

## FORECASTING DEMAND hot today, **COOL** tomorrow

When it's hot and your air conditioner is broken, you do not want to wait weeks to get it fixed because the part you need isn't available. That's the customer challenge New York-based Rheem Manufacturing, a global manufacturer of central heating and cooling products, is solving with a demand-driven supply chain focused on planning and forecasting.

"We strive to be demand-driven and forecast accurately. We can't tell when an item will break down, but we use a history of service and failure rates to determine what parts we will need to order," says Craig Hagler, materials manager for Rheem's service parts division, located in Atlanta.

Rheem partnered with Atlanta-based logistics software provider Logility to create its demand-driven supply chain. It uses a demand planning, inventory planning, and replenishment system to manage the materials management process. The technology has helped reduce the number of parts Hagler's team needs to review each week.

"Reviewing historic item data from vendors manually might take one month. Our goal is to get through all vendors in one week," Hagler says.

Rheem uses predictive analysis and sales history to determine failure rates for parts. "The life expectancy of an air conditioner is about 15 years," says Hagler. "We hold the major components of all functional items, and we use our systems to forecast and respond to changes in customer demand."

Such tactics are improved by recognizing that not all companies' products are created equal. Many companies today make the mistake of managing all inventory the same way, says Karin Bursa, Logility's vice president of marketing.

"These companies consistently hold the same level of inventory for fast-moving and slow-moving products. That leads to shortages for fast-moving products, and product obsolescence for slow movers," she says.

Plus, inventory levels should fluctuate according to seasonality, she explains. "Consumer goods companies selling their products at retail stores may do 70 percent of their business between October and January. They need to plan for a higher service level during this period," she says. Regional preferences and demands by top customers should also be taken into account.

While Rheem's desire to move to a demand-driven supply chain was spurred by factors including metal shortages and an interest in reducing inventories, many factors drive companies to change their supply chain strategies. Global sourcing, rising fuel costs, and globalized markets all affect supply chains today, Bursa explains.

Though Rheem faces more pressure to reduce inventory levels today, its forecasting practices have changed little in the past five years, says Hagler. In the future, the company may implement additional technology systems to improve the process and strengthen relationships with customers.

"We have good relationships with our customers. We've taken some inventory off their hands, and with our 94-percent fill rate, they can order weekly rather than monthly," he says.

Rheem supplies parts to distribution centers, which in turn service the end customer. The service parts division gathers parts from around the country and the globe, and ships items direct to customers. These strategies need application support to be effective, says Bursa.

"The challenge is obtaining good, clean data to populate historical forecasts. Companies need to spend time and effort cleansing data so they can look at past performance and leverage that as a demand indicator," she says.



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