



Driving Greater Transportation Service and Savings for LSPs

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Continuously providing improved service and cost savings for customers has always been at the heart of the business model for Logistics Service Providers (LSPs). But the broad scope of services, customer obligations and geographic coverages supported by most LSPs create a wide range of requirements in transportation.

While some LSPs have chosen to develop in-house technology solutions, which tend to be lengthy and costly projects, others deploy commercially available transportation management solutions for their depth of functionality, ease of use and continuously updated technology.

To add to the complexity, some LSPs are running multiple transportation technology solutions due to acquisitions, special customer requirements or expansion of service offerings which their original solution could not handle. But in today's marketplace, where end-to-end supply chain visibility is the foundation of customer service and business success, disjointed or inadequate solutions can be a deal-breaker. Based on their technology choices, LSPs can be either part of the problem or part of the solution. That's why many of the world's leading LSPs have chosen Blue Yonder's SaaS-based transportation management solution residing in the Microsoft Azure Cloud to manage their complex transportation operations. Here's why.

Supporting the complexity and diversity of transportation requirements that LSPs must handle in a single solution while supporting customers' need for end-to-end visibility requires a transportation platform built to seamlessly handle all of the transportation management processes.

These include network modeling, procurement, freight order management, planning, execution and analytics.

Network modeling

LSPs are often responsible for managing highly complex, multi-modal networks that are subject to change based on market conditions, customer strategy changes, new customer needs and many other causes. Without a robust network modeling tool, it is nearly impossible to predict and properly respond to the changing scenarios as they occur. A lack of timely, intelligent modeling can lead to increased costs and declining service outcomes.

Transportation costs can often be significantly reduced by leveraging insights from modeling advanced routing, consolidation and modal strategies prior to initiating customer operations. Using artificial intelligence (AI) and machine learning (ML), modeling can analyze new business scenarios against historical data and current trends and sentiments so that LSPs can propose and price the new business confidently.

Due to a lack of adequate technology support, many LSPs have attempted to do modeling manually and/or with spreadsheets, but this is a time-consuming process that typically leaves out the wide range of variables that can produce the best solutions for complex network needs. With Blue Yonder's AI-infused modeling capabilities, LSPs can rapidly and intelligently model multiple network strategies and perform "what if" analysis to evaluate the best balance of service levels and costs for their customers.



A key feature of the solution is its ability to do both street-level and logical route modeling. Street-level routing is done from a turn-by-turn perspective and optimizes primarily for mileage reduction. Logical routing leverages mileage services and optimizes for least cost in the context of pickup and delivery windows. Street-level routing is typically employed by LSPs with private fleets, whereas logical routing is most valuable in a purchased transportation environment.

The modeling solution works seamlessly with Blue Yonder's planning capabilities since they use the same algorithms. This seamless communication enables immediate execution of optimized network designs. Multiple network scenarios can be saved and switched on at any time to rapidly adjust to new requirements such as customer seasonality patterns or new product lines. The solution can also help prioritize the implementation rollout, especially in complex multi-model networks common among LSPs.

Procurement

Strategic sourcing, or bid procurement, is an important process for LSPs to set the lane-by-lane cost and capacity foundation for their customers and themselves over the bid period. Especially with the wide fluctuations in pricing and capacity availability in recent years, the procurement process has taken on new significance. Many companies and LSPs have chosen to conduct bid procurements more frequently than the traditional annual basis in order to take advantage of changing market conditions. This is only practical with advanced procurement technology support.

The procurement process must be optimized to support overall cost reduction within contract and capacity constraints. LSPs must consider multiple network constraints such as customer contract requirements, type of facilities, inventory attributes and carrier lane capacity limitations. There are also timing considerations throughout the year. For example, shippers and LSPs tend to reference bid schedules for peak seasons or by industry modal trends. Ocean contracts may be set in Q2 in order to secure capacity closest to the retail peak season. Truckload contracts are typically negotiated in Q4 as carriers and shippers understand how they

performed and what the next year's network will look like. But these seasonality trends are often being augmented or replaced with more frequent bid optimization events. LSPs can have an additional wrinkle. They also have the burden of semi-unpredictable demand for bids to cover the onboarding of new customers.

