

# Data-Driven Vendor-Managed Inventory

Your vendors can be valuable allies in managing the flow of both products and data.



**Y**ears ago, in the pre-personal computer era, inventory management consisted of several manual processes: manually selecting 20,000 or so items to keep in stock, a Kardex system to manually record every sale or transfer to maintain a paper trail showing changes in inventory levels, and conducting annual or semi-annual manual counts of warehouse inventory plus having a well-organized purchasing department. Much more inventory information is now available on a daily basis, and without the right tools it can be difficult to manage. Among the many different solutions, a growing number of distributors are turning to their manufacturers for help and reaping significant benefits in both cost-saving efficiencies and service levels through vendor-managed inventory (VMI).

By Beth Badrakhan

VMI originated in the retail world and made its entrance in the electrical supply chain in the early 1990s. Since that time, VMI has developed and grown to include an estimated 40 percent of inventoried SKUs (stock keeping units) for participating distributors. In its simplest form, VMI is a replenishment service where a manufacturer tracks distributor inventory levels and sales forecasts and, using automated data transfers, ships product as necessary to maintain the distributor's inventory at agreed-upon levels. The growth of VMI in the electrical industry has been assisted by industry standards for EDI transactions, growth of technology, improved data quality, service focus, reductions in staffing and new attitudes about data — particularly regarding what data is proprietary and what's not.

VMI service providers have many different models and features. Some of these include using EDI standard documents; using IDEA's IDX or a commercial VAN (value-added

network) to transmit transaction data; ongoing daily data syncs with notifications going to both partners when key attributes don't match; detailed periodic reporting and forecasting; VMI service support and annual or periodic meetings between manufacturer and distributor to identify shared goals that can achieve sales growth with the lowest inventory management cost.

In many ways VMI is about time. With the avalanche of detailed internal and external data today's business processes and ERP systems now capture or generate, the new challenge is having enough time to harness and transform this daily deluge into actionable business information. Data-driven VMI is a business tool that capitalizes on the automation of computers, industry standards, transaction networks and specialized VMI software designed to collect and analyze volumes of distributor data about SKU attributes for the benefit of the whole supply chain. Instead of the traditional manual method, where a distributor's purchasing agent spends much of Tuesday morning building their weekly stocking replenishment order for one of their large suppliers, through VMI that order is placed automatically and the purchasing staff gets extra hours to get something else done.

For an electrical wholesaler to be successful in a recession, it's essential to have a well-managed inventory in sync with the manufacturers' product life cycle that reacts to customers' changing product preferences and has the right mix of new products. With reduced staffing and increasing internal demands for timely information, a greater need exists for a streamlined automated replenishment process utilizing the distributors' ERP systems and EDI at the minimum.

## STREAMLINED EDI VMI PROCESS

Using labor-saving EDI transactions in conjunction with popular ERP software, the entire process is automated from end-to-end. Here's how a typical order flows between a distributor and manufacturer in a VMI relationship:

- Manufacturer learns the distributor's goals for inventory management, turns and fill rates.
- Manufacturer and distributor agree on stock levels and the process.
- Manufacturer gets daily EDI #852 transactions from the distributor of current stock levels, transfers or new orders.
- Manufacturer sends an EDI #850 purchase order for items needing replenishment.
- Distributor's ERP accepts the EDI #850 and sets up the process to receive materials.
- Manufacturer sends an EDI #855 purchase order acknowledgement on same order.
- Manufacturer sends an EDI #856 advance ship notice right before shipment.
- Distributor receives shipment and sends EDI #861 to communicate what was received.
- Manufacturer sends an EDI #810 with the invoice

on electronic billing

- Distributor sends an EDI #820 payment/remittance advice.

## IMPROVED SERVICE LEVELS

Manufacturers benefit by having visibility on each product's actual demand in the form of sales orders or branch transfers. They monitor the VMI analytic reports to detect when new products are gaining ground or conversely do not seem to interest the end-users. Having the capability to react quickly to this kind of information saves inventory, sales and labor costs for both the manufacturer and the distributor. Lorraine Mott, project leader – E-Commerce with Cooper Crouse-Hinds Inc., Syracuse, N.Y., has seen the benefits first-hand. "When new items are not selling at the distributors, the VMI information they receive helps them adjust forecasting for their own materials planning," she says. "But more important is the service we provide to our distributors to ensure their inventory contains the right mix of our products customized to their buyer requirements."

Manufacturers use the information on fluctuating buyer demand from their VMI reports to determine the amount of product to make, which helps recapture unused resources from the shop floor and reallocate them in other areas of the company. (This is also an example of the LEAN methodology in action.) The knowledge gleaned from VMI reports also helps the manufacturer provide earlier notifications of changes to the SKU-level product life-cycle, starting a cascade of processes, including finding replacement products and authorizing distributor returns within a realistic window or allowing the distributor to liquidate the soon-to-be retired products.

With so many positive benefits to VMI, the compelling question may be, "Why not use it?"

