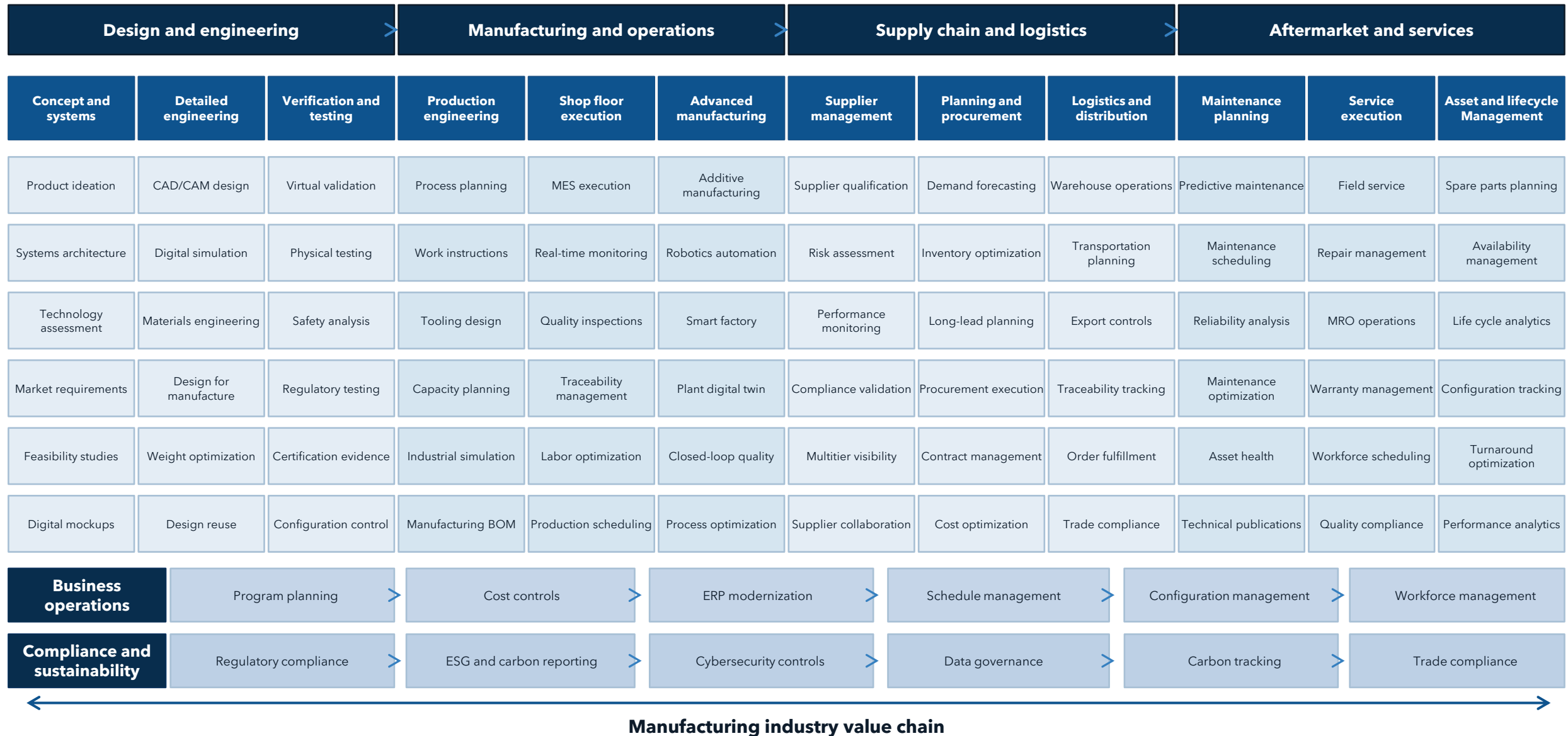
Digital services definition: Digital services accelerate digital transformation by using emerging technologies such as AI and analytics, blockchain, cloud, cybersecurity, intelligent automation, physical AI, generative AI, agentic AI, and IoT across the manufacturing services. The service provider offerings assessed in this report include consulting, proof-of-concept development, build and test, implementation, system integration, and maintenance.

We assess service provider offerings across the following value chain components:



Industries out of scope: High-tech (including telecommunications equipment, electrical parts, and electronic devices), aerospace and defense, life sciences (including pharmaceuticals and medical devices), and CPG (including food and beverages, apparel, and cosmetics).

Definition and scope: Manufacturing digital services (2/2)

