

Integrated Demand & Supply Planning

for CPG, F&B and Life Sciences Industries

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Integrated Demand & Supply Planning

The emergence of Industry 4.0, a competitive landscape and increasing market demands are pressuring manufacturing organizations to deliver products faster and with greater flexibility, while simultaneously reducing costs. In the digital age, planning is about shaping demand and sensing the market. Volatility that impacts production and supply is largely generated in the ecosystem beyond the traditional walls of the supply chain.

Blue Yonder's Integrated Demand & Supply Planning for consumer industries combines the world's leading forecasting technology with market-leading supply planning and factory planning capabilities, converged with a common data model and interfaces to enable **integrated supply chain planning in the cloud**.

- **Demand Planning:** Blue Yonder ingests hundreds of demand-driving variables and uses machine learning to provide a unique demand projection with calculated business impact and risk.
- **Supply Planning:** Supply planning and replenishment capabilities help you stage the right inventory throughout your distribution network, minimizing stock-outs while maximizing inventory turns in your supply chain.
- **Production Planning:** Blue Yonder's solution provides flexible model representation, including simultaneous material and capacity planning. The advanced algorithm in Blue Yonder's Sequencing yields a globally optimal set of capabilities for your manufacturing scheduling challenges based on user-defined scheduling objectives. These user-defined objectives, such as on-time delivery and resource utilization, can be modeled to reflect your manufacturing strategies at each location.



Integrated Demand & Supply Planning

Key Benefits

- **Maximize revenue** and create a faster time to cash by anticipating desired segments, demand shaping and granular demand forecasts.
- **Holistic inventory** optimization improves customer experience while reducing costs by placing the right inventory at the right time while reducing excess and obsolete inventory throughout the network.
- **Reduce expedites** and transfers by creating optimized and agile supply chain plans.
- **Boost productivity** with collaborative, outcome-based planning.

Solutions

- Demand Planning
- Consensus Planning
- Supply Planning
- Inventory Optimization
- Production Planning

Real Results

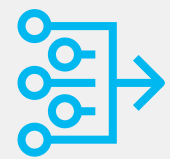


>80%
Improved
Forecast
Accuracy

>30%
Return on
Investment

“Blue Yonder is delivering huge value because we know how to sell our products, who is buying them, how much they need and what it will cost to fulfill orders. We can make fact-based decisions that minimize our cost to serve, while improving our cash flow and operating expenses. We’ve already generated an early 30% return on investment — and we’re just getting started.”

— **Jaime Ponce, Director,
Integrated Supply Chain**



Gather and clean input data

- Implement demand classification, parameter tuning, and data cleansing



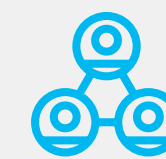
Exception management

- Review demand/supply exceptions
- Gain visibility to problem areas; catching and resolving problems early



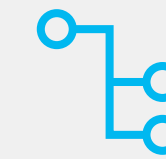
Demand shaping and sensing

- Insights into performance vs. target
- Tracking of key promotions associated with launch
- Use ML to fine tune forecast using real-time weather, news, event data



Consensus demand and master planning

- Collaborate on plans with key stakeholders to discuss alternatives based on operational plans and associated CTS/margin/ revenue, risk analysis and options to close demand gaps



