

Third Party Logistics An Engagement Model for 3PL Growth



Manufacturers and retailers are looking to 3PLs for help in keeping pace with fast-changing consumer demand. JDA for Third Party Logistics provides an engagement model that helps 3PLs leverage these opportunities while creating rapid time-to-value and low total cost of ownership.

The past 10 years have seen tremendous change in the world marketplace. The consumer is now firmly in charge, and aided by new mobile technologies and social networks, has completely changed the buyer-seller relationship on a global scale. Manufacturers and retailers are scrambling to keep up with this frenzied rate of change and are looking to third party logistics providers (3PLs) for help in meeting the many associated challenges. JDA for Third Party Logistics enables 3PLs to differentiate themselves in this new, global, demand-driven marketplace by quickly and profitably helping customers adapt to consumer change, providing rapid time-to-value and low total cost of ownership.

The 3PL Engagement Model

JDA understands that the 3PL world is different from, and more challenging than, other industries due to 3PLs' central role as service providers and logistics innovation leaders to the customers they serve. This requires 3PLs to be a combination of salesmen, logistics efficiency experts, and industry knowledge leaders for each customer's market segment. Increasingly, it also requires 3PLs to understand international logistics practices across the regions in which their customers operate. This is a tall order, but one JDA is uniquely positioned to help 3PLs master.

It begins with JDA's 3PL Engagement Model for 3PL growth. JDA recognizes that our 3PL customers' success is our success since the more business our customers sign, the more of our systems and services they need. JDA works hand-in-hand with our 3PL clients to sell their business to their potential customers, rapidly implement our industry-leading solutions and support our joint customers over time. We bring to the table 30+ years of both logistics efficiency expertise and deep domain knowledge for the many industries we serve, including automotive, consumer goods, food and beverage, high tech, industrial manufacturing, pharmaceuticals/life sciences, retail and wholesale distribution. This can be extremely helpful as 3PLs enter new verticals such as cold chain or pharmaceuticals.

JDA also brings the expertise gained from partnering with global 3PLs across North and South America, EMEA and Asia-Pacific regions. JDA has customers, operations and native-language speakers across these regions to help sell and service these diverse requirements. Our consultants provide industry, product and country insights most 3PLs do not have in-house. Working together, we will help you secure more business, gain faster time-to-value, and maintain high levels of customer satisfaction.

Time-to-Value

There is often little time between when a contract is signed and when the customer expects the 3PL to have their systems in place. There isn't time for long implementation projects and rollouts. JDA helps 3PLs create greater time-to-value in two ways. First, due to JDA's market leadership across many industry segments, we have industry templates with best practice configurations that shorten and simplify implementations. Second, JDA Cloud Services can quickly implement customer systems on our global cloud network—relieving your IT staff of the learning curve and effort to implement in-house so they can focus on your core business. Thus, it is a win-win situation with both you and your customers benefiting from faster time-to-value while you can

The JDA Engagement Model Advantage

By partnering with 3PLs, JDA offers three key advantages not available elsewhere:

- Business development support with expertise in multiple industries, global operations and our broad product suite
- Faster time-to-value with industry-specific functionality and implementation templates and cloud implementations
- An industry-leading, functionally-rich supply chain management suite designed with 3PLs' needs in mind

Working together, JDA will help you grow your business, achieve faster time-to-value and maintain a lower total cost of ownership while providing your customers the best products and services.

For third party logistics providers to be successful in the rapidly changing marketplace going forward, they will need to collaborate with their customers on a wider range of integrated services. For example, large 3PLs are moving into new areas such as omni-channel fulfillment or cold chain management, as well as providing global support for their multinational customers. Mid-market 3PLs are expanding into broader regional support for their customers.

These new areas and broader geographic capabilities will require more advanced, integrated and constraint-aware information technology capable of simultaneously optimizing every aspect of supply chain operations to produce the best overall results for customers. JDA for Third Party Logistics helps 3PLs accomplish this while tackling their toughest challenges and helping them grow.

