

Reframing supply chain planning: A strategic imperative for manufacturing and automotive resilience





Global supply chains are facing unprecedented disruption. From geopolitical instability and inflationary pressures to climate volatility and shifting consumer expectations, the traditional models of supply chain planning are proving inadequate.

According to the Capgemini Research Institute (CRI), five in six organizations feel ill-equipped to accommodate the new supply chain paradigm, despite recognizing its high business impact. In manufacturing and automotive sectors, mixed-mode production, hybrid capacity planning, and flow manufacturing complexities amplify these challenges. Cyberattacks targeting automotive systems to further strain resilience. While 92% of executives cite globalization and resilience as critical, only 15% feel prepared to address them.

Similarly, **73%** identify sustainability as a top priority, yet just **17%** have actionable strategies in place. These gaps are not merely operational,

they are strategic vulnerabilities that threaten competitiveness, customer satisfaction, and financial performance. The challenges are compounded by structural inefficiencies.

Over **75%** of supply chain functions still rely on spreadsheets for planning, and fewer than **20%** of organizations report having end-to-end visibility across their supply chains. Demand volatility, supply disruptions, and siloed systems continue to hinder responsiveness and agility. In fact, **74%** of companies have experienced supply disruptions, and **68%** took more than three months to recover. These statistics underscore the urgent need for a new approach, one that is intelligent, integrated, and future ready.

Strategic partnership: Capgemini and Oracle driving transformation

Recently, a new global partnership was formalized between Capgemini and Oracle under the Oracle Premium Program, marking a significant milestone in a long-standing collaboration

This strategic alignment is designed to accelerate enterprise transformation through joint innovation, delivery excellence, and deep integration of Oracle's cloud-native supply chain technologies with Cappemini's proven methodologies and industry expertise.

Cloud-native supply chain planning delivers measurable impact: organizations report up to 40% faster

deployment and 30% improvement in collaboration efficiency through realtime, cross-functional access. Scalability supports dynamic growth, enabling 20-25% reduction in infrastructure costs. Built-in security frameworks reduce breach risks by up to 60%, critical for automotive systems. Advanced analytics drive 15-20% better forecast accuracy, enhancing agility in hybrid capacity and mixed-mode production. These capabilities empower enterprises to respond faster, plan smarter, and operate more securely in volatile environments.



Capgemini's differentiators: LTP, DAN, and embedded innovation

At the heart of Capgemini's supply chain planning cloud transformation for manufacturing and automotive are two proprietary frameworks: the Large Transformation Program (LTP) and the Digital Acceleration Navigator (DAN). These are not just accelerators, they are strategic enablers of sustainable change. LTP aligns business strategy with IT execution through structured phases that address hybrid capacity, flow manufacturing, and supplier complexity.

It includes value-driven milestones, KPI dashboards, and stakeholder engagement models tailored to manufacturing and automotive operations. DAN acts as a digital compass, guiding clients through strategy formulation, solution design, and adoption. It leverages GenAlenabled tools for persona mapping, impact analysis, and learning needs assessment critical for orchestrating transformation across plants, regions, and OEM ecosystems.

Together, LTP and DAN ensure Oracle's technology is deployed with precision, speed, and measurable impact, driving resilience and agility across the supply chain.



Seamless ERP integration:

Accelerating connected supply chain transformation

Capgemini enables seamless integration across SAP, Oracle EBS, MES, and other ERPs using pre-built connectors, OIC, and REST APIs. Our cloud-native accelerators reduce implementation time by up to 30% and ensure secure, scalable data flows. With over 250+ trained integration consultants, we deliver rapid interoperability across legacy and modern systems. This empowers manufacturing and automotive enterprises to

unify planning and execution. Our frameworks support hybrid architecture and real-time visibility, enhancing agility. Proven templates and assets cut deployment costs and risks. Integration is not just technical, it's strategic, driving resilience and responsiveness. Capgemini's expertise ensures supply chains are connected, intelligent, and future ready.



Embedded AI and agentic intelligence:

Innovation in action

All is deeply embedded in the Cappemini-Oracle solution architecture, tailored to address the complexity of manufacturing and automotive supply chains.

Oracle SCP Cloud uses machine learning to improve forecast accuracy by

30-50%

Reduce inventory levels by

10-30%

Enhance planner efficiency by

20-40%

And improve on-time delivery by up to

15%

In manufacturing, it supports mixedmode production, hybrid capacity constraints, and flow manufacturing, all within a unified environment. In automotive, it helps mitigate risks from cyberattacks and supplier volatility through predictive analytics and intelligent orchestration.

Capgemini-Oracle's solution also introduces the Supply Chain Planning Process Advisor Al Agent, which proactively guides planners through complex workflows, flags anomalies, and recommends corrective actions. Coupled with digital twin capabilities, planners can simulate supply chain scenarios in real time, testing responses to disruptions, capacity shifts, or demand surges before executing them. These innovations empower planners to move from reactive firefighting to predictive, scenario-based planning, enhancing agility, confidence, and strategic foresight.



Use cases: Real-world transformation

Capgemini-Oracle SCP has already delivered tangible results in manufacturing and automotive. In manufacturing, the solution supports mixed-mode production, hybrid capacity constraints, and flow manufacturing within a unified environment, enabling clients to align supply with demand, optimize resource utilization, and respond to market shifts with agility. In automotive, predictive analytics and digital twins have enhanced risk management, supplier resilience,

and cybersecurity readiness. Alpowered forecasting has improved on-time delivery by up to **15%**, while autonomous agents are being piloted to simulate disruptions and prescribe mitigation strategies.

These are not isolated wins, they are proof points of a scalable, repeatable model that drives operational excellence and strategic foresight across complex supply chains.



Addressing today's challenges, enabling tomorrow's growth

Capgemini's new Supply Chain Planning Cloud offer, built on Oracle technology and tailored for manufacturing and automotive, is designed to solve the challenges that keep supply chain leaders up at night. It delivers: This is not just a solution, it's a strategic enabler. It helps manufacturers and OEMs shift from reactive firefighting to predictive planning, from siloed systems to integrated ecosystems, and from incremental gains to exponential value.

- Real-time visibility across complex production and supplier networks
- Al-powered forecasting and scenario simulation for hybrid capacity and flow manufacturing
- Seamless integration with ERP, MES, and automotive-grade systems via OIC and REST APIs
- Scalable, cloud-native architecture supporting mixed-mode operations
- Embedded accelerators for rapid deployment and ROI
- Proven methodologies for sustainable transformation across plants and regions



Conclusion: Shaping the future of supply chain planning in manufacturing and automotive

Capgemini sees supply chain planning as a strategic lever for resilience and growth, especially in manufacturing and automotive, where complexity and disruption are constant. Our AI-powered solutions address fragmentation, volatility, and visibility gaps, enabling proactive planning and faster decision-making. With

deep industry expertise and proven methodologies, we help clients optimize production, manage hybrid capacity, and respond to market shifts with agility. As supply chains evolve, Capgemini remains committed to delivering intelligent, scalable solutions built for the future.

About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, generative AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2024 global revenues of €22.1 billion.

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