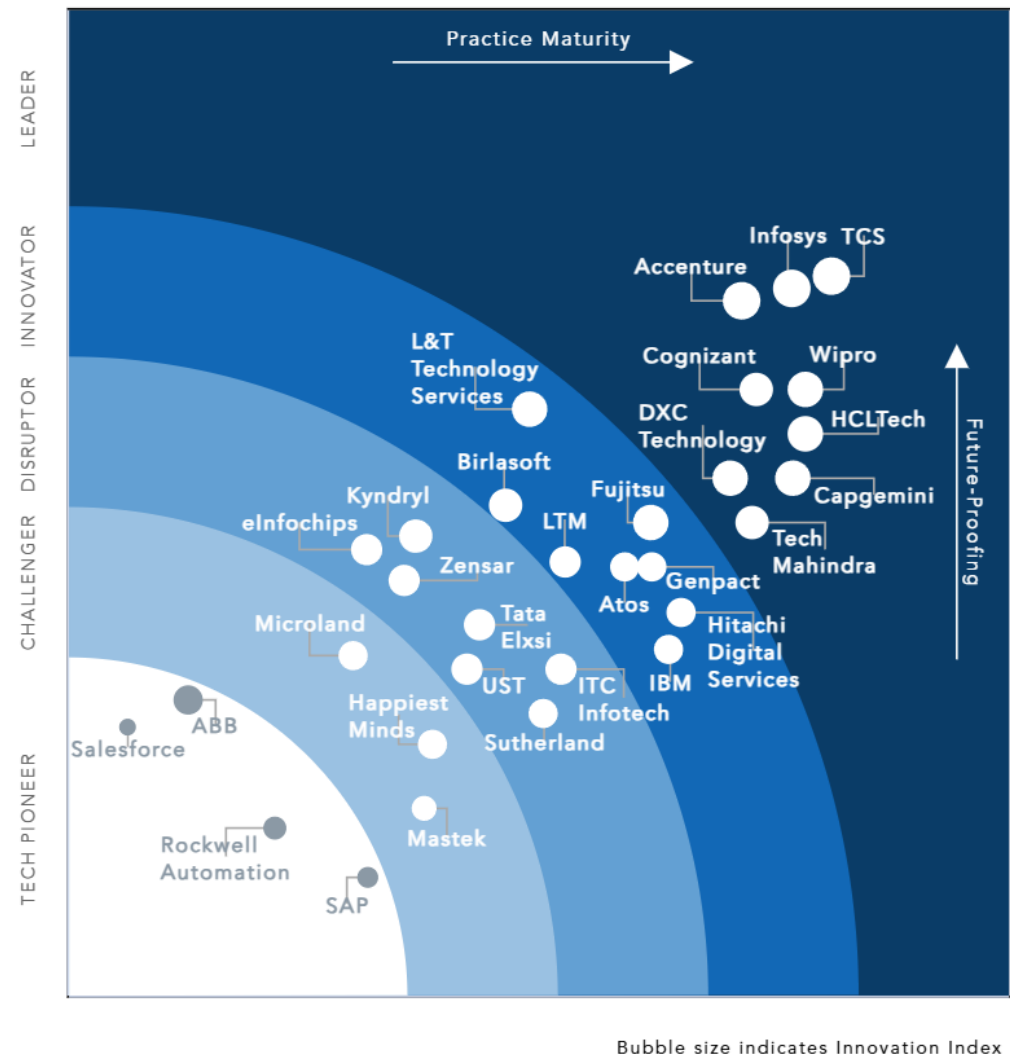


Executive summary

Key driver	Enterprise response
 Agentic AI and autonomous manufacturing operations	Manufacturers are deploying factory wide agentic AI platforms. They are moving from isolated AI tools to agents that plan, act, and adapt across full production operations simultaneously. They are building unified industrial data architectures, training domain-specific AI models on production data, and integrating agents directly into manufacturing execution system (MES), ERP, and supply chain systems.
 Physical AI and humanoid robots on the factory floor	Automotive, heavy equipment, and chemical manufacturers are piloting humanoid robots and AI-powered cobots for assembly, material handling, and inspection tasks previously requiring human dexterity. They are doing phased integration with existing automation lines, establishing human-robot teaming protocols, and partnering with physical AI developers for factory-specific deployment programs.
 Tariff-driven supply chain and geopolitical footprint shifts	Manufacturers are building multiregional production and sourcing networks (driven by trade agreements such as the USMCA*) to reduce dependence on any single geography while preserving cost competitiveness across North America, Europe, and Southeast Asia. They are qualifying alternate supplier bases, leveraging industrial policy incentives, entering long-term agreements in allied geographies, and deploying digital multitier supply chain visibility tools.
 Workforce reinvention for human-machine collaboration	Manufacturers are reskilling frontline workers for AI-augmented and human-machine collaboration roles. They are redesigning job content around AI oversight and robot maintenance rather than eliminating headcount. They are establishing internal digital academies, AR/VR simulation-based training, and redesigning production roles to place human judgment as the supervisor of AI-managed workflows.
 OT cybersecurity as a manufacturing business imperative	Manufacturers are extending enterprise cybersecurity to operational technology (OT) environments, treating OT security as a business continuity and competitive risk, and not just an IT function. They are deploying zero-trust architectures across factory floors, establishing OT-specific security operations centers (SOCs), and embedding cybersecurity requirements into supplier qualification and equipment procurement processes.

*USMCA: United States-Mexico-Canada Agreement
Source: Avasant Research

Avasant recognizes 31 top-tier providers supporting the manufacturing industry in digital transformation