Production scheduling

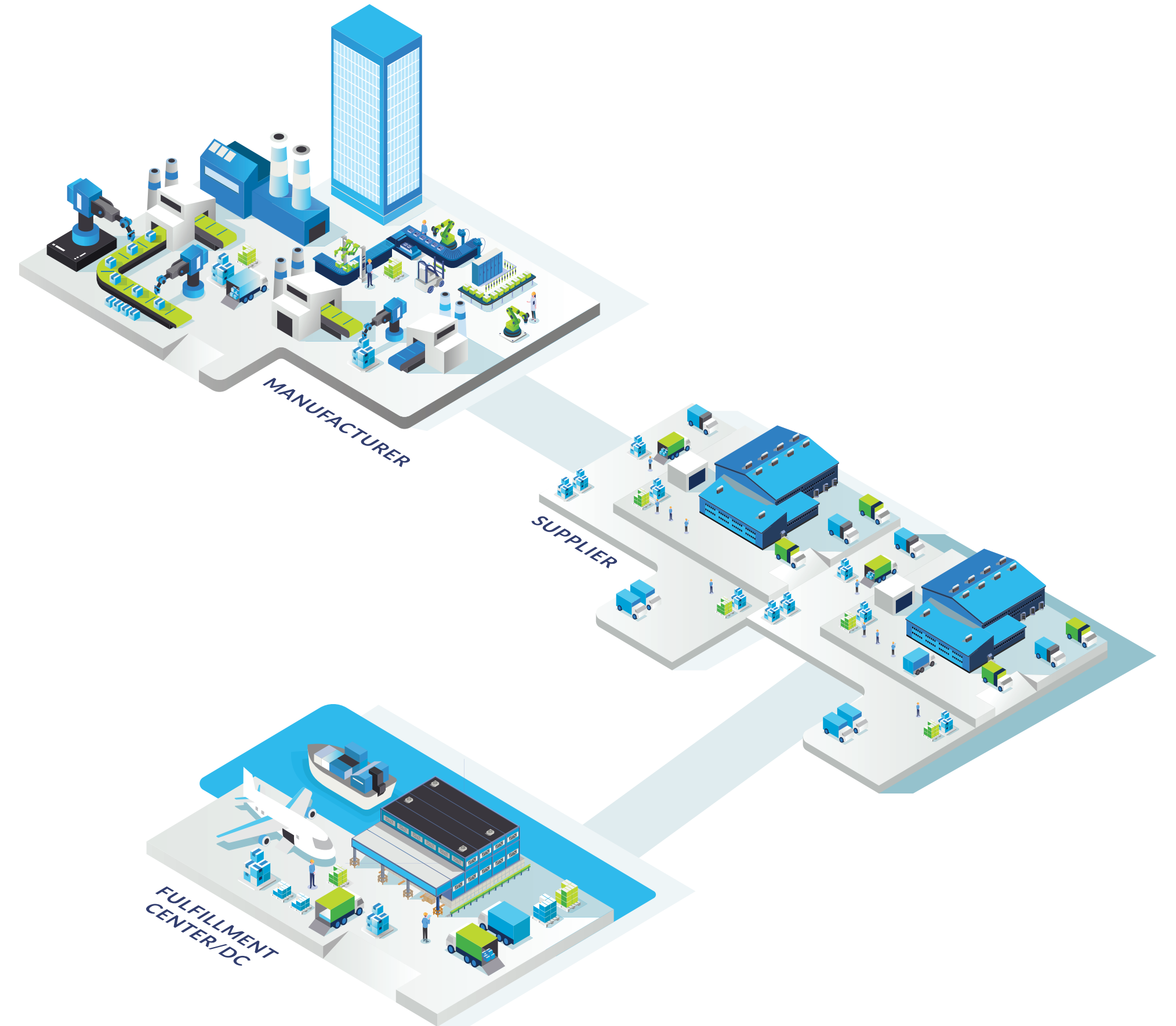
- Establish the best sequence of orders that, when executed, reduces wait time between processes
- Align with factory actuals

Inventory & Deployment Planning

While there's no silver bullet solution to getting the right product, through the right channel, with convenience and speed at the heart of the engagement, manufacturers need to take steps to improve their inventory deployment. This effort begins with a rigorous analysis of the root causes of stocking problems, more detailed inventory classifications, and the application of sophisticated analytical tools.

Blue Yonder has specifically designed inventory optimization capabilities to meet the daily real-world needs of its customers. By leveraging Blue Yonder's years of experience and features like user friendly interfaces, businesses can quickly launch inventory optimization for fast performance results and a rapid ROI.

