



Supply chain  
transformation  
for **supplier  
networks**

**KINAXIS**<sup>®</sup>

For today's automotive businesses, disruptions lurk around every corner. Uncertainty, delays, and volatility are attributes of a fluid market that demands auto suppliers adapt on the fly—with deep coordination of complex processes and supply chain functions.

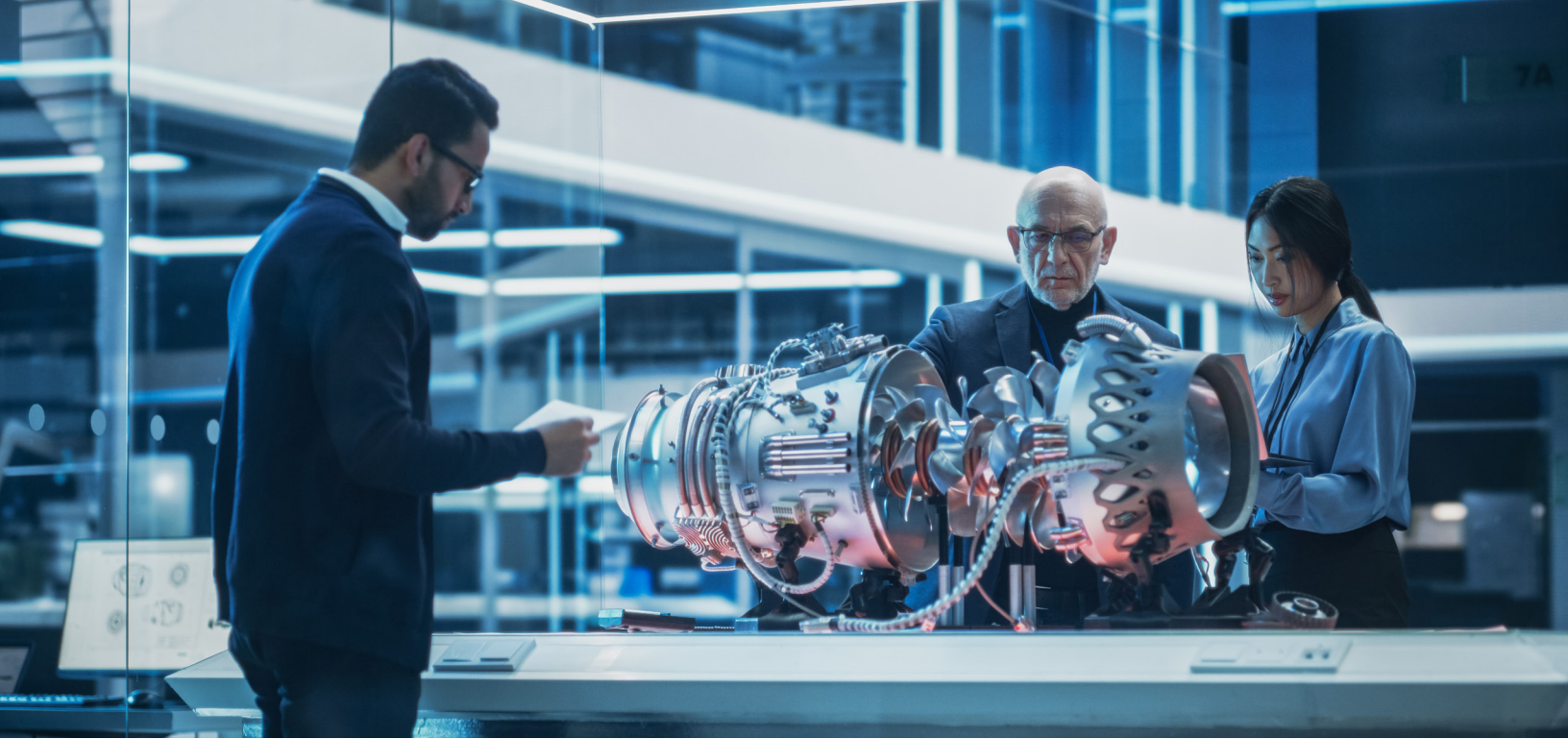
While the transition to electric vehicles (EVs) continues to move forward, a variety of roadblocks are slowing its progress. Buyer hesitancy remains high, the latest waves of EV trucks are seeing delays in production, and automotive original equipment manufacturers (OEMs) have yet to discover which type of EV will take off with consumers.

