

MACHINE LEARNING AND INVENTORY OPTIMIZATION

Accelerate Success for Uni-Select

OPERATIONS

Headquartered in Boucherville, Canada, Uni-Select operates across Canada, the U.K. and 33 U.S. states.

MANHATTAN SOLUTION

Manhattan Demand Forecasting and Replenishment



CHALLENGE

The challenges of seasonality on demand in one of Uni-Select's distribution centers resulted in excess inventory and a higher level of exceptions.

SOLUTION

Leveraging Manhattan Demand Forecasting and Replenishment with Automatic Policy Tuning capabilities.

PROGRESS & RESULT

The inventory carried in the distribution center was reduced, resulting in significant savings.

“Even with great fluctuation of demand, we became more accurate in our forecasting. This improvement made a huge difference in our daily operations.”

JEAN-DANIEL POTVIN, BUSINESS ANALYST FOR FORECASTING AND DEMAND, UNI-SELECT

MACHINE LEARNING DRIVES UNI-SELECT FORWARD

TACKLING SEASONALITY HEAD ON

Uni-Select is a leader in the distribution of automotive refinish and industrial paint and related products in North America, as well as a leader in the automotive aftermarket parts business in Canada and in the United Kingdom. The company operates sixteen distribution centers and 468 corporate stores in Canada, the U.K. and the U.S.

The distribution center located in Montreal is used to ship product to other DCs and 40 retail stores. As a result, demand fluctuation — particularly around seasonality — is a challenge. Uni-Select attempted to improve its processes by investing significant hours into developing internal tools and processes, even adding a staff position. Despite the efforts, inventory management performance did not reach target levels. The inventory carried was higher than optimal, exceptions were frequent and buyers' productivity was impacted.

Uni-Select decided to implement Automatic Policy Tuning (APT), which is a capability within Manhattan Demand Forecasting and Replenishment. As it turned out, that's when all the parts fell into place.

APT LEADS TO ROI

APT is one example of how Manhattan Associates applies machine learning techniques to solve real-world problems. The technology focuses on ensuring that demand forecasting policies are perfectly tuned to generate the greatest possible accuracy for the business. APT takes decisions that used to be asked of the demand planner and proactively crunches huge volumes of data to determine how to improve forecast accuracy. With thousands of SKUs and countless demand factors — including seasonal

variations — the Montreal DC was an ideal environment in which to use APT and machine learning.

From a seasonal perspective, the effects of APT were immediate. The first noticeable difference was more-accurate forecasts, as well as fewer exceptions. Of course, that led to increase productivity for

the demand planners. Over time, Uni-Select also observed that inventory levels were going down. And despite negative external factors like weather events, service levels remained high.

“Because of APT our forecasting is more precise than anything humanly possible. Better yet, it's done automatically and will continue to improve over time.”

Uni-Select also used APT to selectively determine which SKUs in the DC would better perform by tuning the forecast update cadence. Following the specific recommendations from APT, the company shifted slower-moving and intermittent items to a four-weekly forecast schedule. In addition to realizing additional inventory optimization, buying and exception processes for planners were also streamlined. Previously, a user would have to apply multiple manual filters to get through their order review process, which was time intensive. Now, planners can open an order, review only relevant SKUs and move on, spending their valuable time on other critical issues.

In a calendar year since APT was implemented in the Montreal DC, the results have been striking. They include:

- Reduced inventory
- Better fill rates
- Significantly fewer demand for exceptions
- Reduced manual changes
- Increased planner productivity
- Improved receiving dock performance

As Potvin said, “Because of APT our forecasting is more precise than anything humanly possible. Better yet, it's done automatically and will continue to improve over time.”

Even as Uni-Select's sales have grown, inventory levels are going down. Due to the success of the project, the company has big plans for the future and is currently in the process of rolling out APT across all SKUs and all DCs that would benefit from it. Uni-Select is charting a course into an optimistic future. As always, Manhattan will be there to help navigate.