- **Micro-segmentation:** Based on consumption patterns, volume, revenue, margin, cost-to-serve, product maturity, channels, criticality, velocity, seasonality and other key attributes, products are governed by a set of highly customized supply, demand and inventory strategies that are tailored to each micro-segment.
- **Cross-industry segmentation:** Make-to-stock or make-to-order, inventory optimization can be deployed across various industry sectors — from high-tech manufacturing, semiconductors, food and beverage, consumer durables, consumer electronics, and apparel and fashion, to life sciences and aerospace and defense.
- Better decision making supports strategic informed executive decision making via scenario management capabilities.
- **Supply planning & inventory:** Optimize end-to-end plans to meet and exceed goals with consideration of capacity, material and logistics constraints and campaign planning with pre-build and shelf-life. Improve plan quality significantly with predictive analytics and detailed analysis. Further optimize with industry-leading multi-echelon inventory optimization. Align co-manufacturing, re-pack and MRP (input to finite scheduling & purchasing)



Inventory & Deployment Planning

Key Benefits

- Deliver accurate and reliable inventory commitments to consumers across every channel in real-time.
- Increase customer service with lower resource investment.
- Improve flexibility and accuracy for inventory management.
- Reduce inventory investment and enable multi-echelon inventory optimization.
- Improve the accuracy and performance of daily replenishment and inventory planning.

Solutions

- Supply Planning
- Inventory Optimization

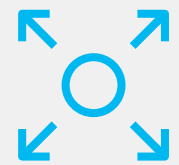
Real Results



- Increased supply chain visibility
- Improved operating efficiencies
- Improved production order planning
- Standardized and synchronized processes throughout organization

“Implementing Blue Yonder’s solutions has provided Merck Serono with one synchronized view of demand. Having only one demand data repository for the entire company allows us to easily follow an aligned process across the organization. Having only one application instance forces us to define clear rules in terms of forecast data availability and process. We now have timelines for data availability and for forecast submissions within the whole organization.”

— Head of Supply Chain Process, Merck Serono



Distribution planning

- Tracking and prioritizing distribution for key account planning
- Country of origin



Alert, exceptions management

- Deviation in sales vs. forecast
- Safety stock limits
- Inventory expiry
- Days of coverage



Inventory allocation

- New orders, rush orders, channel allocation
- Quality and inventory management
- Collaborate with demand planner and sales to allocate supply



Deployment planning

- Stock rebalancing
- Reduce customer penalties
- Reduce inventory
- Reduce obsolete stock