A report by Boston Consulting Group reveals that most automakers are losing thousands of dollars on every EV they sell after accounting for customer tax credits. These losses are often passed down through the supplier network, squeezing already slim margins. The challenge for suppliers is two-fold. Even though material costs have receded from all-time highs, suppliers are still suffering from higher input costs, while OEMs increase cost pressure even further. In addition, a growing number of suppliers face liquidity challenges that will require special support, including from OEMs, to prevent insolvency.

Delivering parts to automakers affordably remains a challenge, as varying regulations across global trade partners, inflation, and other market dynamics also affect profitability. Meanwhile, disruptions due to raw materials shortages, geopolitical factors, and natural disasters abound, and changing forecasts, reconfiguring supply lines, and optimizing new schedules leaves little room for error. Every decision is difficult. That's why tightly syncing every stage, from order placement to delivery, is crucial. Supplier profitability depends on the ability to strategically prepare for any scenario and anticipate its impact across different functions to ensure delivery in-full.







## HAZARDS IMPEDING YOUR ROAD TO PROFITABILITY

Though they may seem familiar on the surface, the many obstacles automotive companies must overcome are evolving and creating heightened levels of urgency. At the same time, they're obscuring timely opportunities.

### **Innovation and volatile demand**

While inflation and other economic pressures have caused buying patterns to fluctuate, so has innovation. Manufacturers of parts for internal combustion engine (ICE) vehicles are at a crossroads. If they don't act quickly, their profits will continue to dwindle, and eventually die. But innovation requires funding. While sales of EVs continue to grow, sales of ICE vehicles aren't slowing as rapidly as some experts forecast. As a result, suppliers need to continue serving the needs of ICE vehicles while innovating for the future. Balancing production and inventory with accuracy is as critical as ever.

As automakers struggle to forecast customer demand, suppliers are left trying to ride the wave of spikes and drops. Using legacy equipment and systems that are too sluggish to handle major shifts in production, or reconfiguring the factory floor to build parts to serve new models, puts organizations at risk. To keep pace with the demands of OEMs and with customer expectations, suppliers need to leverage modern technologies, test the supply line configuration precisely, and respond to volatile demand with agility.

## Limited coordination with OEMs

A lack of transparency and coordination between suppliers and the OEMs they serve makes it challenging for suppliers to create accurate forecasts. For example, consider a viral post from a social media influencer that promotes a car with a trim level that includes massaging seats as an option. If the OEM isn't providing real-time analytics to suppliers that indicate a peak in demand for this option, the supplier may not have the inventory on-hand to serve demand. This could ultimately lead to unhappy customers, either as the result of a delay or an inability to fill orders.

Moreover, assembly lines are heavily reliant on just-in-time component delivery. Late visibility into capacity constraints or parts shortages can halt a production line. Manual tracking won't cut it. Instead, suppliers need a real-time view of their capacity, available supply, and incoming demand. This requires concurrent planning and execution capabilities that enable collaboration with their entire network, from raw materials to carriers and to OEMs, to ensure visibility and control over every milestone.

## Poor visibility drives up costs

In the historical method of supply chain management, each functional area manages its own operations but has limited visibility into what's happening in other areas. When there is some visibility, it often comes with significant latency, making the organization more vulnerable to threats of disruption.







Any material supply shortage, delay, or other disruption that does occur creates ripple effects that could have an impact on multiple vehicle programs. Production facilities are only making money if they are producing something. Suppliers must protect their margins by gaining actionable insights into how best to allocate resources given the available production capacity. To maximize output without expending resources, suppliers must be aligned with the OEMs they serve, so that both are operating from a single version of the truth, with a clear view of their entire network.

