## **Explore the Future of High-Tech**

Discover how Blue Yonder solutions help high-tech companies transform volatility into a competitive edge



### **Explore the Future of High-Tech**

The global high-tech industry is experiencing unprecedented growth, fueled by 5G networks, artificial intelligence, product autonomy, augmented reality and other advancements.

Yet, as the recent past has demonstrated, that growth is not without its challenges. High-tech companies are pressed to meet customer demand for greater innovation, higher service levels, faster launches and lower price points — while also protecting profit margins.

Perhaps the single greatest challenge is managing extreme market volatility by accurately aligning supply with the moving target of demand. But the results – incredible new levels of precision and responsiveness – are well worth the investment. The good news? High-tech companies that successfully manage market volatility will achieve a significant edge over their competitors. But that means building the end-to-end supply chain around speed, visibility and automation. High-tech companies need to obtain a real-time view of both internal and external conditions, seeing farther ahead at a higher resolution. Processing real-time information almost instantly, at high levels of granularity, requires a leap in capability and a digital transformation. But the result incredible new levels of precision and responsiveness — are well worth the investment.

From network design and high-level planning to daily execution, Blue Yonder helps support the success of the world's high-tech leaders. By achieving real-time visibility and enacting an immediate response, often with no human intervention, high-tech companies can not only survive, but thrive, in the volatile new normal.

Inability to adjust to the new normal



Disconnect between demand & supply



Blue Yonder Solves Real Challenges

Frequent delays in fulfillment



No scenario

planning

No real-time visibility

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### In this eBook, we'll discuss five use cases

Perhaps the single greatest challenge is managing extreme market volatility by accurately aligning supply with the moving target of demand. The worldwide chip shortage revealed weaknesses in some companies' global supply chains and planning processes that left them unable to respond quickly enough to shifting conditions.

- 1. Network Design & Optimization
- 2. Integrated Business Planning
- 3. Integrated Demand & Supply Planning
- 4. Omni-Channel Execution
- 5. Real-Time Visibility & Collaboration

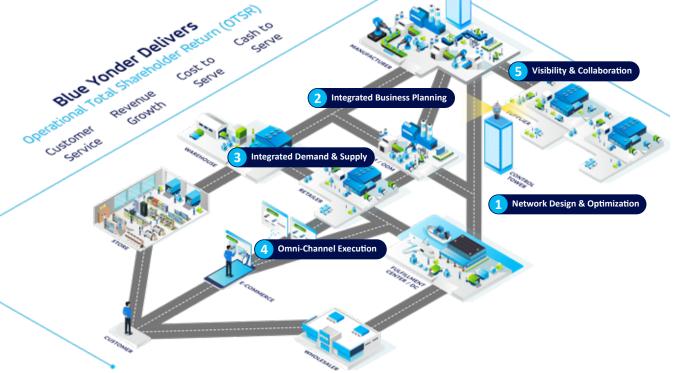
### **Optimizing the High-Tech End-to-End Supply Chain**

Blue Yonder helps high-tech companies maximize operational total shareholder return (OTSR) by truly connecting business strategy, financial strategy, supply chain strategy and operational strategy under a common plan. This methodology results in meeting key business objectives including customer service levels, revenue growth, cost-to-serve goals and cashto-serve targets.

High-tech companies can manage volatility, deliver outstanding customer service and support strong financial results by focusing on five strategic actions:

- Designing an end-to-end network that eliminates disconnects, blind spots and lag times
- Closely integrating their business planning processes for a high-impact, coordinated response

- Bringing together demand and supply planning to minimize shortages and excess inventories
- Supporting flawless execution across every fulfillment channel
- Gaining real-time visibility to support a fast, orchestrated response



# **1** Network Design & Optimization

The complexity of today's global high-tech supply chains has made them especially vulnerable to any disruption. Sudden supply shortfalls, demand drops, channel shifts and other events bring a cascading array of unintended consequences, causing the rapid breakdown of many high-tech networks.

As evidenced by the global chip shortage, this lack of visibility, agility and resilience poses major risks not just for individual companies, but also for society at large. To succeed in today's uncertain business landscape, high-tech companies must enact network designs that are agile and able to pivot quickly, centered on customers and their needs, and synchronized across increasingly complex networks of multitiered suppliers. The chosen design must enable collaboration, prevent supply gaps and disconnects, and improve overall velocity.

