

Vendor Managed Inventory- Promising Value for the Truck Parts Industry

By Carl Hall, CEO, Enterprise Data Management

Vendor Managed Inventory (VMI) is a process in which a supplier generates orders for its distributor based on demand information sent by the distributor. VMI was first applied to the grocery industry, between companies like Procter & Gamble (supplier) and WalMart (distributor). But increasingly, VMI is providing the benefits of smoother demand, increased sales, lower inventories and reduced costs to other industries.

Can VMI provide value in the truck parts industry? We looked at data from three truck parts suppliers that have been using VMI for over a year to find out.

What is VMI?

With VMI, suppliers generate orders based on mutually agreed upon objectives for inventory levels, fill rates and transaction costs, and demand information sent by their distributor customers. In this process, the buying function moves from the distributor back to the supplier, who takes over responsibility for placing orders.

The distributor sends sales and inventory data to the supplier on a pre-arranged schedule---typically, daily---and the VMI system determines what should be ordered based on the criteria the supplier and distributor have established. The supplier monitors the inventory status information to make sure that the distributor always has the appropriate amount of stock on hand when needed. The distributor can override the system when necessary, for example, if they anticipate an increased demand in the market.

Benefits of VMI

Why is it better for the supplier to place the orders rather than the distributors ordering themselves? The benefits of VMI result from better information flow to both parties. The distributor and supplier are better able to monitor demand in the market. Lower inventories, better in-stock positions and increased sales are the three biggest benefits associated with VMI for the distributor. Suppliers benefit from the increase in sales as

well as smoother demand and consistent orders. Both parties benefit from reduced administrative costs, with better information flow and an improved ability to place, manage or follow-up on orders.

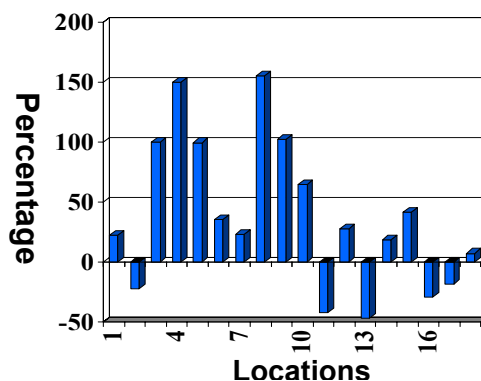
Can VMI Work for Truck Parts?

VMI has been successfully applied to other industries and is being used in the truck parts industry today. The truck parts industry has a high number of potential SKUs, highly disbursed distribution, a wide variation in product movement (from daily to monthly to even yearly) and some highly engineered, high cost products.

To find out how beneficial VMI can be to this industry, we examined data from three manufacturers that have been using VMI (specifically, the Datalliance system) for over a year. These three companies represented four distributor/supplier relationships (one of the distributors works with two of the suppliers) and 21 unique distributor locations. Annual sales per location ranged from \$15,000 to \$500,000, with average annual sales of \$100,000. We considered the eight weeks before employing VMI and an eight-week period one-year later. We compared the data for sales, inventory turns and in-stock percentage.

Results: Increased Sales and Inventory Turns

Figure 1: Sales



As you can see from the graph in Figure 1, we found that at most locations, sales increased substantially, an average of almost 21 percent.

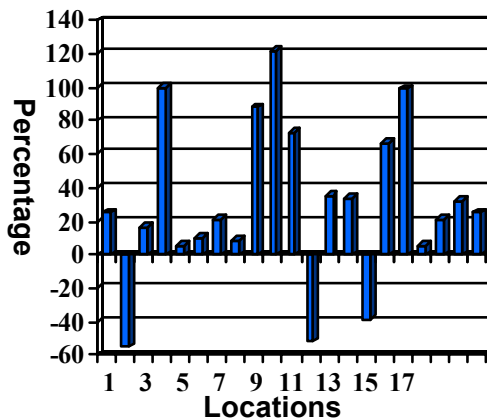
Sales increased for two reasons. First, when the distributor has the right products at the right time, the distributor can take better advantage of demand from end customers and sell more. In

the situations we examined, there was about a ten-percent increase in the number of items handled by the distributors leading to better fill rates. Sales in these product lines also increased because of the improved relationship between the supplier and the distributor. Distributors tend to prefer doing business with suppliers that utilize VMI,

because it provides better business results. Suppliers benefited, as they were able to move more products through the distributors, thus increasing sales volume.