## **Intensified competition**

A recent research study estimates that \$1.6 trillion is being lost to disruption each year.<sup>1</sup> For suppliers, it's not just about losses from halts in production, it's about lost opportunity, as the competitive advantage modern supply chain technology offers is being used to capture market share. This is putting added pressure on suppliers to deliver on-time in-full (OTIF) every time or risk losing contracts to alternative suppliers.

## **Growing regulation**

When operating across geographies, suppliers manage many regulatory bodies and achieve and maintain compliance. Sustainability initiatives and regulations continue to expand for auto makers. As a result, transparency and cleaner and greener practices are trickling into the tiered supplier network as well. In North America, emissions caps are rolling out, while in the EU, where such regulations have been in place for years, new initiatives like and battery passports are becoming a reality. To balance compliance, service and costs, suppliers must have greater visibility into their network than ever before.

# A CLOSER LOOK AT SUPPLY CHAIN ORCHESTRATION

Today's supply chain challenges demand hyper-agile, modern supply chain management techniques—the end-to-end orchestration of people, and physical, digital, and financial assets to meet customer expectations and corporate goals.

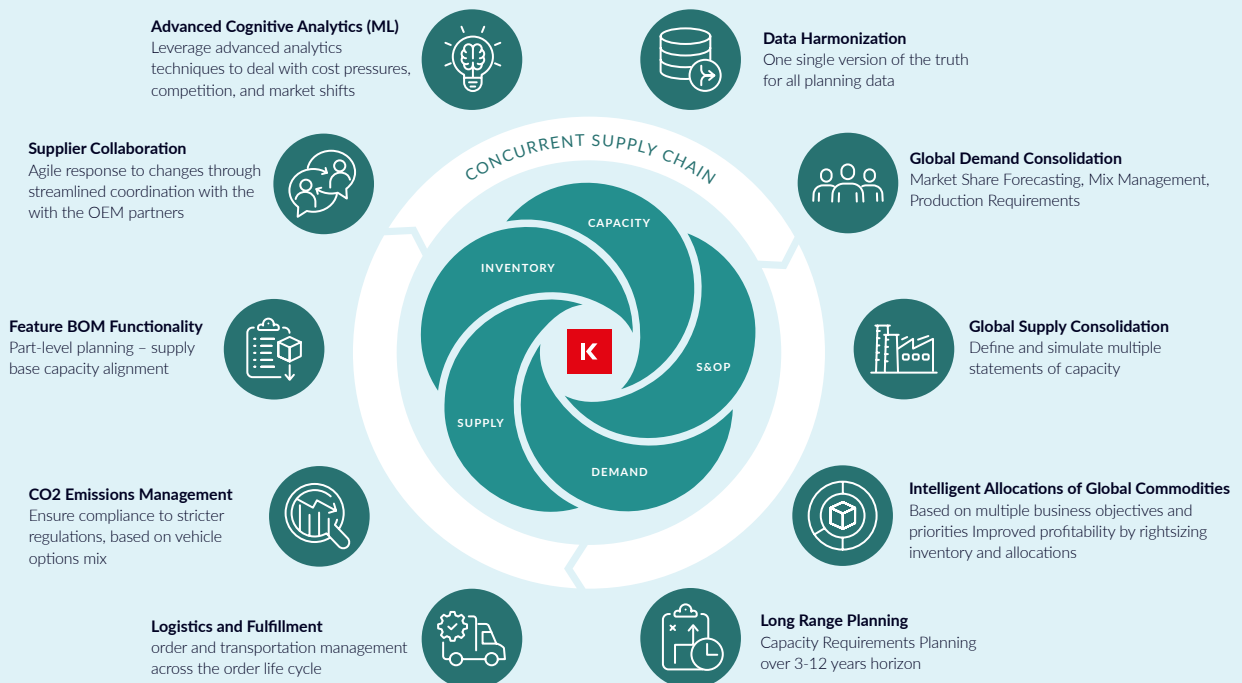
While the concept of “orchestrating” specific parts of the supply chain isn't new, supply chain orchestration is emerging as a new sub-segment of supply chain management—bringing together the most critical activities into a new synchronized process.