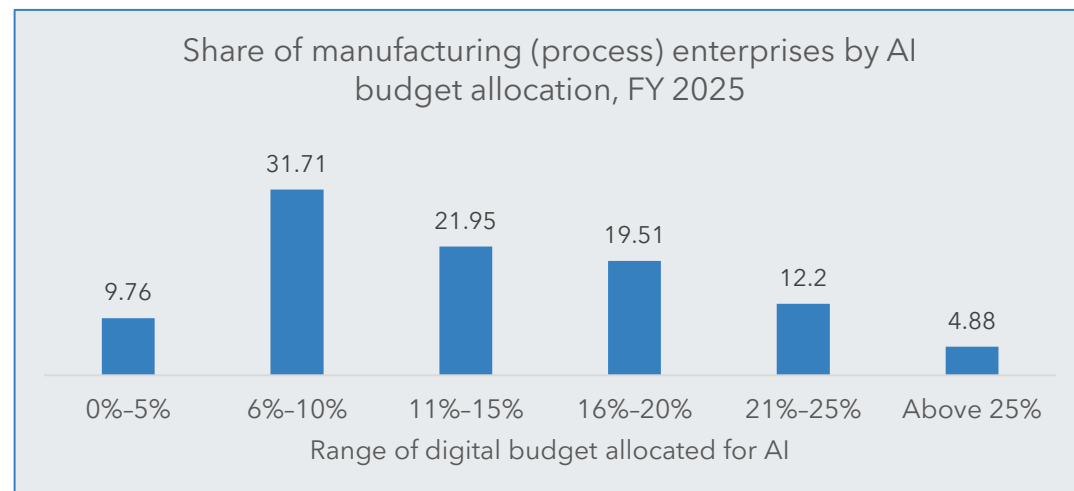
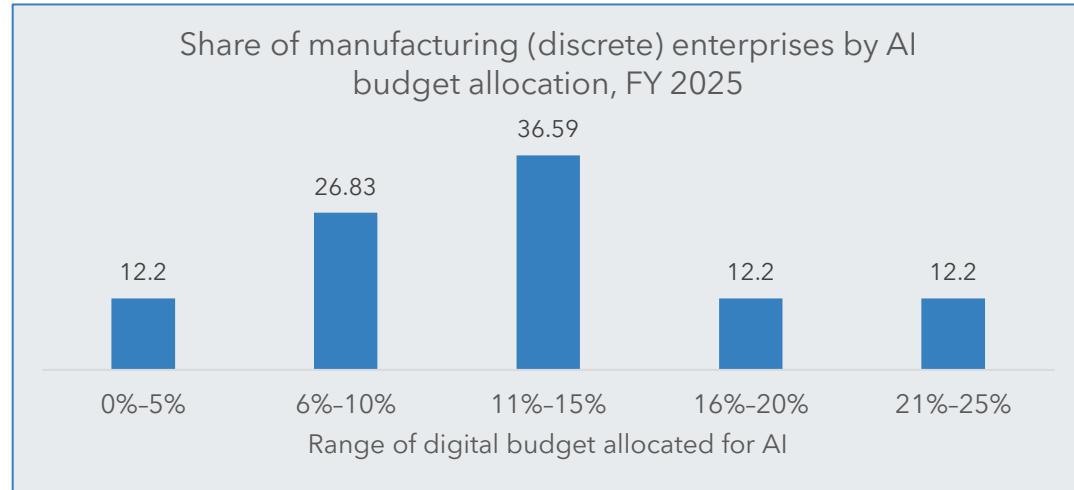
Note: Please refer to Avasant’s *Manufacturing Digital Services 2026 RadarView* for detailed insights on service providers and supply-side trends.



Demand-side trends

Factories are now managed by agents, as AI displaces rule-based automation

AI systems that can plan, decide, and act across the full operation are moving from isolated pilots to production deployments. The key shift is from AI that assists to AI that acts.



- The manufacturing industry was among the top industries in terms of budget allocation for AI at 8.02% in FY 2025, based on the Nasscom-Avasant Digital Enterprise 2025 report.
- According to the Nasscom-Avasant report, 19.51% discrete manufacturers expect more than 75% of their tech spend to be digital by 2030.
- The report also said that 7.32% process manufacturers expect more than 75% of their tech spend to be digital by 2030.
- Based on the World Economic Forum's Future of Jobs 2025 report, 35% of manufacturing tasks are expected to be performed jointly by humans and technology by 2030.

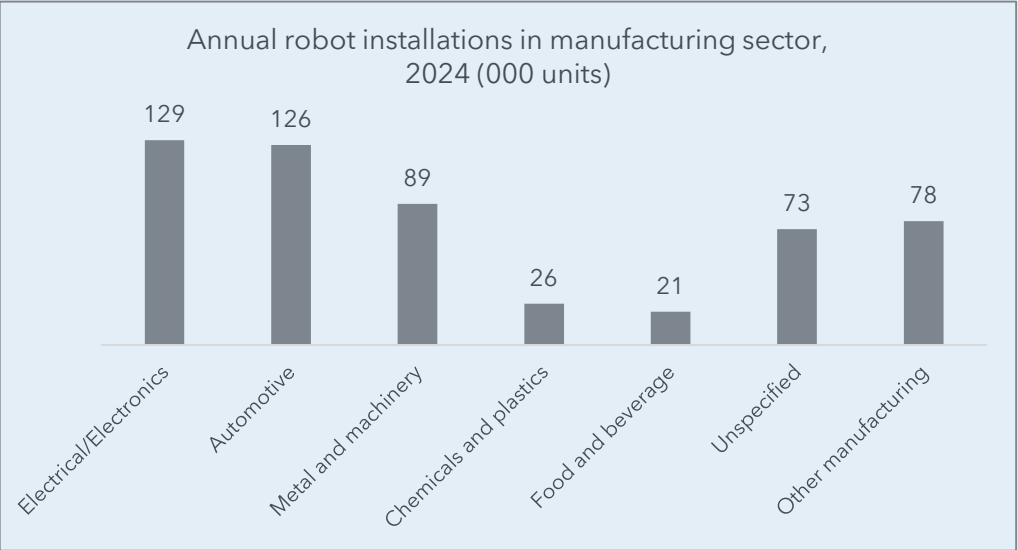
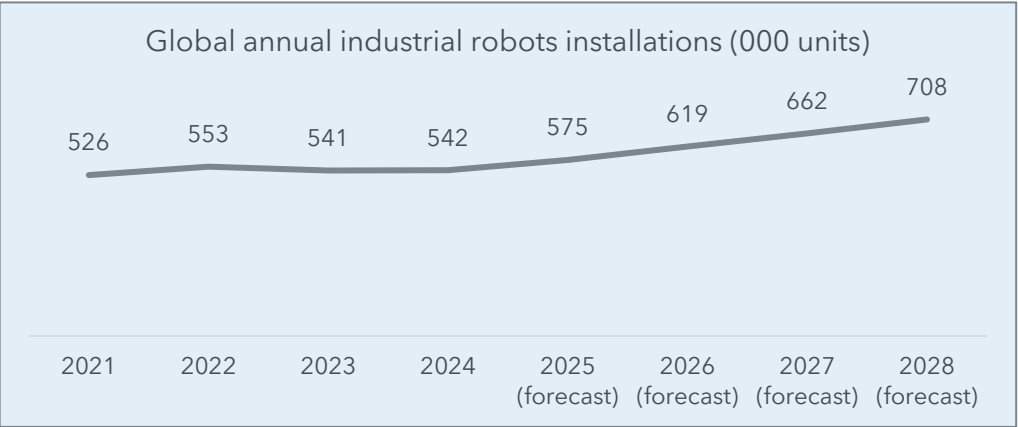
Illustrative examples:

- Georgia-Pacific connected MES, ERP, and production planning into an AI-managed layer to adjust schedules based on machine status, staffing, and supply inputs.
- BASF rolled out AI agent-driven process control, with edge AI and cloud infrastructure handling routine batch optimization to flag quality issues automatically.
- John Deere deployed factory wide AI agents integrating MES with supply chain data to enable real-time schedule optimization and autonomous production adjustments.



Humanoid robots are moving from showcases to real production lines, with 70% of cobot orders from non-automotive sectors in 2025/2026

Food processors, chemical plants, packaging lines, and equipment manufacturers are all buying in. Reliability and human-level dexterity are the key milestones being cleared in 2026.



9.22%

Discrete manufacturers invested in robotics and industrial automation technologies to implement use cases in 2025.

9.07%

Process manufacturers invested in robotics and industrial automation technologies to implement use cases in 2025.

Illustrative examples

GXO Logistics expanded trials of Apptronik's Apollo humanoid robots for warehouse and supply chain operations, targeting repetitive manual tasks and workforce augmentation.

GXO

Caterpillar has integrated AI cobots into machining and assembly lines alongside workers, developing human-machine protocol for each task before introducing cobots.

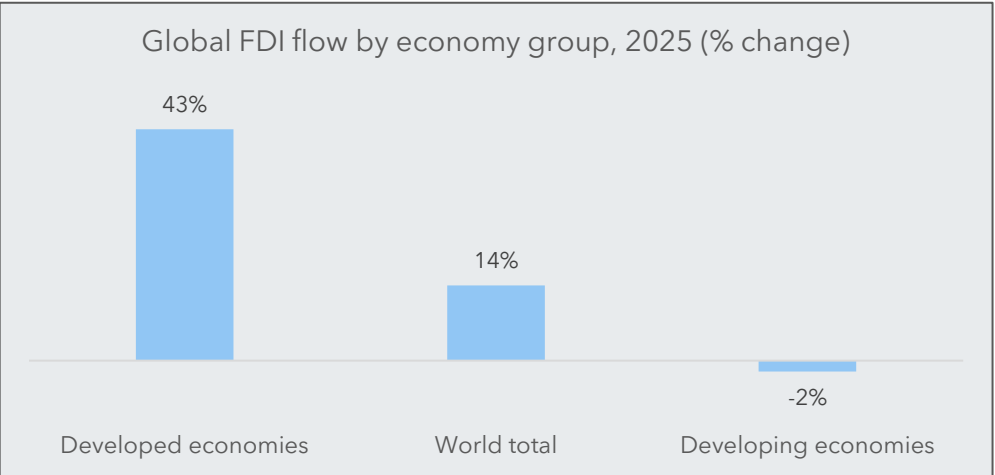
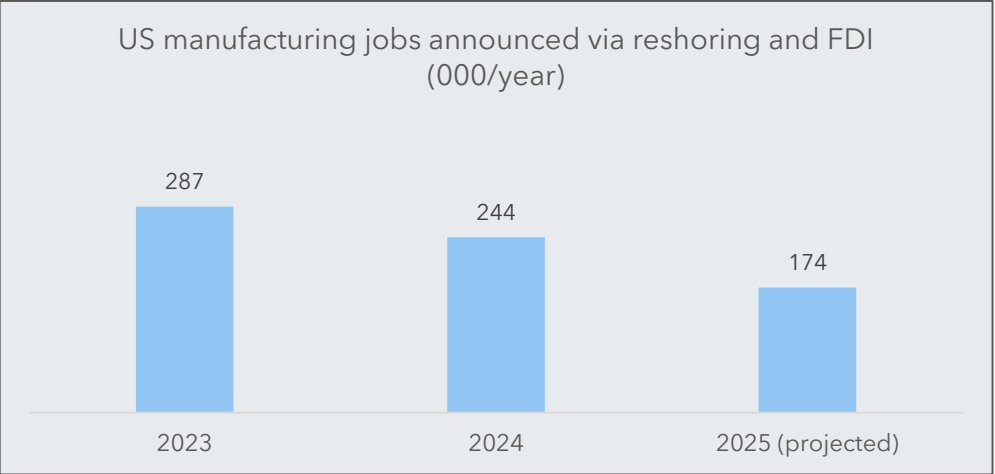
CATERPILLAR®

BMW deployed the Figure 02 robot at its Spartanburg plant in 2025 to assist in producing more than 30,000 BMW X3s and handling over 90,000 sheet metal parts.

