



Honeywell Safety Products Protects Customer Service with Better Forecasting

A Forecast Pro Success Story

PROFILE

Honeywell Safety Products (HSP), part of Honeywell's Automation and Control Solutions (ACS) division, is a leading provider of Personal Protective Equipment serving the fire service, electrical safety and general industrial worker segments. Offering a wide range of safety products—from helmets to respirators to first aid kits—HSP has grown in part via acquisition, a process which creates some forecasting challenges.

Backed by Honeywell's strong commitment to Sales, Inventory & Operations Planning (SIOP) which is viewed as a strategic advantage to the corporation, John Romano, Director, SIOP & Materials Planning, leads the team responsible for HSP's SIOP process in North America. John explains how important it is to accurately assess demand. "We've always said that it starts with demand—what is the market telling us that it needs? We then translate that need via our forecasts to our ERP systems so that the supply chain responds to that demand."

CHALLENGES

With only five demand managers responsible for forecasting products that generate more than \$800 million in annual sales, John's team has its work cut out for it. Having grown both via acquisition and organically, HSP faces some significant forecasting challenges including (but not limited to):

Lumpy, inconsistent demand: Irregular demand patterns difficult to predict with simple models

SKU proliferation: 32,000 data series forecasted monthly for US and Canada

Three different systems: Forecasts created across three separate systems, creating inconsistency and inefficiency

It was evident that the forecasting process for HSP's "legacy" products needed to be overhauled. The process for this business segment—wherein 32,000 data series are forecasted on a monthly basis for US and Canada—relied on the forecasting module of an existing ERP system with several limitations. Forecasts could only be created using shipment history, not actual orders. Furthermore, the software included a limited number of forecasting models (four or five) and usually chose a very simple forecasting model as the "best fit" for these products.

Not only was it very difficult to extract data from the forecasting module, but it was also hard to analyze it, making the process cumbersome. Forecasts for relevant items were extracted into Excel spreadsheets and then passed on to HSP's product managers for review and adjustment.

SOLUTION

Following a recommendation from the ACS SIOP group, the team evaluated Forecast Pro TRAC, which was successfully supporting other SIOP processes within the division. They chose Forecast Pro because it had the rich functionality to meet HSP's needs at a significantly lower cost. In early 2010, they set up a two-month trial phase running Forecast Pro TRAC in parallel with the existing software, starting with 36 months of order history.

The Forecast Pro trial forecasts were \$13 million higher than the existing system—aligning with senior leadership's perception that under-forecasting was causing service level issues.

"I recall leadership saying upon seeing these results that they were pleased that the organization was getting more analytical with its ability to forecast market needs," notes John Romano.

— John Romano, Director, SIOP & Materials Planning, Honeywell Safety Products

RESULTS

After going live with Forecast Pro TRAC, the team experimented with tracking accuracy at different levels in the hierarchy and settled on tracking it at the item/class level. This was chosen as the standard because it is low enough in the hierarchy to be able to see variability but high enough to be meaningful to the sales and marketing teams. The results from the first three quarters showed that HSP's overall forecast accuracy—measured using weighted MAPE—was improving:

Q1: 24.4% weighted MAPE

Q2: 13.6% weighted MAPE

Q3: 12.9% weighted MAPE

In addition, a year-over-year forecast accuracy comparison for the US operation revealed a 13% improvement. "The analysis showed that since implementing Forecast Pro TRAC, without question, there has been a definite improvement in forecast accuracy across almost every product line," explains Lisa Gardner, Demand Manager.

Implemented in HSP's Canadian operation almost a year after its US counterpart, Forecast Pro TRAC contributed to improving customer delivery as measured by On-Time to Request (OTTR). The results of these combined efforts are impressive—OTTR improved by 20% in less than a year and inventory turns have improved by 16%.

"Forecast Pro has allowed us to have deeper discussions with better information. By coupling the quantitative framework provided by Forecast Pro TRAC with the qualitative input from sales and marketing, we are able to create true consensus. The end result is not only buy-in from different parts of the organization, but a crisper view of the market and its needs."

— John Romano, Director, SIOP & Materials Planning, Honeywell Safety Products