Supply chain orchestration with Maestro rises to the challenge of managing multiple parties, systems, and processes to drive high-performance supply chains that can fulfill on time and in full at the lowest possible cost, and to do so consistently, with resilience to changing demands and conditions.

The result? Happier customers, better network synchronization, and more sustainable profits.

## WHAT MAKES KINAXIS RIGHT FOR YOU?

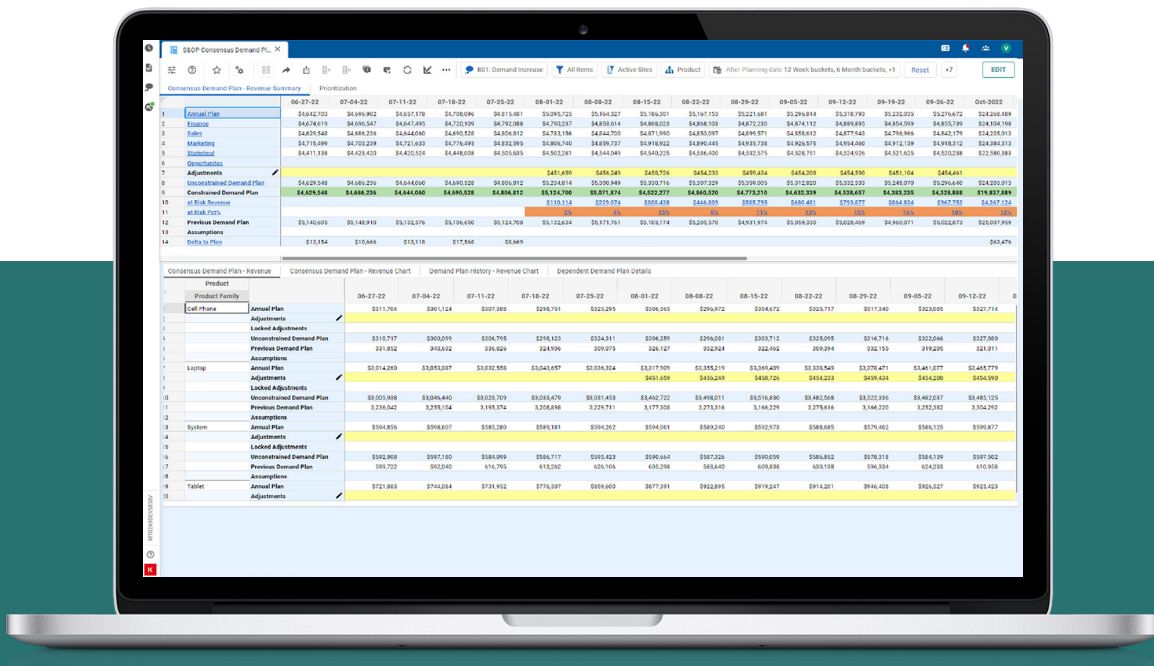
Kinaxis offers auto-specific functionality and capabilities designed to help you overcome your unique challenges



# Global supply, demand and inventory planning

To build a stellar performance vehicle, the foundation has to be solid. And many suppliers are managing their supply chain operations on systems built decades ago, unequipped to manage the challenges of today. These siloed, sequential systems can lead to disconnected processes and money lost, at a time when you simply can't afford it. When the OEMs you serve are placing orders with variable demand and the forecast is uncertain, you can't afford to wait weeks or months to complete an S&OP cycle. The demand for certain programs can fluctuate dramatically, as the EV shift ebbs and flows, and as competition becomes fiercer.

The Kinaxis Maestro S&OP application lets you eliminate data silos and create a transparent end-to-end network – from raw materials to the finished auto part. You're empowered to identify disruptions to your plan, analyze alternate options and prioritize their impacts, and quickly pivot to a new approach. Utilize out-of-the-box dashboards, or create custom dashboards tailored to your KPIs, to provide insights into performance, including on-time delivery rate, margin percentage, key constraint utilization percentages, and revenue.