Challenge: Supporting Customers' Complex Supply Chain Operations

While most 3PLs have focused on traditional warehousing, distribution, transportation and logistics functions, their customers are faced with much larger challenges such as supporting the many ramifications of omni-channel operations. This impacts all retailers, and increasingly, consumer goods, high tech and other manufacturers. Forward-thinking 3PLs will differentiate themselves by offering the broader solutions customers are seeking to cover everything from demand management to omnichannel fulfillment. But this will require 3PLs to acquire new skill sets and new technologies. JDA for Third Party Logistics can help 3PLs grow into these broader support areas with market-leading, end-to-end supply chain capabilities and services.

"Our customers have complex distribution demands that require proven, functionally-rich software. Whether those issues are the various compliance requirements by which our pharmaceutical customers must abide, or the high velocity inherent in the retail supply chain, we know JDA's solutions are up to the task."

Mark Sell CEO MD Logistics, Inc.





 Synchronize appointment scheduling, receipt management, staging management and labor planning

Solution: JDA Intelligent Fulfillment[™]

- Improve labor efficiency

JDA's Intelligent Fulfillment offers an integrated, constraint-aware set of cloud-based best-of-breed supply chain planning and execution solutions that holistically and iteratively solve inventory planning, replenishment and order fulfillment challenges. This enables 3PLs to make intelligent and profitable decisions that reduce inventory levels and costs, improve customer service through superior product availability and faster cycle times, and create more agile, profitable, and responsive operations.

One of the biggest challenges facing 3PLs is an inability to make intelligent and profitable fulfillment decisions regarding labor, inventory, capacity and processes based on an accurate view of customer demand and real-world, real-time execution constraints. Demand and replenishment plans that lack visibility to network inventory and execution constraints, and which lack the ability to respond with agilty to changing customer demands, cause 3PLs to be fatally sluggish and bloated at a time when markets are more volatile than ever. JDA Intelligent Fulfillment tackles these challenges head-on to give 3PLs and their customers a competitive advantage. The following component systems comprise JDA's integrated Intelligent Fulfillment.

- Optimize utilization of slots and assets
- Optimize truck loads based on real-time supply availability adjustments
- Increase on-time and in-full deliveries

Demand Forecasting and Replenishment Planning

For too long, 3PLs have been at the mercy of customers' close-kept planning processes. The role of the 3PL was to store inventory and fulfill and ship orders with little visibility to what was coming down the road. There was scant opportunity for 3PLs to make strategic decisions based on knowledge of future customer plans.

That is changing now as retailers and manufacturers realize they must optimize their entire supply chain networks if they hope to compete in today's dynamic global economy. 3PLs can place themselves in the center of this transformation by working collaboratively with customers on demand and fulfillment planning.

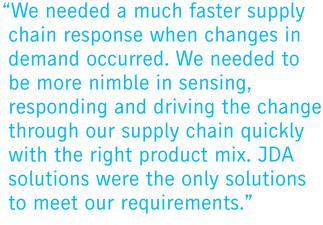
Collaborating on optimal inventory distribution and order fulfillment decisions starts with creating a single, customer-centric demand forecast based on their demand signals, such as sales forecasts and point-of-sale (POS) data augmented with price, promotion and event information. This holistic view of demand is combined with real-time knowledge of execution constraints across your distribution centers and transportation network to plan for and schedule the right number of associates with the right skills to fulfill customer orders, secure appropriate levels of transportation capacity to match expected shipments, and create time-phased replenishment plans for inventory, labor and transportation that can be realistically executed.

To achieve higher margins and customer service levels, 3PLs must leverage these collaborative demand plans to position the right customer inventory in the right facilities at the right time. JDA Demand and Fulfillment incorporates customer demand signals and forecasts into enterprise-wide replenishment strategies, enabling 3PLs to create optimal, time-phased inventory plans.

In addition to ensuring timely execution of customer orders, a longer term forecast of customer demand enables strategic, proactive planning for capacity, inventory levels and fulfillment services. Visibility to long-term customer demand trends, inventory movements and workflow patterns enables a higher, data-focused level of strategic planning that helps 3PLs make better-informed and relevant decisions on long-range business strategies. This can turn short-term cost and service differentiators into longer-term competitive advantage that helps grow your business.