BMW GROUP

Production strategies are evolving, while manufacturers are balancing tariff risks with growth opportunities

Manufacturers are diversifying sourcing and production across regions, keeping trade flows strong despite reduced investment in tariff-exposed markets.



Key figures

Global merchandise trade is projected to grow 1.9% in 2026, reflecting delayed normalization after front-loaded imports in 2025.

Around 18,000 discriminatory trade measures introduced since 2020 continue to disrupt supply chains and drive supplier diversification.

Illustrative examples



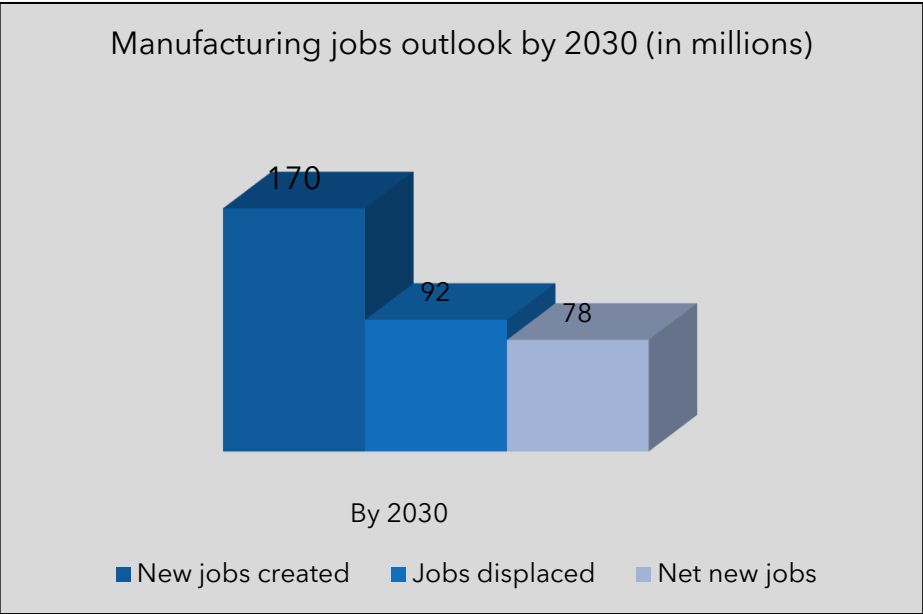
Toyota qualified new suppliers under the USMCA to build parallel supply chains for critical parts, backed by digital multitier traceability tools.



Caterpillar reduced single-region sourcing from 70% toward diversified allied-country suppliers, with real-time visibility tools across the new network.

Human-machine collaboration is creating new workforce demands, as manufacturers prepare workers for AI oversight and automation

Just below two-thirds of employers say the skills gap is their biggest barrier. Companies are rewriting shop floor jobs around supervising AI and maintaining robots, not cutting head count.



Enterprises examples preparing workforce for the future



Hyundai deployed exoskeletons, AR/VR training, and AI copilots in assembly lines and machining. It redesigned roles as human-machine collaboration to enable better output with same headcount.



John Deere launched formal skills programs with community colleges covering data literacy, robotics maintenance, and AI oversight built into production schedules instead of a separate add-on.



Sandvik runs a global competence program that enables machine operators with digital-skills coaches. They enable AR-based simulation training that reduced onboarding time for machining operators.