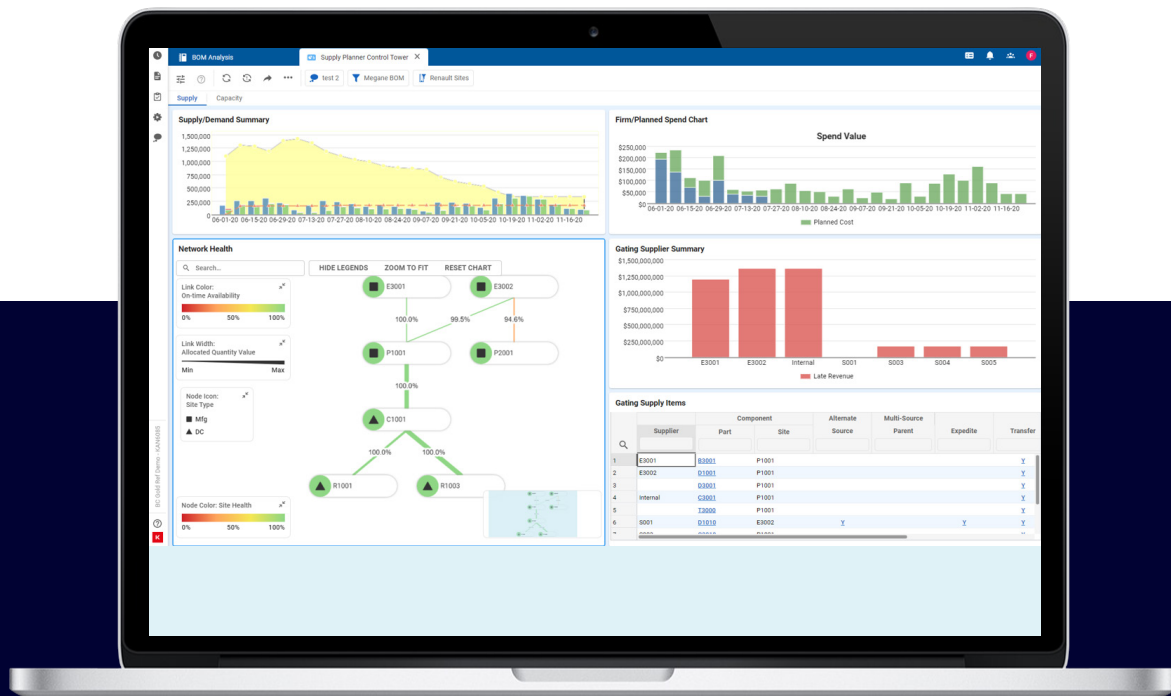


# Supplier collaboration

No other industry rivals the complexity of the supplier network in the automotive industry. The sheer volume of parts required to manufacture a finished vehicle typically numbers in the thousands. This complex web of suppliers often serves many vehicle programs. At so many points in the production process a supplier that is unable to complete an order can bring production to a screeching halt. No one wants to be that supplier.

Maestro delivers advanced supplier collaboration, so OEMs can gain visibility across all their tiered suppliers to stay ahead of disruption. This functionality helps minimize risk by empowering you, the supplier, to review orders; see expected, committed, and actual delivery dates; and alert the network to disruptions.

When disruptions do occur, OEMs and suppliers can efficiently and effectively collaborate and model scenarios to determine the best option to mitigate risk and keep production moving. This collaboration goes beyond constraints to aligning on flexible contracts and tracking execution against them. With supplier collaboration, information sharing between OEMs and suppliers increases transparency around production and transport delays. What's more, with the supplier portal, this information exchange is simplified, accessing data flows and connecting underlying IT systems for easy information exchange.

