



Synchronizing the automotive supply chain

AI-powered planning, execution and collaboration across the extended network

Business context and challenge

The automotive industry is undergoing unprecedented transformation. Volatile consumer demand across EV, EREV, hybrid and ICE programs, shifting regulations, sustainability mandates, and geopolitical disruption are straining already complex global supply chains. OEMs, Tier suppliers and aftermarket organizations must navigate blurred demand signals, compliance and traceability requirements, fragmented logistics, supplier capacity constraints, and rising expectations for customization and service.

Most automotive organizations are still operating with disconnected planning and execution systems, static forecasts, and limited visibility beyond Tier 1 suppliers. These blind spots lead to frequent firefighting, inflated total cost of ownership, excess and obsolete inventory, production disruptions, and strained supplier relationships. As the pace of change accelerates, traditional approaches can no longer keep up.

Automotive leaders need an integrated, intelligent approach that synchronizes planning and execution, senses risk early across the extended supply chain, and enables faster, more confident decisions across demand, supply, production and logistics.

The Blue Yonder solution

Blue Yonder helps automotive companies turn uncertainty into opportunity with an AI-driven, cloud-native supply chain platform that unifies planning, execution and collaboration end to end.



Blue Yonder delivers

20% reduction in working capital million inventory reduction with Blue Yonder WMS

30% improvement in service levels

25% lower transportation and labor costs



Key benefits

- Faster response to demand volatility across EV, hybrid and ICE programs
- Lower logistics and production costs through synchronized execution
- Greater agility for configure-to-order and personalized production
- Early risk detection with multi-tier supplier visibility
- Built-in compliance and traceability for sustainability mandates
- Improved service levels with less inventory and working capital
- Stronger supplier collaboration and resilience during EV transition

By connecting Integrated Business Planning, Demand and Supply Planning, Production Planning and Scheduling, and real-time execution across transportation, warehousing, and order management, Blue Yonder enables automotive organizations to sense, simulate, and solve disruptions before they impact the line.

Cognitive planning, predictive and agentic AI, and a single, real-time data model allows manufacturers to dynamically align production, inventory, logistics and supplier capacity to true market demand. Multi-tier visibility and collaboration across the Blue Yonder Network provide early warning of risks, built-in compliance and traceability, and faster, more coordinated responses across OEMs, suppliers and partners.

Backed by deep automotive expertise, Blue Yonder Professional Services accelerates time-to-value and ensures sustained adoption through strategic advisory, implementation, continuous optimization, and change management.

Capabilities

Demand and supply planning

Confident, market-aligned forecasting

Blue Yonder enables automotive manufacturers to move beyond static forecasts with AI-driven demand sensing, scenario planning and integrated business planning. By continuously incorporating market signals, policy shifts, channel changes and consumer behavior, planners can dynamically adjust forecasts for models, trims and options.

Demand and supply planning aligns production, inventory and capacity decisions to real demand, improving forecast accuracy, reducing bias and lowering working capital. Scenario simulation allows teams to evaluate EV and ICE mix changes, supplier constraints and capacity tradeoffs before committing production plans.

Business outcomes include:

- Improved forecast accuracy and forecast value-add
- Reduced excess and obsolete inventory
- Faster response to demand volatility
- Higher service levels and production efficiency

Key solutions

- Integrated Business Planning
- Demand and Supply Planning
- Production Planning and Scheduling
- Inventory Optimization
- Order Promising and Optimization
- Network Design and Utilization
- Allocation and Replenishment
- Order Management and Commerce
- Supply Chain Command Center
- Sustainable Supply Chain Manager
- Transportation Management (TMS)
- Warehouse Management (WMS)
- Warehouse Labor Management (WLM)
- Order Management (OMS)
- Returns Management (RMS)
- Blue Yonder Network
- Blue Yonder Platform

Blue Yonder is the **#1** leading supplier for supply chain planning in the automotive industry with a market share of **38.5%**

Synchronized execution

Unified logistics for lower total cost of ownership

Disconnected execution systems drive missed delivery slots, premium freight and poor plan adherence.

Blue Yonder synchronizes planning with execution by connecting transportation, warehouse and order management with upstream plans in near real time.

AI-powered orchestration optimizes routing, appointment scheduling, yard and warehouse operations, labor and capacity allocation, and transport execution. Predictive ETAs and continuous replanning improve coordination across suppliers, plants and distribution networks, turning logistics from a reactive cost center into a competitive advantage.

Business outcomes include:

- Reduced expediting and transportation costs
- Improved on-time, in-full delivery performance
- Better adherence to production and delivery plans
- Greater execution visibility and control

Multi-tier visibility and collaboration

Built-in compliance, transparency and resilience

Automotive supply chains extend far beyond Tier 1, yet many organizations lack visibility into upstream inventory, capacity, compliance and risk. Blue Yonder delivers multi-tier visibility and collaboration through a connected digital network that links OEMs, suppliers, logistics partners and customers.

Real-time insights into inventory, capacity, supplier health and sustainability data enable proactive risk detection, traceability and compliance. AI-driven alerts, recommendations and workflows help teams mitigate disruptions early, ensure audit readiness and reduce manual data chasing.

Business outcomes include:

- Earlier risk detection and fewer production shutdowns

- Built-in traceability for sustainability and regulatory compliance
- Reduced stockouts and noncompliance risk
- Stronger collaboration across the extended supply network

Production planning and scheduling

Agile, demand-driven production

As consumers demand customization and faster delivery, automotive manufacturers must move beyond rigid make-to-stock models. Blue Yonder enables agile, configure-to-order and hybrid push-pull production with advanced planning and scheduling capabilities.

Order slotting, order sequencing and detailed scheduling dynamically align labor, machines and materials to real-time demand and constraints. Manufacturers can optimize model mix, reduce changeovers, increase throughput and respond faster to shifts across EV, hybrid and ICE programs.

Business outcomes include:

- Reduced inventory and freed-up working capital
- Higher throughput and production efficiency
- Shorter lead times and improved customer satisfaction
- Better alignment of production with true consumer demand

Why Blue Yonder

Blue Yonder uniquely combines AI-driven planning, real-time execution and multi-tier collaboration on a single, cloud-native platform built for automotive complexity. Recognized as a long-standing leader by Gartner and trusted by more than half of the world's automotive manufacturers, Blue Yonder delivers the scale, intelligence and resilience the industry demands. With deep automotive expertise and lifecycle support from Blue Yonder Professional Services, manufacturers achieve faster time to value, sustained performance improvement and lasting transformation across their supply chains.