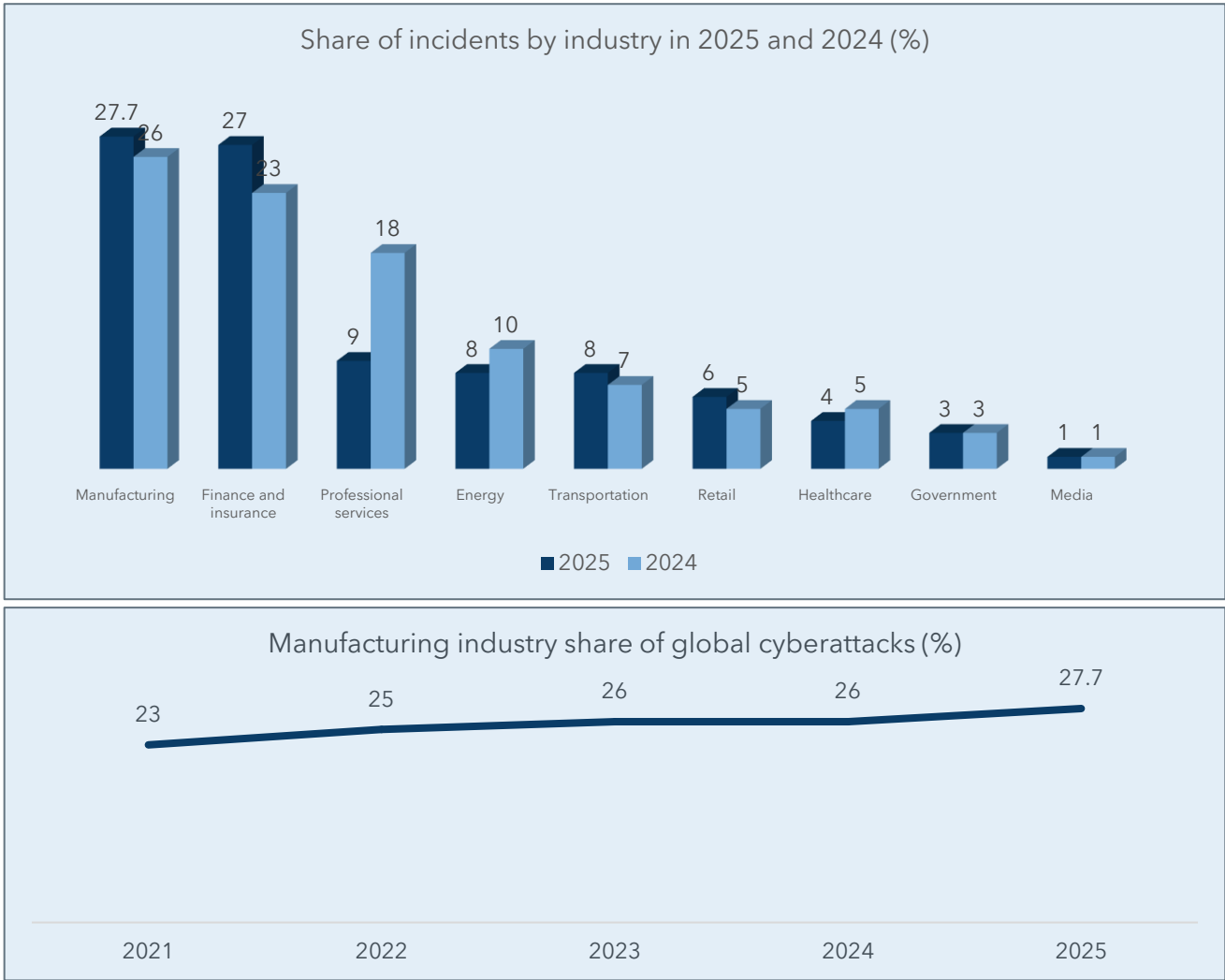
BASF established a dedicated learning campus at Ludwigshafen, Germany, that offers digital upskilling modules covering process analytics, sensor interpretation, and AI-assisted batch control.

37%
Share of current manufacturing core skills which will change by 2030

69%
Skill gap in the labor market in manufacturing industry

Manufacturing has been the most attacked industry for five consecutive years, with IT/OT convergence identified as a cross-border risk

Every machine added to a factory network is an entry point. A successful breach extends beyond data loss to full production shutdown.



How enterprises are adapting

Hyundai Motor Group created its first group-level cyber threat response team in November 2025, centralizing vulnerability assessment, threat monitoring, and incident response across all affiliates.



Honda selected a dedicated OT backup and recovery platform in March 2026 to strengthen cyber resilience specifically across its US manufacturing operations, directly addressing the gap where nearly half of OT systems in manufacturing lack backup coverage.



When a cyberattack hit Nucor in May 2025, it activated a prebuilt incident response plan, proactively taking OT-linked systems offline to prevent lateral spread, and restored production from backups within weeks. The board then also commissioned a formal cybersecurity program maturity assessment.





AVASANT

DXC profile

DXC Technology: RadarView profile



Practice maturity ★★★★★

Future-proofing ★★★★★

Combines MES/PLM/ERP and automotive engineering with accelerator-led smart factory use cases, scaling Gen AI on the shop floor through Databricks and Snowflake with co-innovation platforms like Startup Autobahn and ARENA2036.

Practice overview		Industry-specific solutions/offerings		Sample clients
- Practice size: 14,000+ - Active clients: N/A - Delivery highlights: 40+ delivery centers worldwide		International Material Data System (IMDS)	An industry solution that enables OEMs and suppliers to exchange material composition data	- A German premium automotive manufacturer - A global adhesive manufacturer - A global aerospace and defense company - A global automaker
		Material Compliance System (MaCS)	A compliance platform to automate supplier declarations and audit readiness across supply chains	
		DXC Manufacturing Insight Cloud	A cloud industrial analytics platform that integrates IT and OT data to enable multiplant visibility	
		DXC VisionIQ	A digital twin platform that enables real-time monitoring, scenario planning, and industrial AI use cases	
\$1B-\$2B Revenue from manufacturing, FY 2025 >60% Digital revenue share from manufacturing, FY 2025				
Partnerships/alliances				
 Google Cloud Leveraged cloud infrastructure to modernize mission-critical IT and integrate analytics and AI solutions  Collaborated to deliver enterprise and manufacturing solutions and accelerate client migrations  Partnered to deploy digital thread solutions across the product life cycle for manufacturers  Leveraged its MES platforms to deliver MES implementations and long-term support		 Leveraged its PLM platform to deploy product life cycle management solutions  Partnered to deliver the DXC Signal solution for secure industrial connectivity in factories  Used its MOM/MES platforms to implement manufacturing operations management solutions  Utilized its platforms to deliver physical AI and digital twin for smart factories and *SDVs	Value chain coverage Design and engineering Procurement Manufacturing Distribution Sales and marketing Aftermarket Business operations	

