



Retail

Pep Boys

Customer Success Story

Facts at a glance:

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|--------------------------------|--|
| Number of warehouses: | 5 |
| Size of warehouses: | Ranging in size from 400,000 - 600,000 square feet |
| Number of SKUs: | 30,000 - 40,000 |
| Volume throughput: | 125-150 stores receive shipments each day |
| Manhattan Associates solution: | Slotting Optimization |

“Optimized slotting continually contributes to our ability to keep our labor costs low. We know the two are directly related because each time we see a drop in labor productivity, we fine-tune our slotting and watch our productivity rates climb back up. Controlling labor costs with Manhattan Associates’ Slotting Optimization solution has enabled us to emerge as one of the most productive retailers in the industry.”

Dave Schneider
Director of Logistics
Pep Boys



A Fine-Tuned Slotting Strategy Keeps Pep Boys Rolling

The Challenge

Founded with just \$800 in 1921 by the original “pep boys”—Emanuel “Manny” Rosenfeld, Maurice “Moe” Strauss, Moe Radavitz and Graham “Jack” Jackson—Pep Boys is today a \$2.2 billion leader in the automotive aftermarket industry. Considered a paradise for automotive “do it yourselfers,” the company sells brand-name and private-label automotive parts in 594 stores in 35 states and stocks more than 23,000 car parts and accessories.

Throughout its long history, Pep Boys has succeeded by focusing on service, experience and the changing needs of its customers. The company’s recent concentration on an expanded merchandise mix and increased warehousing and distribution capabilities is setting the stage for the best years yet.

When Dave Schneider, director of logistics, joined Pep Boys in 1996, he quickly set out to reduce labor costs. But rather than simply re-engineering the company’s distribution centers (DCs) to save labor, Schneider focused on implementing changes that would reduce labor requirements across the organization—in both the stores and DCs.

Early on, Schneider observed that Pep Boys’ DCs were slotted by department, but company stores were merchandised by category. This meant that when a shipment arrived at a store, employees had to drag totes across the store from aisle to aisle to unload them. The labor requirements for shelf stocking were staggering.

Schneider and his team decided to work from the “peg hook” back. They observed how categories lived together in store aisles and created family groups that should live together in Pep Boys’ DCs. The new groupings would ensure that store shipments consisted of totes packed with aisle-specific, family groups of SKUs—Schneider estimated that this strategy would reduce average elapsed store stocking time by almost 30%, from 18 hours to 13 hours. Since each store averaged two deliveries per week from the DC, overall distribution network savings could be significant.

But there was a major obstacle—at the time Schneider joined Pep Boys, its existing DCs did not cluster products by family groups. Without the use of a slotting solution, he knew that organizing products by family groups in the DCs would require substantially more manpower and this labor increase would negate the labor decrease in the company’s stores. As a result, Pep Boys began a search for a slotting optimization solution.

The Solution

For help in creating and maintaining the ideal configuration in its DCs, Pep Boys turned to Manhattan Associates' Slotting Optimization solution. The solution enables the company to determine the best location for every car part and accessory in its facilities according to each product's physical attributes, pick frequency and, most importantly, location in the company's stores.

The Implementation

The implementation of Manhattan Associates' Slotting Optimization solution involved the creation of logical picking zones within each Pep Boys DC. Within the active pick zone, product is slotted according to its physical attributes, pick frequency and location in the company's stores. Aisles are set up in perpendicular fashion and items with the greatest pick frequency are stocked in carton flow on the right side of the aisle and in end caps at the end of the aisles. Slower-moving goods are located in bin shelving on the left side of the aisle. This layout helps shorten picking travel distances as order selectors can easily pick the bulk of products from the carton flow and end cap locations with an occasional need to walk down the aisle to complete their orders with slower-moving goods.

The Slotting Optimization solution also streamlines replenishment by allowing Pep Boys to slot products in the right sized locations. In general for repack products, a three-week demand capacity is maintained for products in the carton flow area and a six-week demand capacity is stocked for goods in bin shelving. This configuration has helped to greatly minimize replenishments and increase pick lines per replenishment trip ("lines per drop"). In addition, using calculated capacity values within the Slotting Optimization solution to set replenishment levels in the warehouse management system ensures a high average cube per replenishment trip.

In a three-year time period, Pep Boys deployed Manhattan Associates' Slotting Optimization solution in five facilities located across the country in New York, Texas, Indiana, Georgia and California. Analysts in each DC use Slotting Optimization to make sure the facilities are reacting to changes in product seasonality, new product introductions and variations in sales demand. Pep Boys also completes a major reset every six to nine months as product mix changes and stores are re-modeled or re-merchandised.

The Benefits

Pep Boys originally calculated that the project would yield a potential annual savings of more than \$2.2 million. In actuality, savings were even higher.

Other savings included reduced shipment damage, improved inventory control, reduced employee injury rates and improved capital asset utilization. The Slotting Optimization solution has also made Pep Boys increasingly flexible to business changes—allowing the company to reconfigure its DCs to support re-modeling and re-merchandising of its retail stores in record time.

The Future

Throughout its history, one thing has remained unchanged at Pep Boys—the company continues to focus on each customer as if it had only one store. Whether it is an investment in its stores or DCs, the customers' needs are always foremost in each new venture.

To better service its West Coast customers, Pep Boys is currently building a new DC in San Bernardino, California. The company has also deployed voice picking technology across all of its distribution facilities to ensure the right goods are selected for the right stores where they can be stocked within easy reach of the customer.