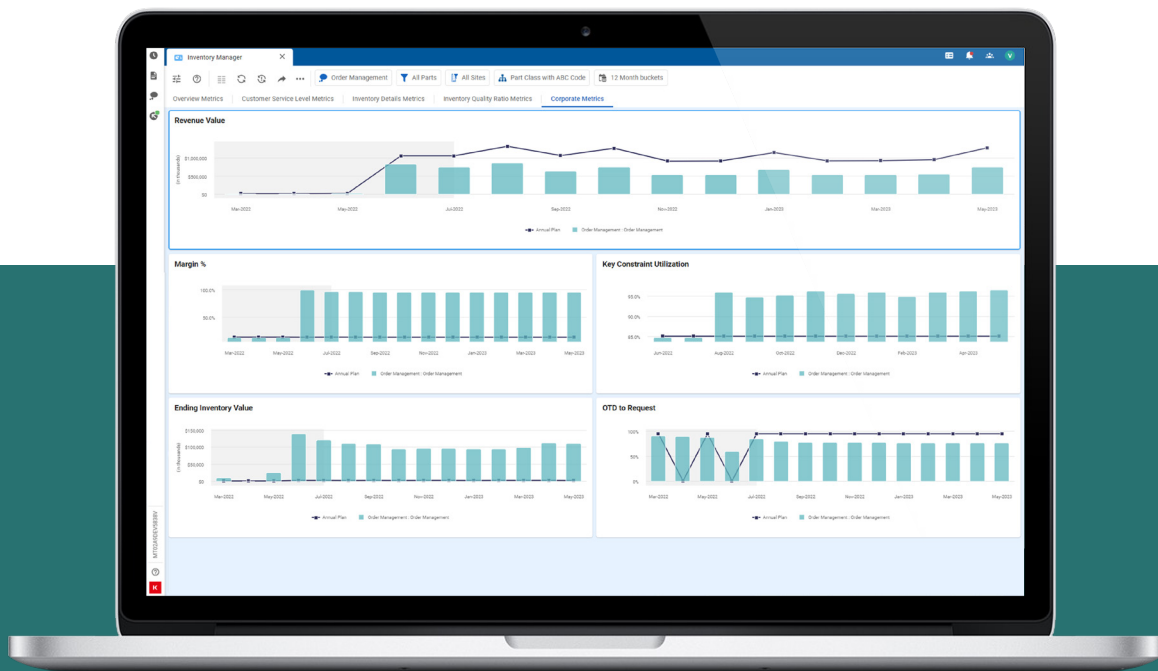




## Inventory optimization

It's costly to miss a commit, but it's also costly to hold excess inventory. And at a time when cost constraints are top of mind for every decision, you need to be able manage your inventory with precision. If you're trying to manage inventory across multiple nodes and facilities around the globe, you need visibility across the organization to understand how much inventory is available at any given time, and where.

By applying inventory optimization, you can avoid excess stock which can consume working capital. You can also improve delivery times to strengthen customer relationships; free up working capital to invest elsewhere in the business; reduce risk with real time data; improve inventory turns; and reduce waste across the supply chain. Maestro empowers organizations to achieve upwards of an 18% reduction in inventory while maintaining customer services levels.

