

By Pat Smith

Taking the Kinks Out Of The **Logistics** **CHAIN**

We often think of logistics as something for the big manufacturers—carefully timed deliveries of raw materials, parts unloaded from trucks onto assembly lines.

But the discipline really encompasses the flow of goods and information through all segments of the distribution chain, from raw materials suppliers to manufacturers, then on to distributors and their customers.

For truck parts distributors, one of the most promising logistics-related developments in the past few years has been a concept called Vendor-Managed Inventory (VMI). First developed for the grocery industry, VMI



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caught the eye of truck parts and component manufacturers in the 1990s.

Today, most of the major suppliers offer VMI to independent distributors and, in some cases, the parts operations of truck manufacturers. All of the major truck OEMs have VMI-type systems for their dealers.

Programs may vary slightly but the basics are the same. Sales and inventory data is transmitted

automatically from the distributor to the supplier on a pre-arranged schedule, usually every night. The VMI system determines what should be reordered based on mutually agreed upon performance objectives, such as inventory levels and fill rates.

Better data and better communications can boost parts sales and reduce inventory costs.

Historical sales are included in the VMI algorithms, enabling the system to adjust stocking levels for seasonal trends. The calculations give more weight to recent sales in order to detect changes in demand, such as a part's increased popularity.

Win/Win For Everyone

Datalliance, one of the industry's leading suppliers of VMI solutions, recently published the results of a study that looked at VMI ben-

efits over two years. Inventory turns for companies using VMI increased 22% in the first year and 13% in the second year. The cumulative improvement over the two-year period was 38%. Out-of-stocks fell 41% the first year and an additional 6% the second. The cumulative improvement was 45%.

"There are a lot of things out there that are supposed to be 'win/win' for everybody, but this really is," said Craig Young, director of information systems, SKF Vehicle Service Market, generally recognized as the first truck parts manufacturer to offer VMI. "It has been an incredible success."

The main benefit for SKF is increased sales through the distributors who are on VMI. The system will order a broader range of items, giving the distributor more part numbers to sell.

Additionally, the system will reduce the inventory quantity for fast moving items. This results in higher inventory turns for the distributor.

Distributors also gain the assistance of experienced inventory management and VMI specialists who are involved in the ordering process. "SKF has more

people with knowledge of our distributors' businesses, therefore more people to help them grow their businesses through sales of SKF products," noted Young.

For instance, "We have some product lines that naturally go together and we can tell if a customer is buying one but not the other. We never automatically add a new item to a distributor's inventory, there's always discussion between the buyer and the salesperson; but we can let him know there's an opportunity for up-selling," he added.

A key plus for manufacturers is that VMI smoothes out order patterns. Many distributors calculate order points and quantities monthly or even quarterly but, for VMI users, they're calculated weekly. Thus SKF sees the popularity of products grow at a smoother pace.

VMI also gives manufacturers more information to help them anticipate future needs, noted Michael Libbe, vice president of technology for AutoPower. "If the system is set up properly, when a distributor reaches the critical stocking point on any item, VMI will generate a purchase order automatically.

"The distributor can keep lower counts on the shelf because he's no longer in danger of running out. The manufacturer will be able to level its production runs because it has more information about demand."

VMI drastically reduces the number of returns, which reduces paperwork and administrative costs. The system allows SKF to monitor stocking levels at all of a distributor's locations, thus assuring that parts ordered by one location aren't overstocked at another.

Although SKF hasn't needed to use the feature, the system also gives the company the capability to search for out-of-stock parts among all of its VMI users.

"We have a much stronger relationship with our customers who have VMI," Young noted. "We work closely with new VMI distributors through set-up and testing. We generally review the first two or three orders almost line by line, looking for differences or large swings they may not be expecting.

"After two or three weeks most distributors turn everything over to us. After that if something out of the ordinary comes up, we notice it and call them to discuss it."

Time & Trust

The improvements can be dramatic, but getting there takes time and trust. SKF's first customer to try VMI was Midwest Wheel and, as Young recalled, it was a learning experience for everyone.

"We have a popular item called Scotseals which are considered 'A' (i.e. fast moving) items for us. Normally distributors will carry a six- to eight-week supply of 'A' items because they never want to run out. But VMI tends to trust that we're going to be able to supply on a weekly basis, so instead of carrying an eight-week supply we started shrinking that to two weeks.

"They worried that they would run out so they started ordering around VMI. It took awhile to finally

start trusting that the inventory would be there and they wouldn't put their customers in a backorder position."

Baltimore-based Keller Truck Parts has VMI with five vendors: SKF, Fram, Bendix, ArvinMeritor, Dayton and Grote. "We absolutely love it," said Wayne Keller, president. "I think it's the best thing to come down the road in a long, long time."

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With vendor-managed inventory, the distributor can keep lower counts on the shelf because he's no longer in danger of running out while the manufacturer will be able to level its production runs because it has more information about demand.

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Keller estimated that it takes 12 to 14 months for the process to settle in and for everyone to get comfortable with the changes. "Instead of 100 of something, you now may only have 80 but it's taking the dollars out of inventory," he noted.

VMI also reduces the number of parts purchased on special. "You have to do the best deal with your supplier for the long term," he advised. And handing inventory management to a supplier doesn't mean you relinquish control. "You still review what they're doing," he said. "We take a look at it about every three weeks. So far, it has been good."