Blue Yonder's procurement capabilities automate and enhance the bid procurement process with AI-infused analytics that evaluate trends in carrier performance by lane, market pricing, capacity issues, customer requirements and many other relevant considerations. The process can exclude carriers based on past performance, capacity and service issues. In addition to handling more frequent, off-cycle bidding, the solution also supports multi-round bidding used to fine-tune bids through a what-if analysis and directly influences scenario planning on bid allocations by carrier and by lane to achieve the best results.

Freight order management

LSPs are uniquely positioned to help customers with inbound freight management due to the visibility achieved with route requests. The route request process is important in collecting accurate inbound volume information and providing order detail. By





streamlining communication and collaboration with their customers' suppliers, LSPs can optimize the inbound process to help customers reduce total landed cost.

Understanding the three-tier data model of orders, shipments and loads for transportation management gives greater insight into freight order management and the route request process. For LSPs managing inbound, the existence of all three of these objects is crucial. For example, when a purchase order (PO) flows into the solution, the supplier would be prompted to login and walk through workflows to update the order details, as well as add logistically relevant information such as weight, dimension, handling unit type, etc. Many LSP solutions do not recognize the PO object as an order, thus eliminating the ability to leverage the full capabilities of mode optimization, split orders and do cost allocation to the item-level within the solution. Handling the order object limits potential barriers and gives LSPs the ability to effortlessly carry out the order process.

Blue Yonder's freight order management capabilities support the three-tier data model and also allow users to establish and monitor vendor compliance milestones as a result of real-time, centralized tracking of the inbound process. These benefits combined with the ability to drive term conversion (prepaid to collect) are especially useful to LSPs.

Oftentimes LSPs have an incentive to drive term conversions on behalf of the customer to establish the most advantageous tradeoff between minimizing total inbound costs and maximizing their own margins. Optimal freight terms are generally influenced by the ability to consolidate orders across days, customers and order-level service requirements, all of which are supported by the Blue Yonder platform.

Planning

In concept, transportation planning should be straightforward: tender loads to contracted carriers based on lane assignments, past performance and contracted rates. In reality, it can become much more complex, especially for LSPs due to the wide range of shipping requirements from their customer base. The price and capacity fluctuations of recent years have further complicated the process. Plus, some LSPs have private fleets whose utilization must be integrated with contracted carrier considerations. Securing the optimal balance of service and cost across the full array of planning considerations can only be done with the assistance of intelligent transportation planning technology.

To secure load coverage in alignment with carriers' contracted rates and committed capacity in an automated manner, the waterfall tender process is typically used for truckload and intermodal. This helps ensure that pickups and deliveries are on time,

resulting in higher customer satisfaction. Blue Yonder's transportation planning capabilities enable users to configure the waterfall tender process via carrier sequential tendering. Users can create time constraints so that carriers must respond to a load tender request within a certain timeframe, otherwise the tender is revoked and sent to the next carrier.

The solution has broad functionality LSPs can leverage to optimize planning, including routing, rating, and scheduling for all domestic and international modes. It can plan and then interactively re-plan by leveraging real-time transportation visibility tools and network alerts. A plan that is in execution can be altered in response to delays, disruptions, and good or bad news so a more optimal plan can be executed.

While most freight is planned through automated rating and route guide adherence, reverse auction functionality can yield additional savings for LSPs and their customers. In a reverse auction, the LSP makes the load available to a small private group (the opposite of a public load board) who place bids. At the end of this auction-style process, the lowest bid carrier is awarded the load. This allows LSPs to systematically engage with the spot market when attractive market conditions, changes to certain lanes or other off-schedule situations arise. Blue Yonder's transportation planning capabilities enable users to effectively perform reverse auctions, allowing LSPs to react quickly to changes in the transportation market.

