

## Vendor Managed Inventory – A Partnership

If Vendor Managed Inventory (VMI) is implemented properly, there is the potential for a great partnership that will yield immense value for both the customer and the vendor. However, if one party goes into a VMI engagement with only the expectation of their own win the probability of success is greatly diminished. As we all know, the termination of any type of partnership also has a high probability of being expensive and, to use an all-encompassing term, “messy”.

The premise of VMI is that it is *a relationship where the customer's inventory levels are monitored and replenished by the vendor based on an agreed upon service contract*. There are several components to that premise: relationship; customer's inventory; by the vendor; and, contract. I'm going to dive into both sides of the relationship issues in a moment but first both sides need to understand that this must be an agreed upon, contractual relationship set up with the intent of protecting the interests of both the customer and the vendor.

### The Contractual Issues

The items that need to be defined in the contract include: demand forecast and consumption methods and timing; the length of the contract term; prices and annual quantities of products covered by the contract; implementation methods and timing; invoice payment terms; service levels and penalties; termination methodology; quality methodologies; and, any engineering change notification/timing methods that need to be employed.

### Customer Business Processes

The customer must have some method of *communicating demand and consumption* with the vendor. This may be a situation where the customer regularly sends a forecast of demand via EDI or B2B Internet communications and then also updates actual consumption and stock adjustments in the same manner. I have seen this situation effectively used in a health care distribution environment. Alternatively, there may simply be an annual contract in place with onsite replenishment taking place on a pre-determined basis. This is quite effective in manufacturing environments where standard products are used in multiple floor-stock locations (e.g. fasteners, adhesives, safety products, consumables, etc.). There can also be a combination of demand/consumption methods and purchase committal dates that are typically defined at the product level. Whatever situations exist, the methodology and timing must be documented in the agreement.

In order to manage the contract automatically, the customer should have Contract Purchase Order (a.k.a. Blanket Purchase Order) functionality in their ERP system. This functionality includes the ability to maintain: the start and end dates of the contract; the annual quantities expected and the price per unit of measure for each product contracted; the release mechanism for each product (e.g. forecasted, order point, etc.); the agreed upon service level or reorder point; the stock authorization type (e.g. approval or automatic); the payment terms; cancellation criteria; stock out penalty info and capture of incidents; and, whether all, any or none of the products are QAS (Quality-At-Source) certified.

The purchase order system must also be able to accept multiple receipts against the one order. Furthermore, it must track the receipts by part number when there are multiple parts covered by the VMI contract. A work-around is that you have one contract purchase order for each part number covered. The down-side is the number of orders that need to be maintained and the amount of work required to set them up.

The performance of both the vendor and the customer need to be monitored through reports out of the purchasing system. Obviously, the vendor performance measures are on the ability to maintain stock levels per contract and the quality of product, etc. However, the purchasing system should be integrated with the accounts payable system and be able to monitor the on-time payment of invoices so that the customer can readily show compliance to invoice payment terms. Additionally, the purchasing system should be able to flag the buyer when consumption of product either exceeds, or lags behind, forecasted demand levels.

One additional process that the customer should undertake is cycle counting the product receipts as an audit of compliance.

### **Vendor Business Processes**

There are some obvious complimentary processes and ERP functions that need to be in place with the vendor. Dependent upon the types of communication agreed upon for demand forecast and consumption, the vendor must be able to receive and process the information in the same format as the customer. The interesting part is that not all ERP solutions can differentiate demand forecast by customer. However, this is a function that is essential to tracking forecast deviations, plan replenishment and potentially track 'commit to buy' aspects of the supply contract.

The Customer Order System must have all of the same elements as the corresponding Contract Purchase Order system. As I noted earlier when discussing the contract purchase order, multiple line items per order may be required (preferred). If the Customer Order system is not able to track multiple shipments against multiple lines, then multiple sales orders are going to be raised against a single customer purchase order. The lack of multi-line customer order contracts with multiple shipment capabilities will complicate reporting requirements. The customer orders must also be integrated to the quality system should a Quality-At-Source (QAS) environment be required. In most QAS environments, a Certificate of Compliance or Certificate of Analysis is required with each shipment. Each line item under QAS will require a Certificate number to be tagged to each shipment.

### **Implementation of VMI**

Once the contractual agreements are dealt with, the implementation of the agreement takes place. As usual with any implementation, a good project plan with agreed upon milestones and failsafe measures must be in place. However, the setup of communications between the people that must make the agreement work is as critical as any computer or telecommunication system setup. When bad things happen, and there will be some bumps in the implementation, it will be the cooperation between the various people involved on both sides of the relationship that will get issues resolved quickly. Therefore, the educational and team building components of the implementation cannot be understated.



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At the end of the day, the benefits to both parties in entering the relationship are significant. The cash-to-cash cycle, streamlining of the supply chain and the cost of overhead required to manage supply and demand will all be significantly reduced. However, implement the first few situations carefully until all the issues are identified. Going too quickly on the implementation of VMI can result in untenable situations very quickly.

***About the author***

*Ken Cowman has over 11 years experience working in operations management and over 26 years of management and enterprise solutions consulting experience. With over 25 years of executive management experience and 6,500 hours of education and seminar leadership experience, he has the experience to be able to view the organization from all levels and ability to provide the appropriate level of teaching and/or consulting to effectively assist organizations in their quest for continuous improvement.*