Advance Auto Parts Turns to JDA to Increase Product Availability — Leading to Both Revenue and Service Gains

Advance Auto Parts is a leading automotive aftermarket retailer of parts, accessories, batteries and maintenance items — serving both the do-it-yourself consumer and professional installer. With more than 3,900 stores across the United States, Advance serves these locations via a strategic network of distribution centers (DCs) focused on delivering excellent service.

“The name of the game in our business is inventory availability and speed of delivery,” said Josh Lankford, director of supply chain solution delivery at Advance Auto Parts. “If you have a car that’s broken down, tomorrow morning isn’t good enough. You need that part now, so that’s what we endeavor to do. That really comes through in our motto: Service is our best part. We need to make sure that we have the parts available when our customers need them.”

In recent years, Advance’s retail segment has shifted from do-it-yourself consumers to do-it-for-me commercial customers, placing added pressure on Advance to ensure immediate product availability. “These commercial customers need the parts when they pick up the phone. The faster they can serve their customers, the happier they are with us,” said Lankford.

Advance was already relying on JDA Software’s solutions for space and category management, as well as replenishment, to manage its nationwide supply chain when it decided to embark on a supply chain transformation project. In 2010, Advance made a strategic decision to expand the role of these solutions, add physical supply chain infrastructure, and incorporate new technology solutions and business processes to optimize its warehouse, workforce, execution and performance management.

“We were looking to figure out, how can we get more inventory into our markets? How can we ensure fast delivery to our customers? Fundamentally, we needed less SKU [stock-keeping unit] depth and more SKU breadth. And that had implications all the way back through the supply chain,” said Lankford.

While Advance considered other technology vendors, according to Lankford the choice to add new software from JDA seemed natural. “We ultimately...
chose JDA based on the spirit of partnership,” he explained. “For us, it was important to know how were we going to work together — how the company would make us better, and also how our feedback would make them better.”

A Dramatically Expanded Footprint
To increase service and availability over a large geographic area, Advance decided to retrofit its existing DCs, while also constructing a new 550,000 square-foot facility that would provide daily replenishments to stores in a targeted rollout region.

To support these facility expansions, as well as its new daily replenishment strategy, Advance added JDA Warehouse Management and JDA Warehouse Labor Management from JDA’s Intelligent Fulfillment™ solution. “Starting back in the planning phase, we needed to be able to respond to sales, generate our forecasts and generate our store replenishment orders much faster,” Lankford said. “We went from a 36- to 48-hour sale-to-replenish cycle time to as little as 12 hours.”

That strategy impacted the execution of the company’s DCs. “We needed to be able to increase our throughput because we were taking what previously would have been a week’s worth of volume and splitting it into six or seven chunks,” he explained. “We went from a primarily multi-order, cluster-pick approach to more of a batch-pick approach. We became a pick-to-store, sort-to-store type of operation.”

This shift in strategy represented a significant change in the way Advance serviced its stores, and ultimately, its customers. “We didn’t have any model to base this on,” added Lankford. “We built literally the new building from the ground up. We built the processes from the ground up. We built all of the solution components from the ground up.”

In addition, Advance relied on the deep experience of the JDA Services team. “Throughout the project, we used JDA Services to help coach us on the technology and guide how we configured it, how we implemented it,” Lankford said. “One of the things that was a real positive was the way the JDA Services team members embraced this culture we’d created. We had a number of different people from a number of different organizations because of the breadth of what we were trying to do. The JDA Services team really understood that they were helping us to solve a problem — they weren’t just helping us implement a piece of software.”

Results Across the Supply Chain
Today, Advance Auto Parts is realizing a range of benefits from its new daily replenishment strategy, as well as the associated JDA solutions. “Previously, the work was presented to a team manager, and they had to figure out the best way to get it performed. But in the warehouse now, it’s about letting the system optimize how the work gets done,” said Lankford. “We’ve been able to service the increased volume through the DC with less labor than would have been required otherwise, and we’ve been able to reduce the order cycle time.”
The end-to-end supply chain at Advance is much more nimble as market demand inevitably shifts. “The JDA solutions position us to be able to respond to change quicker,” he explained. “We often might have 10 to 15 configuration changes in a week. That’s a great testimony to how flexible the system is, and how we’re able to make those changes and fine-tune the process. The JDA solutions allow us to be more flexible.”

Advance has also realized significant results in its retail stores. “By being able to put, on average, 20 percent more hard parts into our rollout stores, that directly translates into faster service to our customers,” said Lankford. “Using the JDA solutions, we’ve ultimately seen an increase in revenue in our stores through the increased breadth of SKUs. For the stores that are serviced through the DC that we’ve enabled with these new JDA solutions, we’re seeing sales growth compared to our other control stores.”

**In the Driver’s Seat**

In a competitive marketplace, the company’s supply chain transformation has helped Advance strengthen its position as an industry leader. Advance’s additional SKUs and its ability to cut the store replenishment cycle time in half have combined to decrease lost sales opportunities, improve inventory availability and create much faster delivery times. Once fully ramped up to full store volume, the company anticipates achieving significant results in increased throughput and improved labor efficiency as well.

The JDA solutions are seen as core enablers of the company’s dramatic supply chain transformation as opposed to merely a set of transactional systems. “Our experience with JDA has really been a partnership,” Lankford concluded. “We’ve used multiple components of their solution set, and the recurring theme is that they’ve always been willing to help when we’ve had issues. They’ve always been willing to bring the resources that were needed to solve problems together. They’ve always been willing to listen to our input so that we could influence the way that the solution set would service the retail industry. I think we’ve had a really good, mutually beneficial partnership.”