One fact was made clear in recent years: For high-tech leaders, network optimization can no longer be an annual event, but instead must be a monthly or weekly process. As the market changes, the supply chain must also transform. High-tech companies must continuously assess their network designs to ensure that they are providing optimal results in terms of speed, agility, resilience, profitability, innovation, collaboration and sustainability.

By digitizing their operations via Blue Yonder solutions, high-tech companies can simulate scenarios and act quickly to configure, and reconfigure, their networks for extreme speed and responsiveness.



- **Optimize decisions** by quickly evaluating business scenarios, including production cycles, product handling, process and transportation lead times, and safety stock
- Improve sustainability and costs by reducing the carbon footprint and travel miles
- Increase flexibility by creating multi-year strategic or weekly network plans
- Increase competitiveness via globalization, digital disruption and customer centricity

#### Solutions

- Network Design
- Transportation Modeling

#### **Real Results**



## Reduced cost of goods sold by 1%

within two months

## **2** Integrated Business Planning

Whether disruptions occur on the supply side or the demand side, integrated business planning (IBP) enables high-tech companies to respond in a manner that aligns with the company's long-term strategic plan and desired business outcomes. IBP means having real-time global supply chain visibility so high-tech companies can sense when something goes wrong — as well as advanced analytics and what-if scenario planning so a strategic response can be defined quickly.

A well-executed IBP process, supported by bestin-class digital capabilities, positions high-tech companies to eliminate supply chain disconnects, make network-wide operations more efficient and conduct rapid, thorough analysis for faster, betterinformed sales and operations decisions. Via integrated business planning, customer and endconsumer demand can be aggregated across industry segments, geographic regions and product hierarchies.

Blue Yonder's exception-based planning framework, driven by artificial intelligence, allows high-tech companies to see and address supply-demand imbalances across the end-to-end supply chain at the earliest possible moment. Business planners can explore a variety of resolution alternatives, determining the best outcome based on probabilistic trade-offs. They can look closely at operational, cost and service impacts before executing corrective actions. Blue Yonder's industry-leading analytics engines enable continuous monitoring and real-time alerting of exceptions, positioning high-tech companies to respond with speed, agility and fact-based decisions. To address the tough realities of the high-tech industry, Blue Yonder supports a continuous feedback loop for planning and execution — harmonizing operations and driving more certain results across the end-to-end network, even in an age of uncertainty.



- Create a streamlined, scenario-based integrated business planning process that improves collaboration, minimizes waste and supports sustainability
- Drive cross-functional alignment across the business organization that considers assumptions and risks
- Improve customer service at a lower cost, via reduced inventory
- Enhance understanding of business performance via better, more comprehensive data and analytics

#### Solutions

Sales & Operations
 Planning

Real Results

Lenovo

### 10+ ppt improvement in forecast accuracy

for majority of products

## **3** Integrated Demand & Supply Planning

High-tech manufacturing cycle times can span months but the pandemic has proven that customer demand can change seemingly overnight. In this challenging environment, demand and supply planning must be linked as closely as possible, with production starts tied directly to forecasted demand and planned inventory.

But reconciling real-time demand signals across thousands of SKUs from disparate customer segments makes it extremely difficult to forecast high-tech products accurately. Hightech companies need integrated planning systems that can sense actual demand from all sources, not just extrapolate historical trends, to form an accurate picture of future demand. Blue Yonder can help, with machine-learning capabilities that ingest a variety of demanddriving variables for each SKU, creating a precise sales projection along with calculated business impacts and risks.

Once the organization has a clear picture of demand, Blue Yonder's supply planning solutions provide industry-leading master planning, capacity planning, distribution planning and production scheduling capabilities for complex, global, asset-intensive production. Blue Yonder enables optimized and executable plans across supply networks, along with the ability to think through integrated demand-supply scenarios very quickly. The result? Smart manufacturing that balances changing customer needs with the realities of the physical supply chain, from materials and inventory levels to asset utilization and production capacities.

The volatility of market demand in the high-tech world puts a premium on accurately sensing demand, planning production and optimizing distribution to respond quickly and profitably as conditions inevitably shift. Blue Yonder's integrated demand and supply planning solutions are purpose-built to provide visibility into all critical functions and holistically optimize end-to-end planning processes. Consistently named to Gartner's Magic Quadrants for supply chain planning solutions, Blue Yonder bridges the gap between demand and supply planning, providing a collaborative and connected platform for high-tech companies to gain better visibility and control of the supply chain.