JDA Demand and Fulfillment customers achieve ROI through:

- Improved forecast accuracy of 20-25 percent by leveraging statistical analysis capabilities, demand stream segmentation and forecasting at multiple hierarchical levels
- Increased demand visibility across the trading network with consensus demand plans that align trading partners with a shared forecast
- Reduced supply chain cost with a more accurate, stabilized forecast, driving inventory management efficiencies
- Optimized inventory levels for bottom-line savings:
- Decreased safety stock 4-15 percent
- Decreased overall inventory 4-8 percent



Ron Kantorik

Senior Manager, Demand Management Altera Corporation

Intelligent Order Lifecycle Management

Customers' omni-channel orders raise new opportunities for distribution efficiency and differentiated customer service. JDA Intelligent Order Lifecycle Management orchestrates flexible and profitable order fulfillment decisions, automatically selecting from which of your facilities to source each customer order based on inventory availability, customer order allocations, transportation costs, and customer delivery windows, and redistributes orders when disruptions occur. This optimizes delivery costs and customer service levels.

JDA Order Lifecycle Orchestration combines three industry-leading capabilities for profitably promising and fulfilling orders across multi-level distribution networks—distributed order management, profitable order promising, and enterprise inventory visibility. Together, these capabilities enable 3PLs to achieve greater customer satisfaction while optimizing the utilization of inventory, labor and logistics assets across all levels of the supply chain.

It starts with JDA Enterprise Inventory Visibility. which provides a time-phased view of on-hand and projected inventory at all sites and in-movement across the extended supply chain. JDA Profitable Order Promising and JDA Distributed Order Management together use this projected inventory data to ensure orders from all customer channels are fulfilled from the most profitable locations that support customer delivery windows and service strategies. The combination of enterprise-wide visibility, order orchestration and profitable promising capabilities enable real-time, customercentric order fulfillment decisions to be made that optimize the trade-offs between costs, service. strategy and profitability in a dynamic, multi-level distribution environment.



JDA Intelligent Order Life Cycle Management customers achieve ROI through:

- Configuring multi-channel order lifecycles with holds and monitors
- Network-wide visibility to inventory on-hand and projected receipts
- · Real-time order promising from projected supply
- Re-balancing order fulfillment, as needed, for greater profitability
- Traceability of inventory states for planned inventory movements

Constraint-Aware Supply Chain Execution

Old notions of supply chain integration where systems passed order, inventory and shipment data between each other are no longer adequate in today's fast-paced and volatile business climate. Each execution system today must be keenly aware of limitations and constraints impacting execution of order fulfillment plans at every level and facility.

JDA's supply chain execution solutions are not only tightly integrated, but also constraint-aware so all operations work hand-in-glove to optimally plan and execute customer orders and shipments. For example, advanced transportation routing is coupled with integrated pallet and load building to optimize freight and labor costs. Dock door schedules are coordinated with order picking, value-added service work orders and order staging to maximize labor utilization and order throughput. Pick face slotting plans are integrated with labor costing to ensure only profitable slotting plans are executed. And there are many, many more examples of systems in one domain being intimately aware of what is going on in other domains to maximize efficiency and throughput.

The systems that comprise the JDA constraint-aware execution suite include:

JDA Warehouse Management (WMS) — optimizes the flow of information and inventory across your network of distribution centers. Its attribute-rich, configurable processing supports the unique inventory tracking requirements for each customer and industry a 3PL supports, such as lot creation, shipment and expiration dates, as well as aging routines, for food and beverage and pharmaceuticals; nested serial numbers for high tech — electronics; serialize inventory for pharmaceuticals; or production line component sequencing for automotive. And because the WMS handles all of these attributes and workflows in a single system, 3PLs do not have to implement multiple systems to handle diverse customer requirements.

"At ADS we differentiate ourselves based on the technology and services we can offer our customers. Our highly automated approach depends on the flexibility and versatility of the JDA WMS."

Paul Peavey.

Director of Operations
ADS Gaffney Logistics Center

The system makes 3PL operations more efficient by computer-directed management of all tasks. Each worker is automatically assigned the most productive next task based on order priorities, proximity to the inventory, and the equipment used by and certifications of each worker, while keeping track of all tasks completed for activity-based costing and customer billing. This efficiency can be further enhanced through the use of RF or RFID devices, voice and pick-to-light automation, and integration with material handling systems.