VMI transfers some management functions to suppliers but it's still the distributor who dictates how the process will work, stressed Libbe. "You may decide that you want the 'A' movers to be replenished more often, and you may decide that you want to run completely out of slower movers before they have to be replenished.

"Once the system is set up you can be completely hands off until you want to make an adjustment. Maybe all of a sudden you're selling many more of a certain item that you haven't sold before. The VMI process may not pick this up as quickly as you'd like, so you can make a special order to the supplier."

"You have to have a little bit of trust," said Edward Kuo, executive director of HDeXchange which offers VMI through its HDX Services subsidiary.

"We say the first two months you're going to see some things happening with your orders that you might not expect. It may be adding a few products to your shelf that you didn't think you should carry, but you would sell if you did. The difference between a sale and a non-sale is whether or not you have the item on the shelf."

Users always have the option to override the system, but are encouraged to be as hands off as possible. "In order for VMI to work, the distributor has to let it work," explained Chuck Scahill, vice president of corporate relations for Karmak, Inc.

"If they try to second guess it, it will fail. They've lost the efficiency because they're trying to analyze everything the system's doing. If they override it, they've lost the accuracy that is inherent in the system."

Not Just VMI

VMI isn't cost justified for all distributors and manufacturers, but there still are ways to streamline the inventory process. Most good business systems can come up with recommended orders based on historical sales and other criteria.

Ideally, orders will be transmitted electronically directly to the supplier or through a network such as HDX, which puts the information into a format that can be read by the supplier's system.

Electronic transmission eliminates potential keystroke errors when entering the order into the supplier's business system, thus assuring that the distributor gets the parts he wants, noted Scahill.

An extension of that is electronic transmission of the invoice from the supplier's system to the distributor and to a business system capable of matching the invoice to receipt of the product, checking prices, and posting it into the business system.

"When you close that loop, a lot of errors and a lot of manual processing are eliminated," he added.

AutoPower has a system that allows distributors to search each other's inventories. Right now the demand is most prevalent among marketing group members but Libbe said some non-affiliated distributors are starting to ask for similar capabilities.

"In one city you might have two distributors who are competitors, but one sells a product that the other doesn't," he explained. "If distributor A is looking for a filter he doesn't normally stock, he keys it into the parts inquiry screen which shows that a competitor down the road has it in stock."

Bar coding is high on Keller's wish list. "For the past 16 years we've been working to get bar coding for the heavy-duty replacement parts industry and it's still not where it needs to be," he said.

The major stumbling block is the need for cross-referencing to match UPC numbers with part numbers and for an efficient way to keep that information up to date. It may come with the new Price File Library being created by HDX Services.

Currently manufacturers and distributors struggle to maintain accurate, up-to-date pricing information. "For manufacturers, it's a confusing process to create it," said Kuo. "When you get to the distributor side, you receive a price file that looks different for every manufacturer."

The HDX Price File Library will enable distributors to download price sheets and other information—including bar code cross-references—in a standard

format. It also will help manufacturers distribute accurate information on a timely basis, noted Young.

“Customers will be able to pull up their information whenever they want it and we’ll be able to reduce the number of file formats we supply.”

Managing Your Customer’s Inventory

The next big step toward streamlining the supply chain is establishing electronic links with customers.

About three years ago Karmak introduced a system to be sold through parts distributors that automatically will transmit orders to distributors and create a pick ticket on the distributor’s system, but Scahill said it has been slow to catch on.

“Many fleet managers simply don’t carry enough parts in inventory to justify the cost,” he explained.

AutoPower offers a system that enables customers to check parts availability and place orders online. Libbe said about half of the distributors who use the system say it has opened new markets, allowing them to sell across the country and even worldwide. An equal number see it as a convenience for existing customers.

“A lot of end users don’t work 8 a.m. to 5 p.m.,” he explained. “They’re fixing vehicles overnight and that’s when they need parts.” Even though they can’t actually get the part at 3 a.m., they can at least find out if it’s available and they can place the order—which hopefully will be delivered that day.

“They’ll check your web site first because you’re the first one they can get in touch with,” he said.

The ability to place and process orders electronically, any time of the day, has enabled some distributors to be warehouses for their customers.

Omega Environmental Technologies is a Dallas-based distributor of air conditioning parts for a wide range of markets, including heavy-duty trucks. About five years ago, it landed a fleet customer with 110,000 vehicles and 200 service centers throughout the U.S.

“At the time it primarily was a fax machine-based process,” recalled Thom Davis, CIO. “We’d come in on Monday morning and have maybe 200 faxed orders that we had to key into our system and work through our internal distribution.”

Working with the customer, Omega came up with a system that enables orders to be transmitted from computer to computer, 24 hours a day, 7 days a week in all time zones. Pick tickets are printed automatically.

The plan has slashed overhead at the customer’s warehouse and cut typical delivery time to the service centers drastically from five days to overnight. “The customers no longer have to inventory parts, we’ve become their de facto warehouse,” Davis said.

“We stock for them, even though many items are particular only to them. We’ve assumed the risk of having those parts available on our shelves.”

Moreover, what used to be a time consuming order processing task for Omega now takes about a half hour a day. “We both reap the benefits,” Davis said. “It’s hugely cost efficient.”