Execution

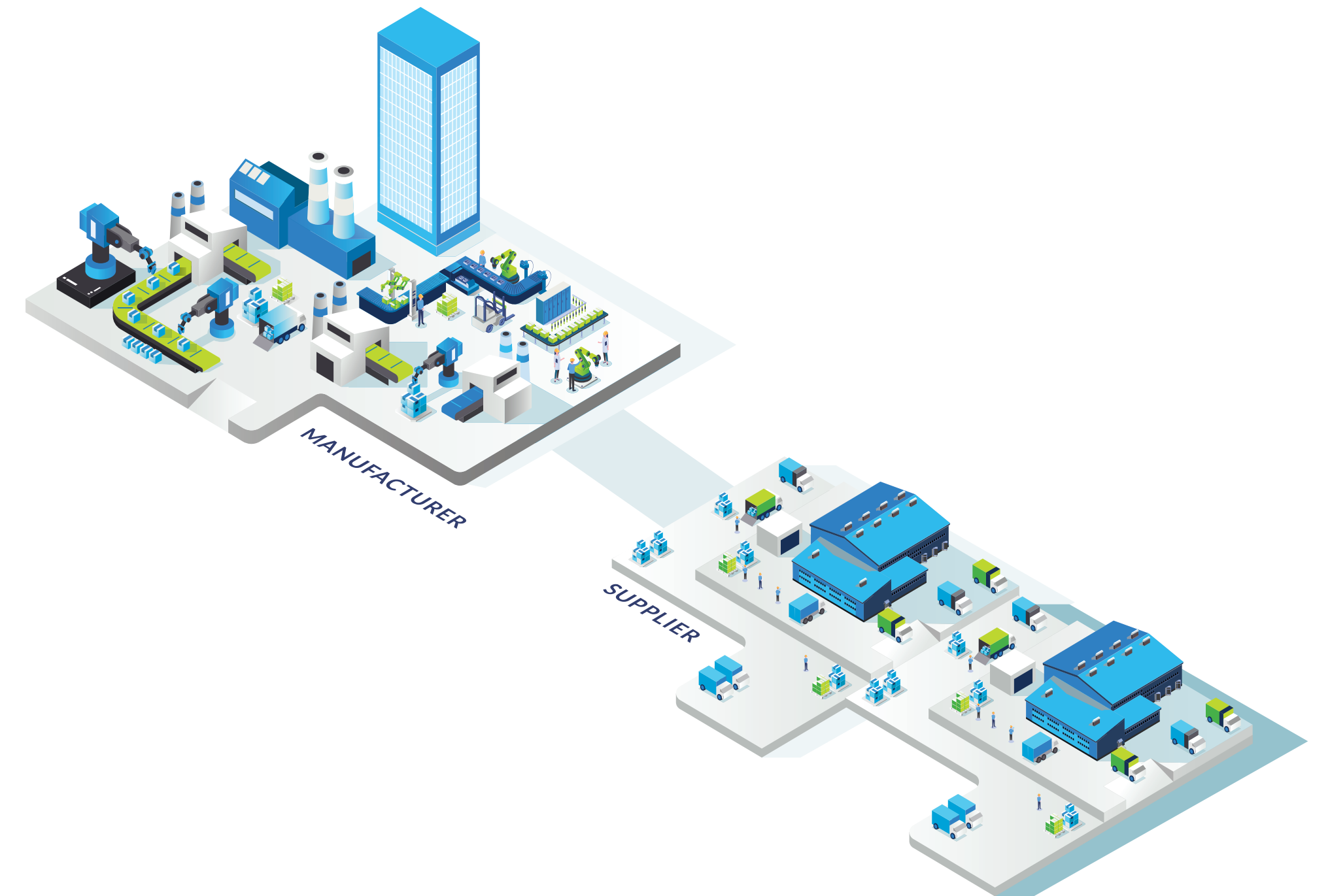
- Optimize load building
- Production orders for replenishment

Supplier Collaboration

Suppliers are an intrinsic part of the supply chain. It does not matter what business you are in, what products you manufacture, distribute and sell, or what part of the world you are in. And it doesn't matter where in the supply chain you are, existence without collaboration with your suppliers is impossible. With service-level acceleration, increased direct-to-consumer deliveries, and urbanization of the workforce and transportation landscape, organizations increasingly rely on their partners to ensure that product availability meets their customers' expectations.

Blue Yonder's Platform sits at the heart of the supply chain ecosystem, facilitating the sharing of information as well as the automation of the response and optimization mechanisms. The capabilities include:

- **Real-time visibility:** Providing consistent information in real-time and allowing internal and external partners' access to update assumptions, is critical.
- Enable collaboration among internal and external stakeholders in real-time for superior visibility.
- Provide enhanced actionable data analytics for carriers, vendors and suppliers to effectively act.
- Ingest big data and make suggestions, or initiate remedial actions, based on near real-time information from the ecosystem and network of providers



Supplier Collaboration

Key Benefits

- **Predict & pivot:** Shift suppliers quickly when disruptions occur by collaborating, planning and executing contingencies quickly and efficiently.
- **Value creation and sharing:** Collaborations promise equal benefits for both parties. In some cases, collaboration can deliver an increase in sales. In other cases, however, the collaboration might create as much value overall but the benefit could fall more to one partner than to the other.