JDA Warehouse Management also supports add-on service strategies such as put-to-store, flow-through and cross-docking, as well as work order processing for special packaging and handling and other value-added services. These strategies not only improve revenue and competitive positioning, they also reduce handling and storage requirements resulting in reduced inventory levels and lower distribution costs, which can be shared with customers.

JDA Warehouse Management customers achieve ROI through:

- Fulfillment cost reductions of 10-50 percent
- Inventory storage and handling costs reductions of 10-35 percent
- Throughput increases of 10-40 percent
- Inventory visibility and accuracy near 100 percent
- Inventory reductions of 5-25 percent
- Dock-to-stock time reductions of 25-50 percent
- Receiving dwell-time reductions of 25-50 percent

JDA Warehouse Labor Management - While improved distribution operations and strategies reduce the need for labor, required labor must be made as productive as possible. JDA Warehouse Labor Management (WLM) improves labor scheduling to better match labor resources to demand, and improves productivity by ensuring all tasks are performed in the most efficient, safe and error-free method possible. JDA industrial engineers help develop the most efficient work methods and engineered standards for each task. The system monitors adherence to these standards and keeps supervisors apprised in real-time when productivity drops or work falls behind schedule so they can take immediate corrective action. All direct and indirect time is tracked for proper billing to customers.

An integrated approach to warehouse and labor management enables 3PLs to maximize the productivity of their workforces by directing the order in which tasks are to be completed and how they are to be performed. Task Management sets priorities and automatically directs the worker to the most efficient next task. With integrated labor management, workers are trained on the most efficient and safe method for completing each task and the system automatically assigns associated time allowances. Performance is monitored and reported to analyze warehouse activity and track individual or team productivity by customer. Thus, with integrated warehouse and labor management, workers are always doing the right tasks in the most efficient way, and customers are always billed correctly.

JDA Warehouse Labor Management customers achieve ROI through:

- 10-35 percent increases in productivity
- 10-45 percent increases in utilization
- 3-11 percent increases in quality
- 10-25 percent reductions in voluntary turnover
- ullet 10-35 percent decreases in labor expense

"We're looking to drive greater efficiencies across all locations. Having the WMS and WLM together will allow us to monitor all operations down to specific users. For example, if there is an error, we will know who performed the task so we can identify training needs. We also plan to implement task interleaving to better utilize our labor resources."

Jim Hepp
Director of IT and Customer Solutions
MD Logistics



JDA Transportation Management – The volatility of fuel costs has impacted all modes of transportation. causing companies to rethink transportation strategies—often outsourcing transportation planning and execution to 3PLs. This is particularly important with today's extended global supply networks. JDA's transportation suite optimizes all modes of transportation to ensure lowest cost modes, routes and carriers are used that meet customer delivery commitments. The system optimizes everything from global multi-leg, multi-modal shipments to local multi-stop fleet routing. It tracks all shipment expenses, including surcharges and demurrage. by customer for proper freight audit and payment and for customer billing. And JDA Transportation Management is fully integrated with JDA Ware house and JDA Warehouse Labor Management to synchronize operations based on priorities and constraints. As a result, all supply chain operations are more coordinated and efficient, reducing costs and the impact of demand and fuel volatility. This can be a major selling point for 3PL services. In addition, both JDA WMS and TMS are in the Leaders Quadrant of the respective Gartner Magic Quadrants.

JDA Transportation Management customers achieve ROI through:

- 10-25 percent improvements in load consolidation
- Improvement in planner productivity by as much as 67 percent
- Improvement in service levels, including on-time delivery, by 20-40 percent
- Decreases in carrier turn-down rates of as much as 40 percent
- Improvements in customer fill rates of 20-30 percent
- Improvements in in-stock positions of 5-35 percent

 Reductions in lead and cycle times of 25-75 percent "JDA's advanced TMS is the only solution today that has the ability to deliver best-in-class supply chain management functionality along with the adaptability to customize workflows and scale across our complex and distributed supply chain network. This combination of world-class domain expertise, rich solution functionality and innovative delivery methodology works to extend the value of JDA transportation management solutions both inside and outside of our enterprise and enables highly customizable and configurable user interfaces in an effective and costefficient manner."