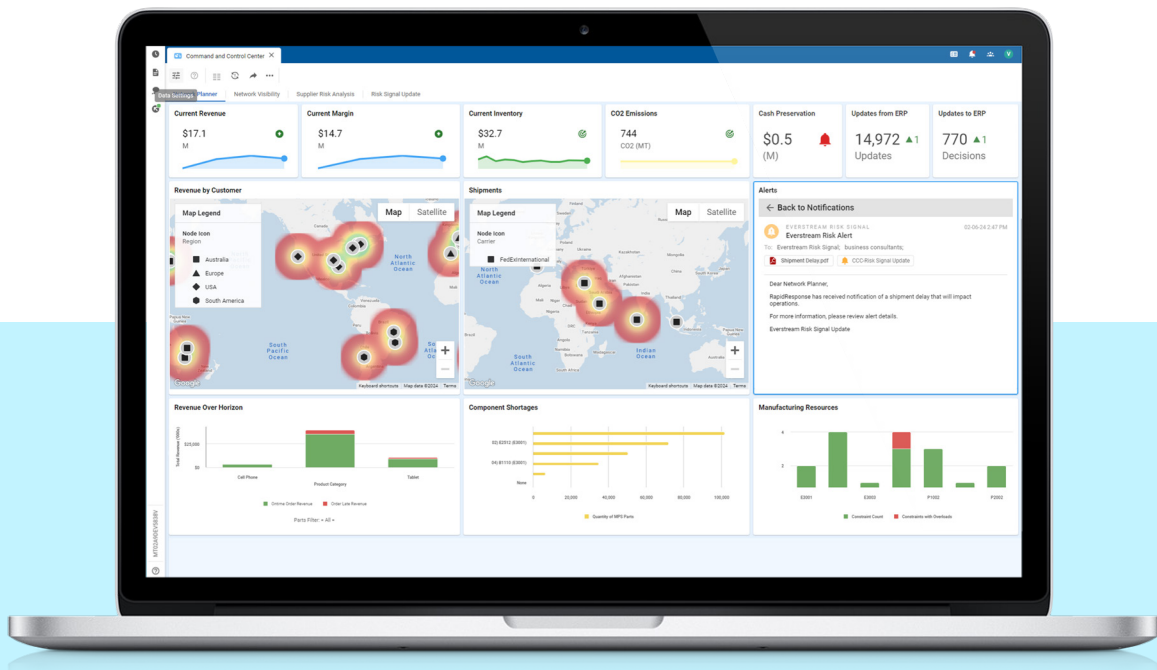


## Logistics and fulfillment

The need for fulfillment perfection is greater than ever to satisfy OEM demand, adhere to production schedules, and ultimately delight customers. To meet these requirements, you need to ensure your parts get to where they need to be, under tight deadlines. Orchestrating from production through execution to last-mile delivery is essential for fulfilling contract obligations to the OEMs you serve.

Kinaxis order and transportation management capabilities enable you to automate and optimize logistics across the full order life cycle. Dynamically reserve inventory, allocate orders, and automate and optimize decisions across all carriers and modes, including parcel, to support just-in-time deliveries at the best cost.

Maintain OEM relationships with greater reliability and transparency with end-to-end visibility and documentation across every touch point and transaction during multi-leg, multi-modal supply chain execution. Stay ahead of disruption with real-time exception alerts and always-on, optimized, automated re-planning, and take the best action directly within the application. Automatically provide execution updates back to planning to keep everyone on the same page and supply and demand in sync.



# VALIDATION FROM THE EXPERTS

If you'd like validation that Kinaxis is a Leader in supply chain planning solutions, look no further than Gartner®.

The 2024 Gartner® Magic Quadrant™ for Supply Chain Planning Solutions positions Kinaxis highest on Ability to Execute. This also marks the tenth consecutive time Kinaxis has been recognized as a leader, solidifying our proven track record of bringing innovation to life.<sup>2</sup>

In the 2023 Gartner Critical Capabilities report, Kinaxis scored above average in all 15 capabilities and was ranked top in the following areas: supply planning basic functionality, multi-enterprise planning, decision/plan alignment, process management, data integration, scenario management, user experience, scalability and performance/speed, and solution extensibility.



“We used to plan in monthly cycles. But now our planners talk about concurrency and simulations. You’ll hear them say, ‘Let’s simulate that’. So, now we can make better decisions and we’re getting better at predicting.”

**KAMIL KORCZYŃSKI**  
GLOBAL LOGISTICS PROJECT MANAGER, NORMA GROUP



## ENDNOTES

- 1 Accenture, Resiliency in the making, © 2023 Accenture. [Access the report](#)
- 2 Gartner, Magic Quadrant for Supply Chain Planning Solutions, A. Salley, T. Payne, P. Orup Lund – 2021, 2022, 2023, 2024

Gartner, Magic Quadrant for Supply Chain Planning System of Record – 2014, 2016, 2018

Gartner, Magic Quadrant for Sales and Operations Planning Systems of Differentiation – 2019, 2017, 2015

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