Effectively Implementing Vendor Managed Inventory

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Abstract.
Vendor Managed Inventory is only one term for inventory management systems where the supplier manages the day to day inventory activity. The process is also known as Supplier Managed Inventory, Consignment Inventory, Consignment Stores, Breadman and VMI, just to name a few.

Many supply chain managers implement VMI only to learn that the implementation fails because one or more critical steps were compromised. These critical steps include setting clear objectives for the VMI program, selecting the supplier that best fits the objectives, selecting the correct VMI model to implement, and implementing the program with both a well-defined project plan and adequate resources. This presentation will cover these critical steps in detail using real examples, providing the supply chain manager with the skills to effectively implement VMI.

Set Objectives.

One commonly held problem is the mistaken belief that the major benefit of VMI is shifting ownership of inventory to the supplier. The VMI programs that succeed are the ones that derive their objectives from the company's overall business and supply chain objectives. The supply chain manager must also recognize that shifting the burden of inventory ownership is only one benefit and the other benefits provide the greatest savings. Objectives that drive for time savings are the most beneficial because they generally result in reduced costs as well, whereas objectives that drive for cost savings can also generate time, flexibility and efficiency bottlenecks elsewhere.

One of the major benefits of VMI is how it can drive the cash cycle closer to its theoretical best balance. Businesses try to balance their payments (measured as days payables outstanding or DPO) and their receivables (measured as days sales outstanding or DSO) so that receipts happen before payments are made. A theoretical cash cycle of 10 days DSO with 45 days DPO would be a good example of healthy cash management.

The reality is that in manufacturing there are many variables that restrict a business from achieving the theoretical cash cycle. Parts are delivered late, customer schedules are pushed out after parts are delivered and production can run longer than planned, just to name a few variables. The result is that even though the DSO/DPO ratios may look good, the actual timing of payments and receivables is reversed.

A properly designed and implemented VMI system will get you closer to the theoretical cash cycle because lead times are reduced close to zero. Since stock isn't bought until the job is ready to be issued to manufacturing, the chance of scheduling delays is reduced, if not eliminated. And since the material already resides in the VMI store, delivery delays are eliminated as well.

Select The Supplier(s).
Supply chain managers often find it puzzling that supplier selection comes before development of the VMI model. Effective VMI implementations rely on the supplier's experience and expertise with VMI programs. The supplier is actually the best resource for ideas and best practices. Avoid the common mistake of telling the supplier how to run the VMI model. The supplier knows how to best run his business. Instead, give the supplier your objectives and let him figure out how to best design the VMI system to meet them.

Supplier expertise is the most significant supplier selection criteria. Make sure the supplier has the practical experience not only in running VMI systems but also in dealing with the types of materials you will have in the program.

Select The Correct Model.
Another common mistake is the belief that one size fits all. The most effective VMI implementations use a combination of models to fit different situations. A few examples are:

- Expense Item Store
- Breadman
- Consignment Store
- Proximity Warehouse
- Point Of Use Pull Systems
- Third-Party Logistics

After model(s) have been appropriately selected, the development of a statement of work is essential. This document should become an integral part of the contract with the supplier. It is in fact the most important part of the contract.

Implement The Program.
The final critical step is the implementation. At this stage it is important to develop an implementation project plan, clearly defining action items, responsibilities, due dates, resources required, etc. The supplier can do most of the work but it is essential that required, internal resources be applied, monitored and kept on schedule. In most implementations the Information Technology staff, at the very least will be required. Maintaining commitment from your internal resources will be your biggest roadblock to successful implementation. Steps need to be taken to minimize the natural tendency of internal resources being misdirected.

Before bringing the system "live" you should perform a series of tests to ensure correct operation. These tests must encompass all process elements: software, procedures and people. These tests will uncover any defects in design, tools or process. Appropriate actions must be taken to correct deficiencies. The tests should be split into prototype and pilot runs.

Your turn on process needs to include training sessions for all personnel. The staff that will be working in the system should already have been part of the implementation team and be fully trained. But there are others who work in auxiliary roles. There are buyers, planners, QA Technicians that have to be briefed because even though they may not actually work with the system it will touch their lives. The training should also include the announcement of the Go-Live date so that everyone knows when the kick-off will occur.

REFERENCES

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