Figure 2, represents the impact on turns. Turns increased at 18 of the 21 locations.

Figure 2: Turns



Prior to implementing VMI, these distributors had an average of 7.4 inventory turns annually. This number was already very high for the truck industry, indicating that this set of distributors was doing a pretty good job of managing inventory. But with VMI, there was still improvement. As shown in Figure 2, inventory turns increased an average of 22 percent for these distributors (from 7.4 to 9.1

turns annually). Though some specific locations realized decreased turns due to business factors not related to VMI every distributor experienced overall improvements ranging anywhere from ten to 35 percent.

Inventory turns increased, because the fast selling items were overstocked, and VMI helped bring down the inventory in those areas. At the same time, the typically slow selling items tended to be understocked. With VMI, the distributors improved their product mix, which ultimately increased sales since they now had a more complete inventory of parts available when needed.

As for in-stock percentage, even though inventory turns increased these distributor locations stayed consistent before and after VMI, at 98.5% in-stock.

Better than the Industry Average

To get a perspective on how these results compare to the industry average, we compared our sample to statistics from the Council of Fleet Specialists.¹ The differences were impressive. Industry-wide sales increased less than two percent, compared to the almost 21 percent increase for the locations in our study. Inventory turns in the industry increased an average of ten percent (to 3.35 turns), compared to the 22 percent increase (to 9.1 turns) that we found in our VMI sample organizations.

The locations we studied were better managed than the industry average prior to VMI, as indicated by their relatively high inventory turns. But these results still show impressive improvement, indicating that VMI can help even leading distributors run their businesses more effectively and efficiently. If VMI can help these companies, what can it do for the average distributor? Fine-tuning its inventory management with VMI can make a significant improvement on a distributor's financial bottom line.

Additional Benefits to Both Distributors and Suppliers

When you consider that the typical distributor makes less than three percent profit, the potential for profit improvement plays an essential role in convincing them that VMI is worth deploying. Consider the many additional benefits for both the distributor and the supplier.

Besides increased sales, suppliers realized smoother demand, reduced administrative costs and improved market intelligence. As VMI leads to smoother demand, with a much more even flow of product from supplier to distributor, suppliers are able to level their production. The distributor can also have a steady staffing level to deal with receiving, stocking, and so on. Both supplier and distributor benefit from the lower costs of shipping, receiving and stocking merchandise.

The market intelligence available from the data in VMI also helps suppliers to make better decisions on a broad range of topics. Operationally, it can help with decisions like

¹ Although our sample came from the years 2000-2001, and the industry data came from 1999-2000, these years were very similar for the truck industry and close enough in time to still be valid.

pack sizes, production planning and helping to locate those hard to find items. The data can also be used to support promotion plans, new product introductions and even play a role in sales compensation.

VMI Does Benefit Truck Parts Industry

In total, truck parts distributors using VMI substantially increased their sales, turns and most importantly, profits. Perhaps even more importantly, the collaboration between suppliers and distributors leads to better decisions and a more effective supply chain.

About Carl Hall and Enterprise Data Management

Carl Hall is President and CEO of Enterprise Data Management (EDM). He founded EDM in 1991 as a consulting company, and has led the company's transition to a service provider offering the premier Vendor Managed Inventory solution, Datalliance. Carl is responsible for general management of EDM and setting the direction for continued product development. He spent 14 years with IBM, acquiring management experience in distribution, customer service, and national marketing. As part of the IBM/Procter and Gamble team, Carl helped create the original VMI program between Procter and Gamble and Wal-Mart. Carl has worked with over 50 companies in developing and deploying VMI systems.

EDM is an Application Services Provider with more than ten years of experience designing, developing, and executing mission-critical supply chain systems for Fortune 500 companies. Datalliance, a comprehensive VMI-based e-commerce service, is the product of EDM's extensive industry and technology experience. Datalliance enables suppliers and their customers to quickly and easily establish effective VMI relationships and facilitates collaboration across the Internet. EDM is based in Cincinnati, Ohio.