



Leadership in Manufacturing

INDUSTRY WEEK'S THE VALUE CHAIN

[SUBSCRIBE](#)[SEARCH](#)[FEEDBACK](#)

● [IW HOMEPAGE](#)

● [VALUE-CHAIN HOMEPAGE](#)

● [NEWS ROUNDUP](#)

● [FEATURES](#)

● [COLUMNS](#)

● [VCM QUESTIONS](#)

● [FUN FACTS](#)

● [EVENTS CALENDAR](#)

Articles - Publication Date 7.7.2003

Value-Chain Report - Vendor-Managed Inventory In Low-Volume Environments

Whether you're a buyer or a supplier, you may be missing a significant opportunity if you don't consider the bigger picture.

By [Kevin O'Brien](#)

Although vendor-managed inventory (VMI) concepts were originally developed for high-volume environments, particularly retail and automotive OEM applications, and have been adopted widely in these industries since, they are not limited to high-volume situations. In fact, VMI applications in low-volume environments have been growing significantly. Chances are, your company or one of your company's trading partners is already using some variation of VMI in some part of their operations.

Vendor-Managed Inventory Concepts

The phrase vendor-managed inventory refers to the transfer or assignment of responsibility for managing and/or replenishing inventories from the buyer (typically an end-user) to the supplier/vendor (typically a distributor or manufacturer). The APICS Dictionary, from APICS -- The Educational Society for Resource Management, Alexandria, Va., defines vendor-managed inventory as "A means of optimizing supply chain performance in which the supplier has access to the customer's inventory data and is responsible for maintaining the inventory level required by the customer. Resupply is performed by the vendor through regularly scheduled reviews of the on-site inventory. The on-site inventory is counted, damaged or outdated goods are removed, and the inventory is restocked to predefined levels."

Among industry practitioners, there is generally no specific distinction made between buyer-owned inventory being managed by the supplier/vendor and supplier/vendor-owned inventory in application of the phrase vendor-



[E-Mail This Column](#)



[Reply To This Column](#)

RECENT VALUE-CHAIN COLUMNS

[Value-Chain Report: Focused Approach For Implementing Lean](#)

Finding focused applications for L principles, rather enterprise-wide initiatives, can help get your lean pro off to a successful start.

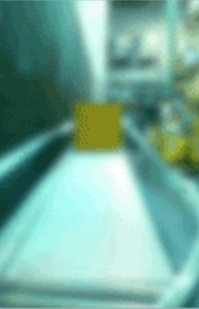
[Value-Chain Report: Improve Supply-Chain Visibility With E-Management](#)
SCM solutions enable "early war for corrective action before"

[Value Chain Report: Aligning Your Supply Chain To Support World-Class Customer Service](#)
Understanding and incorporating customer requirements into supply-chain processes is an essential element of supply-chain management.

[Value Chain Report: Could Your Distribution Center Be More Productive?](#)
A leading retailer achieved significant results by implementing process changes that leveraged the capabilities of its without significant

ADVERTISEMENT

A
manufacturer
produces
just enough



IBM
business on demand

managed inventory.

Consigned inventory refers to ownership of inventory by the supplier that is being reserved for future use by a buyer. This is a dedicated inventory stock that is typically, but not always, located at the buyer's facility or at a location accessible to, or controlled by, the buyer. Ownership of the inventory typically is presumed to transfer from the supplier to the buyer at the time the inventory is removed from the inventory location for consumption, use or benefit of the buyer.

It is worth noting that a supplier may position consigned inventory at a buyer's facility without engaging in VMI activities. Again, this reinforces the fact that VMI and consignment are distinct and one may exist independent of the other.

Another concept often associated with VMI programs includes co-managed inventory (CMI). CMI refers to joint or shared responsibility for management of inventories by both the supplier and the buyer. When utilizing CMI, tasks necessary to support effective and efficient management and replenishment of inventories are assigned to both parties. Assignment of task responsibilities typically depends on the ability of one of the parties to execute the task more effectively and/or the desire to imbed checks and balances or oversight into the inventory management process.

Typical Low Volume VMI Applications

Over the past decade, VMI has evolved from primarily high-volume retail and OEM applications to wider use across a variety of industries and operating environments. In particular, companies have found that VMI offers a number of advantages for both buyer and supplier when managing MRO (maintenance, repair & operating) supplies and other indirect materials, such as office supplies, packaging materials, printed literature and similar products. These commodities, by their nature, tend to be lower volume applications, although not necessarily so.

While high volume VMI environments are typically supported by specialized information systems that efficiently manage the transfer of information between customer/buyer and the supplier/vendor (e.g., EDI) as well as the inventory management functions, low volume VMI environments may rely on adaptations to existing business systems and processes.