Additionally, the single platform allows for sourcing of volume LTL/partials, as well as traditional less-than-truckload, intermodal, truckload, parcel, ocean and air moves. Automated planning, reverse auctions and tactical planning/re-planning functionality allow LSPs to ensure the proper mode, carrier and equipment is selected as they seek to ensure cost-effective on-time deliveries for their customers.

Execution

LSPs often have to manage the execution of multiple transportation modes (i.e. air, ocean, truck, rail, parcel) for their customers. The ability for LSPs to plan and execute all modes within a single platform is rare, however. Complicating matters is the fact each mode has vastly different execution processes.

The rail industry is unique in that when a single load is moved using two separate railroad companies, the LSP (or shipper) will be invoiced by each. Most people and supporting solutions expect to receive only one invoice for the load similar to when an LTL carrier is tendered a load to an indirect point and they only generate a single invoice against the BOL even though there was a second carrier doing the final-mile of the delivery. In rail, this is referred to as Rule 11. So, that load needs to tender to each of the carriers involved in the movement of that single rail load.

In parcel, LSPs face challenges with manifests for grouping unassociated shipment legs originating



from one location, going to one or more destinations, using a single carrier. LSPs and shippers typically solve this problem by having different applications or sub-systems to solve for this complexity, but that creates additional work and inefficiencies. A single solution for all modes and contingencies will be more efficient and free operations to handle exceptions.

Blue Yonder's transportation execution capabilities handle all modes within a single integrated platform. The solution can execute Rule 11 rail shipments seamlessly due to its ability to autogenerate multi-load shipments, consider rail route codes and rail junction locations without human intervention. At the same time, the manifesting process supports the grouping of unassociated shipment legs that will be moved by a single carrier. LSPs can leverage Blue Yonder as a single platform for planning, execution, tracking, freight audit and pro-active monitoring across the entire transportation lifecycle. This enables efficient and effective management of sophisticated transportation networks resulting in reductions in overall freight costs, rapid ROI and improved utilization of private fleets, containers and drivers.

Business analytics

Now, more than ever, companies need real-time information to make timely, effective decisions on the key issues facing their business. Using traditional, disjointed data collection and reporting systems is no longer adequate. All companies, but especially LSPs, need a single, end-to-end source for data gathering, visibility and analysis.

In transportation, LSPs need internal analytical reporting to optimize their operations, as well as external scorecarding for customers. Planning activities, both short and long term, are often influenced by carrier performance scorecards, as are procurement bid decisions. In short, the need for analyzing the business, supporting customers and making decisions requires effective data visibility and reporting.

Blue Yonder's AI-infused business analytics capabilities ensure LSPs can generate all reporting within a single platform regardless of the end user. This provides increased network and trading partner visibility by consolidating key data elements to monitor and intelligently evaluate overall supply chain performance, with the ability to drill down into all detail for root-cause analysis. LSPs can leverage this information to ensure that they make timely and reliable decisions, meet business objectives, collaborate with key stakeholders, enhance business reviews, mitigate risk, resolve persistent service failures and improve visibility for timely solutions to business challenges. Ultimately, LSPs' customers will have more insights and higher satisfaction with the management of their transportation operations.

Intelligent transportation management

Transportation management is growing more complex each day and even more essential to the success of most businesses. A robust, cloud-based SaaS transportation management platform will manage the entire transportation lifecycle, resulting in improved service levels, maximized capacity utilization, enhanced operational efficiencies and proactive monitoring of orders, shipments, and loads.

Blue Yonder's solution manages the end-to-end transportation process from network design to performance analytics to provide seamless management of the entire transportation environment. As an integral part of the industry's only digital fulfillment platform, it provides real-time execution details for optimized decision-making and metrics-based management. Whether you are looking to replace an outdated in-house transportation management tool or seeking to consolidate disjointed transportation operations, Blue Yonder provides the industry's leading end-to-end solution enabling you to run all of your transportation services on a single, intelligent platform, driving greater transportation services and savings for you and your customers.

