Prestolite Electric Charges up Its Inventory Management

When retirements drained its planning expertise and a bad mix of too much inventory put a strain on cash flow, the company brought in a new forecasting tool to power its planning process

By April Terreri

Prestolite Electric faced an overwhelming number of odds threatening to affect the growth of its business. First of all, the company's top planning forecasters were retiring. As the team retired over a two-year period, newcomers without extensive institutional knowledge were making some costly inventory miscalculations. Confronted with an abundance of inventory, the negative effect on cash flow was making it difficult for Prestolite to qualify for refinancing. Careful and thoughtful planning, coupled with providential timing, helped keep Prestolite thriving, particularly despite the dramatic global economic downturn that was last year's legacy.

Let's peek inside the company. In addition to its corporate headquarters, Prestolite operates its North American manufacturing facility in Arcade, N.Y., from which it ships OEM products, primarily starters and alternators for the military, heavy truck, agricultural and construction industries. Its Florence, Ky., distribution center ships parts to aftermarket customers like Caterpillar, John Deere, New Holland and Freightliner dealerships. Prestolite Global operates manufacturing plants in Argentina, China and the UK. About 80 percent of parts sold out of the Florence facility are manufactured at the Arcade plant, and the remainder is sourced from one of the overseas plants. Sales are split evenly between the OEM market and the aftermarket. Annual revenues for Prestolite are about $130 million.

Losing Critical Institutional Knowledge

The story begins in 2005, when the company's chief planning forecasters were anticipating retirement. "There were about four extremely adept people with over 100 years' of combined experience with Prestolite who were responsible for all of the inventory planning," reports Joe Pattacciato, director of supply chain for the Plymouth, Mich.-headquartered company. "Their deep institutional knowledge drove our planning process for years. They knew all of our customers, they knew what those customers typically bought, and they knew when they bought. They made sure all the right inventory was in stock when it was going to be needed. Although they might have

been a bit excessive in what they stocked, they did a pretty good job."

As the retirements progressed through 2007, new people came aboard. "But they didn't have that high degree of intimate company business knowledge and, consequently, Prestolite began to make a few big and costly mistakes," explains Pattacciato. "We were buying some product we didn't need, and we were not properly stocked with products we did need. So we had a very bad mix of inventory beginning in late 2006 into early 2007."

This meant the company's cash was tied up in inventory it wasn't selling, limiting its ability to stock products it was selling. "When you are selling to the aftermarket, you have to have products on the shelf, or your customers will go somewhere else to buy what they need," Pattacciato says. "Our sales took a hit."

So in late 2006, Russ Ford, Prestolite's CEO, charged the IT director to search for forecasting software tools that would help the company forecast more effectively. Three companies were given the same set of old company data to use to predict what sales would be. "We compared their conclusions to what our sales actually were, which allowed us to determine which of the software companies reported the best forecast accuracy," explains Pattacciato. "This was a productive way to analyze the companies because we were using our actual data, which took into account the volatility in our mix of part numbers."

The best performer among the various software packages was the SmartForecasts solution from Belmont, Mass.-based Smart Software. "SmartForecasts came out on top and provided the best forecast accuracy," Pattacciato says. By mid-2007, Prestolite deployed SmartForecasts, which was operational well before the recession of 2009 hit the world economy.

Controlling Unruly Inventory

Taking the helm as director of supply chain in January of 2007, Pattacciato was charged with leading the transition to SmartForecasts for the company's formal sales and operations planning process. As expected, there was some pushback against the new technology, but Pattacciato held regular meetings to help employees buy into the system and to acquaint them with the benefits, particularly its ability to help reduce unnecessary inventory while assuring popular parts were stocked in sufficient quantities. About 95 percent of the company's sales are attributed to approximately 300 "A" and "B" parts, so Prestolite wanted to focus its planning process on these items, which are inventoried at the Florence distribution center for the aftermarket.

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— Joe Pattacciato, director of supply chain, Prestolite Electric

"Our inventory was going in the wrong direction, and we could have faced severe financial setbacks had we continued on the road we were on," Pattacciato says. "We were spending too much money on product we didn't need. We also made some mistakes buying from our sister divisions overseas, and we are just now beginning to sell those products. Once you fill the overseas pipeline, it is hard to turn it off quickly, and if you are ordering the wrong products, you wind up with a whole lot of it before you realize it is the wrong product."

A major SmartForecasts feature is its statistical forecast and estimated safety stock level that corresponds to the company's desired service level. "We chose a service level of 93 percent because we felt this was a good compromise

between the cost of carrying too much inventory and the cost of assuring we have sufficient quantities of A and B products available on the shelf for our aftermarket customers," reports Pattacciato.

The top metric used to measure the success of the software is availability, which is critical because the number of available A and B parts relates directly to sales potential. "We have taken availability from the mid-60-percent range up to the high-80-percent level while reducing overall inventory by 25 percent," Pattacciato says. "So we have achieved the 'magic formula' of increasing availability of what our customers want and decreasing inventory of what they don't want, which is the goal for any supply chain group."