DXC Technology: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A global adhesive manufacturer	• Analytics • Cloud • IoT	• The client wanted to replace its fragmented Industrial Internet of things (IIoT) pilots with a unified platform and automate quality tracking to meet contractual obligations. • DXC designed a hybrid IIoT reference architecture with harmonized data models and a defined operating model. It implemented an IoT-based quality control platform for real-time defect and splice-point tracking.	• Unified the IIoT architecture, replacing isolated plant-level POCs • Harmonized data models enabling cross-plant analytics • Reduced waste by 10% • Automated customer compliance reporting
A global automaker	• AI • Analytics • Automation	• The client sought scalable Industry 4.0 capabilities to replace manual inspection and cycle-time analysis across manufacturing plants. • DXC deployed AI-driven computer vision solutions for automated quality inspection, cycle-time analysis, and anomaly detection. It integrated the solution with the existing manufacturing execution system (MES) and quality system and delivered it end-to-end, from advisory to optimization.	• Achieved higher consistency than manual quality inspection • Enabled immediate corrective action • Provided continuous process optimization • Reduced scrap and rework costs
A global aerospace and defense company	• AI/ML • Automation • IoT	• The client needed to reduce labor costs and rework in welding operations while enabling future AI adoption. • DXC designed and implemented a composable IIoT platform integrating machines and sensors within the clients' ecosystem of partners across technology, education institutions, manufacturers of capital equipment, and others. The platform enabled automated actions based on real-time production data across multiple welding types.	• Reduced manual work by up to 66% • Improved product quality and reduced rework cycles by increasing right-first-time • Reduced production costs significantly due to reduced re-work • Established a foundation for advanced analytics and AI/ML weld defect detection
A German premium automotive manufacturer	• Analytics • ML	• The client needed a consolidated global MES to harmonize production across five plants while maintaining continuity. • DXC designed and built a service-based MES architecture combining new development and modernization. The solution integrated analytics and ML while enabling phased rollout alongside legacy systems.	• Standardized the global MES architecture • Lowered operating costs via a shared operations model • Reduced implementation time through component reuse

DXC Technology: RadarView profile

Analyst insights

Practice maturity



- DXC delivers end-to-end digital services to manufacturing clients, covering advisory, platform engineering, system integration, and run services across IT, OT, and engineering systems. It combines long-standing MES, PLM, and ERP delivery with accelerator-led smart factory and AI platforms.
- It delivers smart factory outcomes utilizing use-case accelerators in predictive maintenance, quality inspection, process optimization, energy management, KPI monitoring, and Gen AI-enabled service support, enabling manufacturers to apply AI and analytics directly to shop-floor operations.
- It offers software-defined vehicle (SDV) engineering through the DXC Luxoft automotive engineering platform, providing services across ADAS, connected vehicles, in-vehicle infotainment, and powertrain electrification. It delivers embedded software development, AUTOSAR adaptive and classic middleware integration, and cloud-to-vehicle platforms to automotive OEMs and suppliers, supporting vehicle software development and integration across the SDV stack.
- It has strengthened its ability to deliver Gen AI in manufacturing by upskilling its delivery teams through certified training on Databricks and Snowflake, including Snowflake Cortex AI, to support enterprise-grade implementations and operations of Gen AI solutions.

Future-proofing



Partner ecosystem

- DXC leverages Boomi's Integration Platform as a Service (iPaaS) to deliver seamless system integration and AI agent management for modernization initiatives.
- It collaborates with data, robotics, and AI platform providers such as Snowflake, Wandelbots, and NVIDIA to deliver manufacturing data clouds, robot-agnostic programming and orchestration, and digital twin and physical AI solutions for smart factory use cases.
- It also partners with enterprise service management and cloud providers such as ServiceNow, Google Cloud, AWS, and Microsoft Azure to deliver digital service management, IIoT platforms, cloud-based manufacturing analytics, and IT modernization.

Investments and innovation

- DXC leverages the Startup Autobahn and ARENA2036 ecosystems to co-innovate, pilot, and industrialize emerging Industry 4.0 technologies with OEMs, suppliers, startups, and academia for manufacturing clients.
- Its AI lab in Böblingen strengthens its manufacturing and automotive innovation capabilities by facilitating client demos, supporting secure and high-performance AI use cases to help German OEMs and Tier I suppliers, and embedding responsible AI and governance into solutions developed for mission-critical environments.



Appendix: About RadarView

The Manufacturing Digital Services 2026 RadarView assesses service providers across the following dimensions

Practice maturity

- This dimension considers the current state of a provider's manufacturing practice in terms of its strategic importance for the provider, the maturity of its offerings and capabilities, and client engagement.
- The crucial aspects in this dimension are the width and depth of the client base, usage of proprietary/outsourced tools and platforms, and quality of talent and execution capabilities.