- **Cost benefits & increased responsiveness:** One of the greatest benefits from long-term supply chain collaboration are the cost savings that result from automated procedures over the life of the relationship.
- **Reduce risk:** Know the status of your suppliers in real-time, so you can react quickly when disruptions occur. Create new contracts in seconds, reducing disruptions.

Solutions

- Sales & Operations Planning
- Supply Planning
- Network Design



Rough cut capacity planning

- Strategic supply capability matching
- Design & model scenarios based on projections & SLAs



S&OE supply / capacity forecast - commit

- Suppliers and co-packer collaboration
- Match supply to demand projections
- Alternate supplier sourcing
- Reduce forecast-commit cycle time



Short term order collaboration

- Procure to pay
- Real-time purchase order expedite requests



Supply resolution

- Simulate alternate suppliers and co-packer capacity expansion
- Automate common resolutions
- Collaborate with stake-holders



Execution

- Reduce order creation time
- Monitor inbound shipment status

Key Benefits of Integrated Demand & Supply Planning

As companies adjust to the changing market dynamics, a lack of visibility into demand drivers will result in a disconnect between demand & supply plans, causing misaligned inventory and stock outs.

Blue Yonder's demand & supply matching drives continuous demand and supply balancing by optimizing the end-to-end supply chain for materials, capacity, labor, inventory and production schedules.

Key Benefits

- Increase the quality of demand forecasts, using leading-edge ML technology.
- Create material- and capacity-optimized supply plans, including fast demand-supply scenarios, to maximize customer service and revenues.
- Strategically allocate limited supply to different channels and customers, in line with business objectives.
- Promise orders in real time, aligned with supply allocations.
- Optimize cost-to-serve with intelligent segmentation, automated planning parameter tuning and optimized inventory targets.
- Create optimized factory schedules to maximize throughput, while minimizing inventory and operating expenses.
- Boost planner productivity with collaborative, outcome-based planning.

Solutions

- Demand Planning
- Supply Planning
- Inventory Optimization
- Production Planning
- Allocation Planning & Order Promising

Real Results



<5.2%

Reduced Production Changeovers

“With our business growth and increasing production complexity, we need an automated system to perform forecasting and production planning at much higher accuracies. Thanks to Blue Yonder's Planning solutions, we've been able to improve our forecasting accuracy and reduce the number of changeovers and changeover times. Blue Yonder will play a key role in helping us meet our challenges as we continue to grow.”

— Director of Supply Chain Planning, Swire Coca-Cola China

Bridging the Gap

Demand Planning

Supply Planning

Integrated Demand & Supply Planning

Blue Yonder Supply Chain Planning helps bridge organizational silos and gaps in planning timeframes, closing the loop between demand and supply planning.

Increased profitability

Achieve higher availability and lower costs through micro-segmented demand and predictive forecasting.

Minimized inventory & waste

Drive inventory deployment and accurate demand and assortment planning to reduce waste with dynamic segmentation.

Increased revenue

Better orchestrate supply and execution to fulfill opportunities through ML-enabled predictive demand.

Closed loop planning

The supply chain becomes a powerful, boundaryless closed loop that is more intelligent, responsive and agile to changing business conditions.

End-to-end confidence

Gain better control of the entire supply chain, ensuring end-to-end visibility of inventory and labor while minimizing risk and providing delivery confidence.

Increased agility

Predict and pivot to demand shifts, competitor product introductions, changing material costs and other supply chain disruptions.

Optimized inventory

Stage the right inventory throughout your distribution network, minimizing stock-outs and maximizing inventory turns in your supply chain

Increased productivity

Improve planner productivity as a result of flexible, fast plan analysis.



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