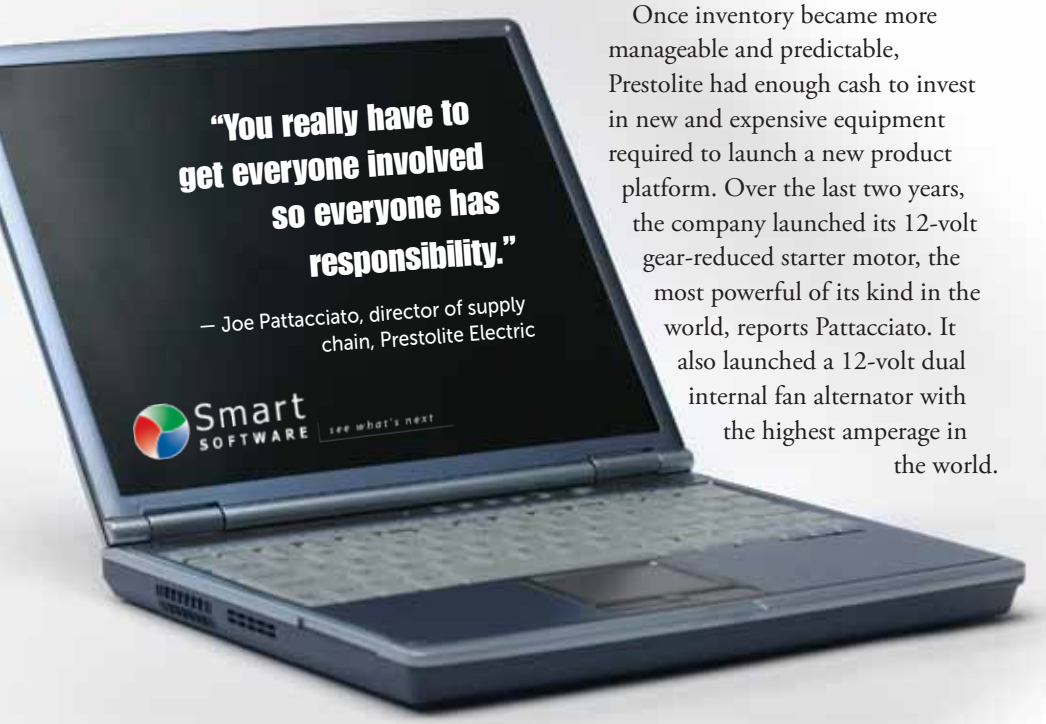
Pattacciato adds that the software has had a significant impact on Prestolite's sales and customer service departments. "The sales guys are happy because they are not getting complaints anymore about our not having this or that in stock – and management is happy because we reduced our inventory significantly," he says. Fill rates increased from 80 percent to 95 percent in the aftermarket business.

In addition, planning for promotions in the aftermarket has become a lot simpler, predictable and effective. "We learned that we can't just decide in the first week of a month to run a promotion sometime during that month," continues Pattacciato. "We learned that if we don't plan far enough in advance, we won't have the parts on the shelf, which was something that always got us in trouble. Customers would get mad at us for not having enough stock to support the promotion we were running." SmartForecasts has a function that allows Pattacciato and his team to examine prior promotions run on a particular part number. "This tells us how much we sold on that part number when we had a promotion so that when we plan future promotions we can assure we have enough parts available on the shelf. This improved our customer service significantly."

Achieving Healthy Growth

Once inventory became more manageable and predictable, Prestolite had enough cash to invest in new and expensive equipment required to launch a new product platform. Over the last two years, the company launched its 12-volt gear-reduced starter motor, the most powerful of its kind in the world, reports Pattacciato. It also launched a 12-volt dual internal fan alternator with the highest amperage in the world. "These heavy-duty products really put us at the cutting edge of where we need to be to compete in our markets," he says. "If we weren't able to get our inventory under control to free up cash, our available capital would have been very limited, which would have postponed the launch of these new products." Managing inventory more effectively reaped another major accomplishment for the company: it qualified to receive refinancing in December 2009.

Pattacciato advises other executives in a situation similar to what Prestolite faced before deploying SmartForecasts to be sure to include as many of the stakeholders as necessary in the process of discovering the right software solution. "You really have to get everyone involved so everyone has responsibility," he suggests. "Then finger-pointing stops and the forecast becomes a company-owned forecast. You have to prove how the software can help and be patient as the process develops. Be flexible at meetings, listen to everyone's inputs and concerns, and factor these into how you develop the process. Let other departments understand that you need them to make this work and be successful because it is something someone in my position cannot do alone. A tremendous benefit in deploying SmartForecasts is that it brought everyone together so if we ran out of something – because no forecast is absolutely perfect – it was no longer a contentious affair. It was 'we' as a group missed something, and what can we do together to do better next time." ■



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