Buyers and Suppliers Both Win

The key factor underlying VMI in low-volume applications is that responsibility for management of inventories of specific products is transferred to the party that, presumably, has the greatest expertise in doing so. Both buyer and supplier can benefit as a result of this shift in responsibilities. Here's why:

In general, buyers participating in VMI programs gain immediate, on-site availability of products included in the VMI process. Buyers expect that the minimum quantity levels and replenishment frequency recommended by the supplier will be adequate to provide that level of product availability. The supplier is generally expected to adjust quantities and replenishment frequencies, in some cases with concurrence by the buyer, as necessary to achieve target availability levels. In many low-volume VMI environments, this may be as simple as a weekly check of stock levels with replenishment of needed items during the next week's review (contrast this with the two times per day EDI data transmissions one might expect in a high-volume VMI environment). For the supplier, this usually is a sole-source arrangement that yields lower costs related to revenue generation, as well as a smoother

additional capital investment. [Manufacturers with multiple distribution centers, take note](#)

[Value-Chain Report: Cats & Dogs: Objective Approach To SKU Rationalization \(F](#)

[The final installment of this two-part series describes a 3-D technique that addresses SKU profitability and volume.](#)

[Value Chain Report: Cats & Dogs: Objective Approach To SKU Rationalization \(F](#)

[Try the two-dimensional inventory-efficiency model analysis.](#)

[Value-Chain Report: Supply-Chain Success In The Aftermarket: Aftermarket parts sales can drive significant competitive advantage as a customer-service differentiator.](#)

[Value-Chain Report: Supply Chains & Getting The Most Of Your Investment: ERP systems can provide the foundation for improving supply chain operations.](#)

[Value-Chain Report: Logistics Outsourcing: An Option Worth Considering: Forward-thinking companies take a closer look at their party logistics providers to increase shareholder value.](#)

[Value-Chain Report: Error Proofing Improves Supply Chain Reliability: Human errors and equipment failure can be minimized through error-proofing techniques.](#)

demand pattern that enables lower overall inventory investment.

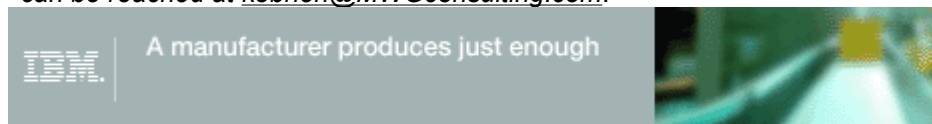
Buyers also have a reasonable expectation that total consumption of, and expenditures for, products included in the VMI program will decrease as a result of improved control of inventories. This improved control results from reductions in waste, theft or "shrinkage" and other unaccounted for inventory withdrawals, especially if "vending machine" or a similar approach is used, where consumption is automatically assigned to the department or project for which the products are being used. This has been observed in many industrial MRO-related VMI environments and is generally recognized as a major source of on-going savings realized by buyers. For the supplier, there may be an initial decrease in revenues, as true demand is identified. However, suppliers who assist buyers in reducing their costs are generally rewarded with additional opportunities.

Buyers typically experience a decrease in costs associated with the administrative activities related to products included in VMI programs. In many cases, when traditional replenishment approaches are replaced with a VMI program, supplier personnel assume responsibilities such as inventory ordering, cycle counting, physical put-away and other tasks previously performed by buyer personnel. Although there are typically some costs incurred by the supplier in conducting these activities, suppliers are generally able to execute these tasks at a lower cost than the buyer and are able to recover most or all of the costs of these value-added services. Many VMI programs have significantly reduced or eliminated invoicing for individual replenishments by providing summary billing at periodic intervals -- typically monthly -- saving administrative labor for both buyer and supplier.

In addition to the physical processes described above, buyers tend to view suppliers as the "expert" in managing inventories to achieve high levels of availability. Part of this expectation is that the supplier will be able to provide buyers with management information, such as what products were purchased, what quantities of each product were used, what the total spend was (in some cases, the departmental or project-related spend) and similar analyses. For the supplier, this capability can provide valuable insights into the spending patterns of buyers and further strengthens the buyer-supplier relationship.

Beyond the obvious benefits, don't overlook the opportunity to use VMI to improve your supply chain. Low volume VMI environments can often provide a significant opportunity to increase supplier revenues while simultaneously decreasing buyer costs. By focusing on each party's strengths, VMI can be applied so that both buyer and supplier come out ahead.

Kevin O'Brien is managing principal of MidWest Group, a management consulting firm specializing in supply chain/operations and customer relationship management process improvement and related solutions. He can be reached at kobrien@MWGconsulting.com.



[SUBSCRIBE](#)

[SEARCH](#)

[FEEDBACK](#)



Copyright© 1998-2003 Penton Media, Inc. All rights reserved.
Penton Media's Privacy Policy

Technical questions or bug r
E-mail webmaster@industrywe