Lee Geun An

Chief Officer, Management Innovation Team Hi-Logistics, LG Electronics' Logistics Subsidiary

Iterative Planning and Execution

The famous saying by General George Patton, "No plan ever survives the battlefield," can be quite applicable within the supply chain as well. Inventory gets damaged during picking, a rush order is dropped late in the day, a carrier fails to arrive on time, customers change their minds—forcing managers to ignore or make ad-hoc manual adjustments to plans. JDA Intelligent Fulfillment's ability to quickly re-plan helps to drive optimal decisions in this fast-changing environment.

The enterprise-wide visibility provided by Intelligent Fulfillment detects changes and disruptions as they occur across the supply chain, informing the planning and replenishment processes to immediately re-plan based on the new set of execution constraints. Order orchestration capabilities re-optimize fulfillment plans for profitability and service. Transportation and warehouse processes interact to re-plan pick waves, shipments, loads and routes. It all happens immediately and interactively to produce the best solution at that time, and then reacts again when the next event occurs, ensuring that you always deliver to your customers' expectations.

The demand-driven consumer marketplace is forcing companies to offer more product variety and personalization, but this raises complexity and cost. It also has led to an increase is more costly parcel shipments. In response, companies are requesting 3PL support for postponement strategies, including light manufacturing, assembly, packaging and other late-stage services, as well as management of parcel shipments, to keep finished goods SKU counts down and contain costs. But many 3PLs are not equipped to handle these requests without throwing too many costly human resources at the task, threatening already thin margins. Tracking and properly invoicing for these services is also a challenge.

JDA Intelligent Fulfillment has many advanced capabilities specifically designed for the unique needs of the 3PL industry. These functions automate many of the burdensome tasks associated with servicing, tracking and billing multiple customers, thus reducing administrative overhead while providing accurate, timely services and invoices.

"For a consumer goods sector in Mexico with 13,000 shipments, 18,000 lanes and 1,500 locations, JDA Transportation Modeler helped us find 7 percent savings directly attributed to better optimization, better use of vehicles and stops per vehicle. We found that once you create a baseline and let the JDA solution apply business rules, the biggest savings occurred."



Transportation and logistics,



JDA Work Order Processing — The advanced work order processing capabilities within JDA Warehouse Management assign, sequence and direct tasks to ensure timely, consistent and accurate completion of customer work orders for value-added services. It is highly configurable, providing the flexibility 3PLs need to tailor processing to customers' initial needs, as well as to their ever-changing future requirements. System-directed work ensures efficiency and throughput even within the chaos of multiple, changing customer requirements.

Value-added services can extend through the JDA Transportation Management system to the delivery of goods to stores, as well. Drivers can be instructed to perform special services such as stocking volume verification, end-cap set-up, restocking, and other specific delivery services customers may need. Value-added services, done right, means increased margins and satisfied customers.

Third Party Billing — Automated client billing fulfills a vital role in efficient revenue recovery and can be tailored according to multiple pricing rules for a variety of external customers. Moreover, it can be used to track internal costs by business unit, allowing you to easily perform cost-to-serve and margin analysis by client, business unit or service type. It also integrates with multiple supply chain applications such as JDA Warehouse Management, JDA Transportation Management and ERP systems using JDA's powerful mapping tool to integrate the various data flows. Fully automated preparation of invoices results in more accurate billing and prompter payment. In addition, the profitability rate of customers, services, lanes and loads can be shown daily, or even hourly, providing highly accurate performance monitoring.

Activity-based costing — Detailed tracking of the work performed for each customer allows cost allocation by individual task or bundled tasks. Third party billing uses this information to determine pricing rules and analyze costs in a variety of ways. Margin analysis is easier and more accurate when activity-based costing is employed. And when requests for new business are received, the information can help forecast costs for more accurate new customer bids.

"JDA offered us not only a high-quality software product, but an implementation team that was outstanding and a Cloud Services approach. We felt that JDA provided an all-in-one package that suited NII's needs, met or exceeded all of our requirements, and gave us the flexibility to get the project rolling as quickly as we could."

Anthony BalducciDirector of Supply Chain
NII Holdings

Parcel Shipments — JDA Parcel is integrated with JDA Warehouse Management and JDA Transportation Management to provide in-line labeling and manifesting of parcels and shipment rating and routing with all major parcel carriers. This enables 3PLs to easily and economically handle the volume of customers' parcel shipments from omnichannel commerce initiatives.