- Increase the quality of demand forecasts, using leading-edge machine-learning 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**

### Western Digital<sub>®</sub>

10%+ improvement

in safety stock and on-time delivery metrics



CUSTOMER

The COVID pandemic has accelerated the shift to e-commerce across every industry, including high-tech. Whether business-to-business or direct-to-consumer, high-tech companies must optimize the process of receiving and confirming customer orders, sourcing products, reconciling inventory, managing warehouse labor, and executing the transportation and distribution of products.

Blue Yonder accelerates and automates these processes, ensuring that every channel and every customer receives the highest possible level of service and fulfillment transparency. Blue Yonder solutions help high-tech companies optimize inventory, minimize costs, maximize service and meet sustainability targets all while making a profit. Inventory and order management capabilities from Blue Yonder provide real-time inventory visibility across the network. High-tech manufacturers can match specific products with individual customers and fulfill orders most effectively based on cost, location and transit times.

ONINIERC

POLESALER

Consistently named to Gartner's Magic Quadrants for warehouse management and transportation management, Blue Yonder delivers unparalleled expertise in the execution of customer orders across channels. Blue Yonder's fulfillment optimization engines ingest real-time data and make fact-based, on-the-fly decisions that balance cost and service outcomes across labor, warehouse management and transportation management.



- Drive growth through e-commerce, direct and distribution channels with a single view of real-time inventory
- Enable end-to-end control and real-time visibility of inventory, from suppliers' production to the end user
- **Grow revenues and margins** with improved fulfillment accuracy and productivity via enhanced on-time in-full (OTIF) performance
- Achieve operational transformation by leveraging AI/ML-driven advanced routing, container optimization and in-transit real-time optimization
- **Optimize transportation** costs with precise network performance evaluation and predictive modeling

#### Solutions

- Inventory & Order Management
- Transportation
  Management
- Warehouse Management
- Labor Management

#### **Real Results**



5% gains

in ecommerce revenues and new customers

## **5** Real-Time Visibility & Collaboration

Given the extreme demand volatility that characterizes the industry today, it's essential for high-tech companies to be able to see, analyze and act on information across their supply chains in real time. It's also critical to learn from experiences such as product shortages, and become better at sensing and responding to supply chain risks and opportunities in the future.

Blue Yonder's Control Tower was designed to address that need by providing real-time, endto-end supply chain transparency. By visualizing the current flow of goods across suppliers, factories, distribution centers, customers and distributors, high-tech companies can identify and address any events or exceptions that will significantly impact supply and demand.

Blue Yonder's intelligent response framework positions high-tech leaders to prioritize their responses to current and predicted disruptions based on severity and impact, as well as conduct real-time analysis and run what-if scenarios so they can understand trade-offs and optimize outcomes. Blue Yonder also supports real-time collaboration with network partners to execute strategic plans, proactively identify bottlenecks, develop resolution strategies, and track and manage execution throughout the product lifecycle. Backed by artificial intelligence and machine learning, Blue Yonder solutions exceed the abilities of human cognition to recognize and address complex supply chain issues. They continually improve in their ability to recognize exceptions, prescribe actions and automate the execution of new plans.



- **Empower and engage planners** to be more productive and effective decision makers, with end-to-end visibility in real time
- **Collaborate systematically with suppliers** on forecasts and capacities
- Enable control, visibility and accuracy from suppliers' production all the way through to the end customer

#### Solutions

- Control Tower
- Supplier Collaboration
- Customer Collaboration

#### **Real Results**



### **Real-time**

end-to-end supply chain visibility



## There's a reason why the world's high-tech leaders run on Blue Yonder.

No one understands the complex high-tech supply chain or the market pressures faced by high-tech manufacturers — better than Blue Yonder.

Blue Yonder's solutions for the high-tech industry provide a unique, integrated suite of supply chain planning and execution capabilities designed specifically with visibility, speed and agility in mind. These capabilities facilitate network-wide collaboration and process alignment, creating end-to-end supply networks that are agile, synchronized and optimized.

Market volatility, supply chain complexity and supply uncertainty are not going away postpandemic. The need for digital transformation has never been clearer or more urgent. As the world's high-tech leaders strive to master volatility and scale for tomorrow, AI, analytics and autonomous decision-making are critical competencies. The high-tech industry is experiencing a true revolution, and Blue Yonder is at the leading edge of enabling this change.

### BlueYonder

#### blueyonder.com

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