eBOOK

Building an Effective Vendor-Managed Inventory Program
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Introduction

Strong competition, ever-shortening lead times, and reliance on partners in a fragmented and extended supply chain are daily challenges for companies in today’s global marketplace.

Success requires collaborative planning and execution techniques that deliver responsiveness to uncertain demand or customer needs while balancing the often conflicting goals of cost containment and fulfillment flexibility.

Vendor Managed Inventory (VMI) is one such collaborative tool, which when properly architected and implemented, can be a quick value creator and fundamentally alter the way a buyer and supplier observe and react to market needs.

This eBook provides a guide to enabling your VMI capabilities, based on our experience with a number of successful implementations in today’s most challenging industries.
Why VMI

In a Vendor Managed Inventory model, suppliers assume the responsibility of managing supply levels for their customers, based on shared information, in order to maximize inventory efficiency and reduce risk of overstock and out of stock.

This allows an enterprise to drive demand-supply network efficiencies and assure a high level of product availability while maintaining lower inventory levels.

Vendor Managed Inventory allows companies to maintain minimum, maximum, and target inventory levels at hubs while automating consumption (pull) and replenishment cycles with suppliers. The dynamically-generated schedule ensures that suppliers restock 3PL hubs to maintain inventory within the pre-defined levels. Consumption-based replenishment ensures lean operations and lower inventory levels.
Measures Impacted by a VMI Process

- **Cost Reduction**: Improved operational efficiencies through process optimization.
- **Customer Satisfaction**: Improved fill rates, responsiveness and on time delivery.
- **Visibility**: Better access to planning information across supply chain.
- **Inventory Reduction**: Use of planning data to reduce inventory while maintaining service levels.
- **Lead-Time Reduction**: Timely sharing of planning information to enable more responsive fulfillment.
- **Improved Metrics Alignment**: A common planning infrastructure to improve cross-tier performance tracking.
Components of a Successful VMI Solution

A successful VMI solution requires three key components: a Forecasting Process, a Replenishment Process and Performance Monitoring.

Forecasting Process

This is the process of demand collaboration between the buying entity and supplying entity. It ensures agreement on a plan which leads to the creation of a Blanket Order. This plan is what drives the Supply and Operations Departments at the Supplying entity.

Replenishment Process

This process can prove to be more complex and multi-dimensional than the forecasting process. It ensures that entities (or tiers) needed for the VMI buffer feeding the Buying entity are properly planned for and replenished. The complexity of this process depends on the VMI configuration being considered and the network requirements (locations, lead times, frequency of shipments, etc.).

Performance Monitoring

Most VMI setups include a set of performance criteria that protect the Buying entity in return for giving the Supplying entity access to better demand (consumption) data. This process is concerned with tracking the attributes of such an agreement (e.g. maintaining inventory within the Min/Max band, etc.).
SUMMARY

THE PROCESS

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WHY VMI

COMPONENTS

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VMI PLANNING PROCESS

Forecast/Commit

Blanket Order/Blanket Order Changes

Blanket Order Responses

VMI ORDER AND FULFILLMENT PROCESS

Replenish Inventory

Pull Signal

Performance and Exception Monitoring

Supplying Enterprise

Buying Sites

Invoicing Process

Invoicing/Payment Notification

Logistics Hub

Forecast/Commit

Blanket Order/Blanket Order Changes

Blanket Order Responses

Replenish Inventory

Pull Signal

Performance and Exception Monitoring

Supplying Enterprise

Buying Sites

Invoicing Process

Invoicing/Payment Notification

Logistics Hub
Replenishment Cycle
Supplier gets real time visibility to:

- On-hand Inventory
  - Buyer demand forecast
  - Projected Inventory (based on future demand)
  - Min, max and target inventory levels
  - Suggested Replenishment Schedules (calculated by application based on demand, on-hand inventory, transit lead time, MOQ, lot size etc.)
- Supplier creates shipments and ships material to hub
- Hub receives shipments and provides receipt visibility
- Solution triggers any business process exceptions dynamically for proactive issue identification and resolution

Consumption Cycle

- Buyer communicates material requirements by issuing pull signals
- Pulls are created referencing blanket orders (Email alert generated for hub when new pull is created)
- Hub ships against the pulls (Pull expires in 24 hours if no shipment is created)
- Adjusted On-hand inventory at VMI hub is loaded
- Users get near real time inventory visibility
- Buyer receives material and communicates goods receipt
- VMI Hub users and suppliers get visibility to shipments and receipts
How the Process Works in Practice.

The workflow shown below provides a summary of the key steps involved in a typical VMI process. With the right tools you can have multiple configurations for your process leading to a successful outcome.

Sample VMI Process Flow

The workflow shown provides a summary of the key steps involved in a typical VMI process regardless of the chosen configuration.
Conclusion

Vendor Managed Inventory as a collaborative supply chain process has been in existence for many years but only a few companies have managed to properly implement it and drive true supply chain value.

Connecting the various entities needed to come together to ensure the success of the VMI setup is possible when working with a company that offers integration technologies along with an industry-leading cloud-based process framework.

With the right plan and the right vendor in place you can see improvements in your inventory visibility, inventory levels and demand responsiveness very quickly.