## DISTRIBUTOR BENEFITS

In the past, many distributors may have been reluctant to share their business data because of concerns about confidentiality. Attitudes about data have changed over time, and the implementation of new technology safeguards to protect data can ease some of this concern. Distributors who have tried VMI have found that sharing the data enables their manufacturers to help maintain the optimum inventory of products their customers are buying today, making VMI a win/win proposition.

Other VMI concerns have included:

- Inventory management is the distributors' area of expertise.
- What if, because of a typo or mistake, someone orders too much?
- VMI might be seen as a threat to purchasing personnel.
- Making changes will be too hard/time consuming.
- Setup will be too hard/time consuming.

Distributors frequently express these concerns initially, but experience wins them over. One of VMI's most consistent benefits is the greater communication and collaboration that begins during the setup phase and continues through the duration of the program. Because inventory management is the distributors' expertise, they may choose to set the stock levels for each inventoried product or take advantage of recommended order points suggested by the service provider. Purchase orders with incorrect order quantities are usually caught by the software's validation processes, which check quantities against agreed-upon stock levels and historical purchasing data. Some distributors said they were able to reduce staff in the purchasing department, but the best advantage of the VMI service is the time savings for the distributor and the manufacturer. Infrequent changes or one-time setup should be evaluated against the time savings over the life of the VMI program. As an added benefit, VMI creates a low-touch "green" solution that's easy to maintain using EDI transactions that replace paper-based processes.

### START WITH A TRUSTED VMI PARTNER

Joe Hart, director of purchasing and materials management for Kirby Risk, Lafayette, Ind., described his company's experiences using vendor managed inventory with long-time supplier Hubbell Wiring Device. His key concerns were the integrity of the manufacturer-distributor relationship and the integrity of the data used to manage the inventory.

"One of the keys to success is the strength of the relationship you have with a particular manufacturer before you begin the process for starting a vendor-managed relationship," Hart says. "We already had a great relationship with Hubbell Wiring but when we partnered with them on VMI, we both found ways to improve the results and benefits."

The process was developed to be as streamlined as possible, especially with regard to synchronizing the product data, says John Riley, director of eCommerce with Hubbell Electrical Systems, who helps manage the VMI relationship with Kirby Risk. "When Hubbell decided to seek the assistance of a vendor-managed inventory service, we requested that the VMI provider set up a data flow that originated not from Hubbell but instead from the IDEA's industry data warehouse (IDW) to ensure timely and synchronized data with our VMI distributor partners."

### VMI ON NEW PRODUCT RELEASES

At Van Meter Corp., Cedar Rapids, Iowa, Joe Wallace, data pricing administration manager, is doing VMI with several manufacturers, including Hubbell and Panduit. The process has improved how Van Meter integrates new products into its inventory and manages purchase levels as the products are rolled out in the market.

"We are very pleased with the assistance we receive from the manufacturers and their VMI partners on new product

releases," says Wallace. "For new items, first we set-up temporary manual controls on stock levels in our Eclipse ERP software for the new items as a precaution to avoid making a large purchase until there is established customer interest in those products. As the orders begin to accumulate, the VMI supplier recognizes the patterns and advises us when we should remove the manual control for these items and just react to customer demand levels."

### RETURNS ARE EASIER WHEN ON VMI

Jim Lisicki of Revere Electric, Chicago, has VMI relationships with Panduit, Crouse-Hinds and other manufacturers. "Once you become a VMI partner with a manufacturer, even if you've been doing business together for years, the big plus is how much easier it is to return slow-moving materials or excess inventory due to a business change," Lisicki says. "Additionally, with VMI we get more advance notice of items that are going to be retired so we can find replacements and we have plenty of time to make the return of material for credit."

One benefit that surprises many distributors is the effortlessness of a well-crafted VMI process. Bernie Westapher, senior vice-president, Panduit Corp., Tinley Park, Ill., says, "After we implement VMI with a distributor, once they are in production, the day-to-day routine literally disappears and the distributor is free to work on urgent matters or those requiring manual involvement. In Panduit's case, our VMI specialists frequently report that once the account is set-up and in production, we rarely hear from some of these distributors because VMI is doing what it's supposed to do. It's that kind of system."

### VMI ON THE BUYER SIDE

Some distributors provide VMI services to their end-user customers, most often in the industrial original equipment manufacturing (OEM) and maintenance, repair and operations (MRO) markets. The service is dependent on several factors which include customer preferences, nature of the contract with their customer. For some customers their VMI service will include everything involved with providing inventory management: on-site counts, quotes, order processing, put-away, invoicing and other services.

### SUMMARY

Using data to make decisions is quickly becoming standard operating procedure as computerization touches nearly all aspects of electrical wholesaling. VMI is a process that utilizes the value of industry standard data and applies the business processes to ensure that distributors are stocking the right items for their business with the assistance of their manufacturer VMI partners. The entire supply chain benefits directly and indirectly when vendor-managed inventory helps eliminate waste and helps achieve seamless automation. ■