Freight Audit and Payment — You can automate freight payment through invoice-less (self-pay) and match-and-pay payment methods. By automating invoice processing and carrier contract compliance, Freight Audit and Payment enables 3PLs to eliminate errant and duplicate charges, improve carrier relations and gain control over the freight settlement process. Detailed cost analytics enable cost allocation by customer, as well as multi-variable pricing, profitability and margin analysis down to the item level.

The JDA Cloud Advantage

For a myriad of reasons—the cost of hardware and software, the rapid advancements in technology and application capabilities, and most importantly, the need for maximum agility in responding to customers' fast-changing requirements—it no longer is optimal for 3PLs to have distribution systems located at each facility. Cloud-based JDA Intelligent Fulfillment provides all locations with consistent, reliable and always up-to-date solutions that are carefully calibrated to match shifting conditions by a team of JDA experts. This greatly improves agility, reduces risk, and ensures seamless operations across the enterprise at all times.

Having JDA handle system implementations and upgrades also reduces the time and risk of customer deployments while enabling 3PLs to quickly and easily add new customer functionality to keep pace with customers' ever-changing needs. This also helps free up internal IT staff to work on pressing customer requirements. Plus, JDA Cloud Service centers have virtually limitless scalability to immediately ramp up or down to match customer requirements.

The automatic redundancy built into JDA's multiple cloud service centers around the world also protects 3PLs and their customers from worries about downtime caused by system failures, power outages, and natural or manmade disruptions. And JDA staff are experts in the JDA systems they support, ensuring high service levels, speedy problem resolutions and 24/7 support. In addition, service agreements can often be matched to customer contracts to limit financial exposure. Considering all of these factors, JDA Cloud Services is the natural choice for 3PL deployments.

Greater than the Sum of the Parts

While having constraint-aware planning and execution functionality is important, it is also necessary to consider the underlying quality and robustness of the individual systems. That is why 3PLs should feel confident because JDA's demand planning, warehouse management and transportation management systems are all consistently rated in the Leaders Quadrant of Gartner's respective Magic Quadrant reports on enterprise software. JDA provides an unparalleled combination of business process breadth and functional richness in each process area, making the value to 3PLs and their customers much greater than the sum of the parts.

JDA also provides unparalleled professional service and consulting expertise to guide you through your business transformation. JDA can help define where the greatest benefits can be achieved, create a realistic roadmap based on industry best practices and your unique customer constraints, and help you develop a fact-based list of benefits and potential ROI.

Benefits of JDA Intelligent Fulfillment

- Make intelligent and profitable distribution decisions based on real-time visibility to inventory, orders, and events
- Create demand and replenishment plans based on real-world execution constraints
- React with agility to events and disruptions with iterative planning and execution
- Reduce inventory, labor and transportation costs while improving on-time, in-full customer deliveries, creating profitable operations and competitive advantage
- Leverage cloud deployment for optimal agility, visibility, consistency and return on investment



Meeting the Needs of the 3PL Industry

The unique needs of the 3PL industry have driven the design focus for JDA solutions — it's not an afterthought. 3PLs want measurable ROI and satisfied, long-term customers, and JDA provides the tools and the expertise to help reach those goals. Our integrated, constraint-aware solutions provide real-time visibility to comingled inventory; automated third party billing to serve a variety of customer needs; activity-based costing for easy and accurate margin analysis; efficient task management and the value-added services your customers require.

JDA gives 3PLs the tools, industry expertise and global experience they need to become more profitable and better serve their customers. And JDA Cloud Services provide a rapid, cost-effective means to achieve these goals. And the JDA engagement model helps 3PLs grow their business, contain costs and provide rapid time-to-value. JDA for Third Party Logistics is the right choice for the 3PL industry.

About JDA Software Group, Inc.

At JDA, we're fearless leaders. We're the leading provider of end-to-end, integrated retail and supply chain planning and execution solutions for more than 4,000 customers worldwide. Our unique solutions empower our clients to achieve more by optimizing costs, increasing revenue and reducing time to value so they can always deliver on their customer promises.

Using JDA, you can plan to deliver. jda.com



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