Future-proofing

This dimension evaluates how the provider is preparing for the future by combining initiatives across domain/partner ecosystem and investments and innovations defined below:

- *Domain/Partner ecosystem:* This dimension assesses the nature of the provider's partner ecosystem, the objectives of the partnerships (codevelopment and co-innovation), and engagement with solutions providers, startup communities, and industry associations. Vital aspects in this dimension are joint development programs around offerings, go-to-market approaches, and the overall depth of partnerships.
- *Investments and innovation:* This dimension measures the strategic direction of the provider's investments and resultant innovations in the offerings and commercial model and how it aligns with the future direction of the industry. The critical aspects of this dimension include both organic and inorganic investments toward capability and offering growth, technology development, and human capital development, along with innovative solutions developed with strategic partners.

Note: As innovation becomes a critical provider selection criterion for enterprises, we have also included an "Innovation Index" in the RadarView representation. This index is derived from the provider's investments in IP, technology partnerships, domain partnerships, service and model changes, and training and development. It also incorporates market feedback about the provider's innovative approaches during engagements.

Research methodology and coverage

Avasant has based its analysis on several sources:

Public disclosures

Publicly available information from sources such as Securities and Exchange Commission filings, annual reports, quarterly earnings calls, and executive interviews and statements

Market interactions

Discussions with enterprise executives leading digital initiatives and influencing provider selection and engagement

Provider inputs

Inputs collected through the provider capability decks and structured briefings from March 2026 to May 2026

Of the 78 providers assessed, the following are the final 31 featured in the *Manufacturing Digital Services 2026 RadarView*:



Note: Assessments for ABB, Accenture, IBM, Kyndryl, LTM, Rockwell Automation, Salesforce, SAP, UST, and Zensar were conducted based on public disclosures and market interactions only.

Reading the RadarView

Avasant has recognized service providers in five classifications:



Leaders show consistent excellence across all key dimensions of the RadarView assessment (practice maturity and future-proofing) and have had a superior impact on the marketplace. These providers have shown true creativity and innovation and have established trends and best practices for the industry. They have proven their commitment to the industry and are recognized as thought leaders in their space, setting the standard for the rest of the industry to follow. Leaders display a superior quality of execution and a reliable depth and breadth across verticals.



Innovators show a penchant for reinventing concepts and avenues, changing the very nature of how things are done from the ground up. Unlike leaders, innovators have chosen to dominate a few select areas or industries and distinguish themselves through superior innovation. These radicals are always hungry to create pioneering advancements in the industry and are actively sought after as trailblazers, redefining the rules of the game.



Disruptors enjoy inverting established norms and developing novel approaches that invigorate the industry. These providers choose to have a razor-sharp focus on a few specific areas and address those at a high level of granularity and commitment, which results in tectonic shifts. While disruptors might not have the consistent depth and breadth across many verticals like leaders or the innovation capabilities of innovators, they exhibit superior capabilities in their areas of focus.



Challengers strive to break the mold and develop groundbreaking techniques, technologies, and methodologies on their way to establishing a unique position. While they may not have the scale of the providers in other categories, challengers are eager and nimble and use their high speed of execution to great effect as they scale heights in the industry. Challengers have a track record of delivering quality projects for their most demanding Global 2000 clients. In select areas and industries, challengers might have capabilities that match or exceed those of the providers in other categories.



Tech Pioneers are platform-first providers reshaping services through technologies, ecosystem orchestration, and long-term bets. These providers demonstrate strong future-proofing capabilities, marked by significant investments in next-gen technologies, differentiated IP, and deep innovation pipelines. Tech Pioneers exert influence through their ability to shape customer road maps, catalyze new service models, and accelerate market transitions. While their service delivery maturity may still be evolving, their impact lies in their role as catalysts, introducing new paradigms, enabling rapid experimentation, and driving early adoption of transformative capabilities.

Key contacts

Primary contact:



Jyotika Jain

Lead Analyst

jyotika.jain@avasant.com

Contributors:



Bharat Amin

Distinguished Fellow

bharat.amin@avasant.com



Libby Roney

Distinguished Fellow

libby.roney@avasant.com



Michael Wheeler

Partner & Supply Chain Practice
Lead

michael.wheeler@avasant.com



Swapnil Bhatnagar

Partner

swapnil.bhatnagar@avasant.com



Sahaj Kumar

Research Director

sahaj.kumar@avasant.com

Disclaimer

Unauthorized reproduction or distribution in whole or in part in any form, including photocopying, faxing, image scanning, e-mailing, downloading, or making available any portion of the text, files, data, graphics, or other materials in the publication is strictly prohibited. Prior to photocopying items for internal or personal use, please contact Avasant to ensure compliance with Avasant or third-party intellectual property rights and usage guidelines. All trade names, trademarks, or registered trademarks are trade names, trademarks, or registered trademarks of Avasant, its licensors, or the applicable third-party owner. No express or implied right to any Avasant or third-party trademarks, copyrights, or other proprietary information is granted hereunder. Avasant disclaims, to the fullest extent under applicable law, all warranties and conditions, expressed or implied, with respect to any content provided hereunder, including, without limitation, warranties of merchantability and fitness for a particular purpose. Avasant does not assume or guarantee and hereby disclaims any and all liability for the quality, accuracy, completeness, or usefulness of any information contained herein, which shall be inclusive of any and all direct or consequential damages or lost profits. Any reference to a commercial product, process, or service does not imply or constitute an endorsement of the same by Avasant. This publication is for information purposes only. By distributing this publication, Avasant is not engaged in rendering legal, accounting, or other professional services. If legal, accounting, or other advisory services or other expert assistance is required, the services of a competent professional person should be sought.

AVASANT

EMPOWERING BEYOND

GET CONNECTED



www.Avasant.com